EXHIBIT 1

RECEIVED
FEB 2 0 2013
CITY OF HOQUIAM

City of Hoquiam
Planning and Building Division
609 8th St. Hoquiam, WA 98550-3522
Tel: 360-532-5700 ext. 211, Fax: 360-538-0938
Website: www.cityofhoquiam.com

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write, "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." **IN ADDITION**, complete the **SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)**.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

	OFFICE USE ONLY
1. Project Title: **Westway Terminal Tank Farm Expansion Project**	
2. Applicant: **Westway Terminal Company LLC**	
Address and Phone: **Ken Shoemake, HSEQ Regional Manager, 3128 Port Industrial Road, Hoquiam, WA 98550**	
4. Date checklist prepared: **February 19, 2013**	
5. Agency requiring checklist: **City Of Hoquiam**	
6. Proposed timing or schedule: **Permitting to be completed by April 30, construction lasting from April, 2013 thru December 31, 2013, new facility brought into service January, 2014**	
7. Plans for future additions, expansion, or further activity. If yes, explain. **The project will take place on property leased from the Port of Grays Harbor. Future expansion into the remainder of the site for an additional tank farm is possible and would be evaluated and permitted separately. The current proposal is separate and independent from future expansion project(s), and the current proposal is not dependent on a larger proposal for its justification or implementation.**	

	OFFICE USE ONLY
8. List other environmental information you know about related to this proposal: • **Joint Aquatic Resources Permit Application (JARPA) for the Shoreline Substantial Development Permit (City of Hoquiam)** • **Construction Stormwater Permit (Ecology)** • **Olympic Region Clean Air Agency (ORCAA) Air Permit Approval Order** • **Stormwater Pollution Prevention Plan (SWPPP)** • **Spill Prevention Control and Countermeasures (SPCC) Plan**	
9. List other pending applications or approvals: • **Conditional Use Permit, City of Hoquiam** • **Critical Area Report, City of Hoquiam** • **Building Permits, City of Hoquiam** • **Grading Permits, City of Hoquiam** • **Industrial Stormwater General Permit, Ecology** • **Local Fire Department Permit, City of Hoquiam** • **Fire Department Certificate of Industrial Insurance Coverage, WA Dept . of Labor and Industry** • **Spill Prevention and Response Plan, Ecology** • **Letter of Intent, U.S. Coast Guard** • **USCG Facility Response Plan** • **USCG Operations Manual update Oil Spill Response Plan, U.S. Coast Guard** • **Facility Security Plan and Facility Security Assessment, U.S. Coast Guard** • **Ecology RCRA Notice of Registration update**	
10. Give detailed description of proposal including off-site improvements, utility requirements, land and building dimensions, etc. (attach site plan): **Westway is proposing to expand it's existing bulk liquid storage terminal to allow for the receipt of crude oil unit trains, storage of crude oil from these trains and shipment of crude oil by vessel and/or barge from the Port of Grays Harbor Terminal #1. Site Plans can be found in Appendix A.** **Four (4) Internal floating roof storage tanks will be added to the site on the south side of the existing tanks and will provide storage for crude oil. Each tank will have a capacity of 200,000 barrels (8,400,000 gallons) for a project total storage capacity of 800,000 barrels (33,600,000 gallons). The new tanks will be surrounded by a concrete containment wall which will have the capacity to contain the total volume of a single tank plus an allowance for rainfall. Each tank will be 150-feet in diameter and 64 feet in height. The tanks will each sit on a concrete slab which will be supported by a series of piles driven approx 150' into the ground.** **The existing rail facility will be expanded from two short spurs with a total of 18 loading/unloading spots to 4 longer spurs with a total 76 loading/unloading spots. The rail spurs will continue to be serviced from the east side of the terminal. The entire rail area will be built on a concrete slab, sloped such that any spills will be contained and directed to a central sump for collection. The construction of the new rail will include the demolition of an existing wood frame warehouse. It is estimated that the terminal will receive 9,600,000 barrels of oil per year, equivalent to one unit train (120 railcars) every three days.** **A new pipeline will connect the two tanks, via an existing pipe bridge, to the Port's Terminal #1. Work performed on the terminal/dock itself will be limited to the addition of loading arms and parts of the Marine Vapor Combustion System. There will be no work performed in the water. The total amount of water shading around the dock will not change.**	
11. Location of proposal including section, township, range and parcel number. **The site is located adjacent to the Chehalis River in the City of Hoquiam in Grays Harbor County at Section 18, Township 17, Range 9 West, North of the Willamette Meridian, Tax Parcel Number #056402300000 and in the City of Aberdeen in Section 7, Township 17, Range 9 West, North of the Willamette Meridian, Tax Parcel Number #029902000200. The project is located at the Port of Grays Harbor Terminal , see Vicinity Map in Appendix A.**	

B. ENVIRONMENTAL ELEMENTS

OFFICE USE ONLY

1. EARTH

a. General description of the site (circle one): [flat], rolling, hilly, steep slopes, mountainous, other.

b. What is the steepest slope on site (approximate percent slope)? **The maximum slope on the site is approx. 1%**

c. What general types of soils are found on the site (e.g., clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The site is currently paved. What exposed soils are present on the site are typical of the industrial lands in the area. The site was created by filling a boat slip with harbor dredge material, then covered with crushed rock before paving. There are no agricultural soils on the site.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **No**

e. Describe purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Earthwork will be necessary for construction of the proposed tank farm. The existing site for the tanks is covered by approx 18" of asphalt paving. Where asphalt/soil/dirt is removed, it will be stockpiled on site, any further use of the material to be subject to further permitting. Other minor amounts of crushed rock or engineered fill may be necessary for equipment foundations.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Chances of erosion are minimal as the site is fully paved and is level. Slight erosion during construction is possible and will be mitigated for by applying Best Management Practices (BMPs) consistent with state and local guidelines.

g. About what percent of the site will be covered with impervious surfaces after project construction (e.g., asphalt or buildings)?

The area where the tanks will be built is currently paved with asphalt and consists of approx. 70% of the proposed project area.. Construction of the additional tanks will remove approx 5 acres of the asphalt paving which will be replaced with a geotechnical (clay) lining covered with soil and crushed rock. The rail expansion area, approx. 2 acres or 30% of the project site, is approx. half soil, half impermeable surface (warehouse and paved areas). Once the project is completed, the amount of impermeable surface area will increase by approx 1 acre.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The facility will obtain a Department of Ecology Construction Stormwater Permit and will also implement a Stormwater Pollution Prevention Plan. Best Management Practices such as covering dirt piles, silt fencing, etc. will be used to prevent soil run-off.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

During construction, emissions from construction activities will consist of dust and exhaust from construction equipment. Following construction, emissions will consist of exhaust from vehicles, locomotive, ship/tug engines and the Vapor Combustion Unit. Air emission sources from the facility are projected to be below major source limits and managed under appropriate approvals and required permits of the Olympic Region Clean Air Agency (ORCAA). The facility will not exceed the thresholds requiring a PSD permit (250 tons per year of any Clean Air Act regulated pollutant).

During operation, the project will not create new types of emission point sources; vessels, trains, vehicular traffic and a vapor combustion unit are already part of the operations at the facility. See Appendix B for calculations used to reach the totals below.

<u>Emissions from increased rail traffic:</u>

The proposed project increase the volume of train traffic from an average of 2-3 cars per day to an average of 96 cars per day (1 unit train arriving and departing every 2.5 days).

Each unit train may have three to four locomotive engines. This increase in rail traffic will increase the amount of emissions produced by rail traffic. This increase could add approximately 11,329 tons of greenhouse gases within the State of Washington per year. The proposed project will not use or require a dedicated locomotive; train switching operations would be conducted using the engines that bring the train into and out of the facility. This increase in Rail GHG is based on 134 round trips annually of 425 miles each way (850 total). The loaded trips to the facility assumed 10,248 tons of freight per trip.

Emissions from increased vessel traffic:

Currently, the facility has 3 to 4 vessel visits per year. This project will result in an increase of approximately 64 vessel barge movements per year. This equates to an increase in GHG emissions of 1,595 metric tons and is based on barge movements of 150,000 barrels traveling a round trip distance of 32.4 miles (distance from the 3 nautical mile limit to the facility and back)

Emissions from increased vehicular traffic:

There will be an increase in GHG emissions from the 20 new employees that would commute to the proposed facility. The calculations assumed a 40 mile round trip commute for the new employees. Assuming that the facility will operate 24/7/365, the commuting of the new employees would increase GHG emissions by approximately 128 metric tons.

Emissions from additional Marine Vapor Combustion Unit (MVCU):

The facility currently combusts the loading emissions from rail cars and trucks. The proposed project will include the marine loading of crude oil onto vessels and barges. To address the loading emissions from the vessels/barges, a new MVCU would be installed, The unit will add natural gas to the vapors being emitted from the marine loading process and combust them in a controlled manner. Based on the proposed thru-put of 9,600,000 barrels per year, it is estimated that the GHG emissions from the MVCU will be 1,930 metric tons per year.

The Washington State Department of Ecology has published a guidance document for calculating Green House Gas (GHG) for SEPA (Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews June 3, 2011). Under this guidance, for projects that are expected to produce an average estimate of at least 10,000, but less than 25,000 metric tons of CO_2 per year, the project proponent should at least qualitatively disclose the GHG emissions caused by the project. The Guidance also recognizes that Washington State does not have the legal authority to regulate GHG emissions that occur outside the state. Based on the calculation procedures in the Guidance, the amount of GHG emissions expected to be generated within the Washington State, as a result of project operation, is about 14,979 metric tons CO2 annually. These increased emissions are the total from increased rail, vessel and auto traffic and the additional Marine Vapor Combustion Unit (MVCU).

Under Guidance, the proposed project is presumed to not be significant got GHG emissions and thus no further mitigation of GHG emissions will be necessary if expected to result in fewer than 25,000 metric tons of CO2 per year. A copy of the GHG Emission Worksheets is included as an appendix.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard construction dust control measures will be used during construction.

Ship loading emissions will be routed to a vapor combustion unit, authorized by modification of the existing ORCAA Order of Approval. Tank loading emissions will be reduced by the installation of internal floating roofs inside the tanks. Rail car unloading emissions will be controlled by the use of vacuum relief devices on each railcar.

OFFICE USE ONLY

3. WATER

a. Surface:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The southeast side of the site is bordered by the Chehalis River.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

A pipeline will be installed from the existing dock at Terminals 1 to the storage tanks. New pipes will span the existing railroad tracks via an existing pipe bridge. The project will require pipe construction within the shoreline boundary of the Chehalis River. All work associated with the pipeline at the docks will occur on top of the existing docks. Pipeline work in the shoreline area will not involve any in-water work, will not create any new shading over near shore areas, and will not entail any activities below the ordinary high water mark. Part of the Marine Vapor Combustion system (the marine safety skid) will be installed on top of the dock with no modification to the dock. This project will incorporate spill prevention equipment, operating procedures, and personnel training prior to a liquid transfer operation. A small amount of the tank farm concrete containment wall will be built within 200 ft (approx 160'), see site map in Appendix A.

3. Estimate amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The proposed project will tie into the existing city water supply line for fire protection use. No surface water will be withdrawn or diverted, other than stormwater runoff, as indicated in section B3(c).

5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No discharge of waste materials to surface waters is expected. Any non-stormwater wastewater generated at the facility will be directed to the sewer system of either Hoquiam or Aberdeen or transported to an off-site private wastewater treatment facility. The only wastewater envisioned will be minimal amounts generated through routine facility cleaning.

b. **Ground:**

1. Will groundwater be withdrawn, or will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No groundwater will be withdrawn and no water will be discharged to groundwater.

2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals _____; agricultural, etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The project will not require any discharges into the ground; all sanitary waste from the site will be discharged to the City of Aberdeen waste water treatment plant.

c. **Water Runoff (including storm water):**

1. Describe the source of runoff, (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

All water runoff will be stormwater only. Rain falling inside the tank storage area will be collected, tested as required, and if clean, released to the existing Port of Grays Harbor stormwater system. Runoff (sheet flow) outside the tank storage area will flow to the Port of Grays Harbor stormwater system.

2. Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials are not expected to enter ground or surface waters. The storage tank area will be on grade level or elevated foundations surrounded by a concrete containment wall capable of holding the total volume of the largest tank on-site plus precipitation. Below grade tanks or underground pipelines are not part of this project. To prevent any spills, leaks from tanks, etc from reaching the ground or surface waters, an impervious liner will be installed inside the entire tank storage zone. The liner will consist of an clay liner approved by a registered Washington Professional Engineer.

All of the rail area will be built on concrete which will prevent any spills or leaks from reaching groundwater. The containment system in the rail area will hold a minimum of an entire rail car plus a significant rainfall.

3. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

During construction, Best Management Practices (BMPs) will be applied for stormwater management following the requirements of the SWPPP. These BMPs may include the use of silt fences, temporary stormwater ponds, or other appropriate methods.

During operation, the facility will follow an EPA Spill Prevention Control and Countermeasures Plan to prevent liquid products from the leaving the containment areas. Spill kits will be placed in strategic and easily accessible locations for use if small spills occur. If a spill should occur, Terminal personnel will follow Westway's Incident Reporting Procedure and notify regulatory authorities as required.

4. PLANTS

a. Check or circle types of vegetation found on the site:

___ deciduous tree: alder, maple, aspen, other _____
___ evergreen tree: fir, cedar, pine, other _____
___ shrubs
_X_ **grass (various pasture grasses)**
___ pasture
___ crop or grain
___ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other_____
___ water plants: water lily, eel grass, milfoil, other _____
___ other types of vegetation

OFFICE USE ONLY

b. What kind and amount of vegetation will be removed or altered?

The entire terminal site is paved with the exception of the existing tank farm area which is covered with crushed rock and a small area of rocky soil north of the existing rail area. There are scattered areas around the periphery with small patches of grass that may be removed or altered by this project.

c. List threatened or endangered species known to be on or near the site.

No listed plant species have been observed or are expected to occur on or near the site.

d. Proposed landscaping, use of native plants, or measures to preserve or enhance vegetation on the site, if any: **The City of Hoquiam Landscaping and Screening ordinance (HMC 10.05.65) requires that 18 inches total caliper of new tress be planted per acre of construction. A Professional Landscaper has evaluated the site and determined that the soil is not condusive to the long term survival of any tress planted at the site. Accordingly, Westway will be planting the trees along other Port property and along public ways inside the City of Hoquiam. A proposed plan can be found in Appendix C.**

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:
birds: hawk, heron, eagle, songbirds, other Loon, Peregrine Falcon
mammals: deer, bear, elk, beaver, other _____
fish: bass, salmon, trout, herring, shellfish, other

b. List any threatened or endangered species known to be on or near the site.

The Chehalis River may be used by bull trout (*Salvelinus confluentus*), Chinook salmon (*Oncrhynchus tshawytscha*), Coho salmon (*Oncorhynchus kisutch*), and steelhead (*Onchorynchus mykiss*). It is possible that Steller sea lions (*Eumetopias jubatus*) could occur in the Chehalis River. A bald eagle (*Haliaeetus leucocephalus*) nest is located approximately 1 mile west of the site. No marbled murrelet (*Brachyramphus marmoratus*) nesting sites are known to occur in the area and it is highly unlikely that marbled murrelets would use the area for foraging. It is possible that marbled murrelets may use the Chehalis River for daily migration during the nesting season.

c. Is site part of a migration route? If so, explain.

The site is in the Pacific Flyway and fish use Grays Harbor for migration. Fry Creek is also known to be used by Coho salmon for migration and may also be used by steelhead and Chinook salmon.

d. Proposed measures to preserve or enhance wildlife, if any:

The tank farm and associated facilities will be fully contained and controlled.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

This facility will be a minor user of electricity. Uses include general area lighting, pumps for moving product through pipelines and power to the maintenance and office buildings. Natural gas will be used to fuel the Vapor combustion Unit.

b. Would your project affect the potential use of solar energy on adjacent properties? If so, generally describe

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

All pumps, motors, electrical equipment and process technology equipment will include energy efficient motors for efficient operations.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

This expansion will add crude oil as a product stored in the new terminal tanks. Exposure, on and off-site, will be controlled using the latest, Best Available Control Technology (Marine loading vapor combustion, Internal floating roof tanks) along with compliance with current health and safety regulations and Westway's Operational and Health, Safety and Environmental policies and procedures. The risk of fire and explosion

will be taken into consideration for this project as all tanks and rail unloading areas will be equipped with fire fighting foam protection. All Occupational Safety and Health Administration (OSHA) and Washington Industrial Safety and Health Act (WISHA) health and safety requirements will be followed. On-site equipment specific training will be required for applicable employees.

Crude Oil is flammable; any fires will most likely be restricted to the site and managed on-site per the Emergency Preparedness Plan and the Hazardous Materials Management Plan, on file with the local fire department. The site will be designed for emergency vehicle access.

An air permit Notice of Construction has been submitted to the Olympic Region Clean Air Agency and is pending approval.

SPILL PREVENTION AND RESPONSE:

Facility Spill Prevention – the following steps will be taken to prevent spills inside the Terminal:

- The above ground, internal floating roof tanks for this project will be new construction. They will be built in accordance with the current API 650 standard for tank construction and maintained, inspected and repaired in accordance with the most current version of API 653. All new tanks will be hydrostatically tested prior to being placed in service. There will be no underground tanks associated with this project. The tanks will be surrounded by a containment wall of sufficient height to contain the volume of an entire 200,000 barrel tank plus a 25 year, 24 hour rain event. To prevent groundwater contamination in the event of a spill, an engineered clay liner will be installed over the soil inside the tank containment area. The liner will be protected/covered by a layer of soil.
- A Stormwater Pollution Prevention Plan will be developed and maintained at the facility. Stormwater accumulating in the tank area will be tested for pH and visually observed for sheen prior to being discharged. Stormwater accumulating in the rail area will likewise be tested, but will also pass thru an oil/water separator prior to being discharged.
- Piping for this project will be built to AMSE B31 Code for Pressure Piping and will be hydrostatically tested prior to being placed in service. The piping from the tanks to the dock will be pressure tested annually.
- The rail car unloading area will be built with all rail sitting on a solid concrete foundation. The concrete will be sloped so that it will form a secondary containment system for the entire rail area capable of holding the contents of an entire rail car (30,000 gallons) plus rainfall.
- The dock will be constantly attended by a terminal operator during all loading operations. He will have the ability to immediately stop a transfer is a leak/spill occurs on the dock. The dock area will have a spill containment curb around the perimeter of the dock which will contain spills of the volume required by the USCG, either three or four barrels, based on the size (piping diameter) of the loading arms to be used.
- A Spill Prevention Control and Countermeasures (SPCC) plan will be developed that will meet the requirements of 40CFR112.

Facility Spill Response – Westway, before any crude oil is received at the facility, will have in place, the following approved operational and oil spill response plans:

- USCG Operations Manual (33CFR154)
- Dept of Ecology Operations Manual (WAC 173-180-400 to 445)
- USCG Facility Response Plan (33CFR154)
- US EPA Facility Response Plan (40CFR112)
- Dept of Ecology Oil Spill Contingency Plan (WAC-173-182-120)

- Spills inside the tank area could occur from over-filling a tank, failure of a fitting, pump or valve, or a failure of the tank itself. These spills would be controlled by the secondary containment wall and the liner underneath the soil. Spilled product and contaminated soil/dirt would be collected profiled and disposed of in accordance with Dept. of Ecology Regulations.

- Spills inside the rail could occur from failures in an unloading hoses, a railcar valve or a hose connection. Minor drips from connecting/disconnecting railcars will be contained by drip pans under each railcar. Minor spills outside the drip pans will be cleaned up immediately using adsorbents, pads, etc. Larger spills capable of reaching the containment area sump will be collected using a vac

truck. An oil/water separator will prevent any residual oil sheen remaining from spills from being discharged from the facility. Any water from cleaning activities such as pressure washing concrete will be collected for disposal.

- Spills at the dock would likely be restricted to failures in fittings associated with the loading arms or piping. A drip pan will be used under loading arm ends when not in use. Adsorbent pads, small adsorbent socks, etc. will be used to cleanup any small drips that occur. During loading operations, there will be a spill response team stationed 1,000 feet downstream at a boat ramp. The team will have a vessel with oil skimming equipment available aa well as boom sufficient to contain the spill.

  To meet Ecology's on-water storage requirement for recovered oil, Westway is negotiating with an OSRO who will provide a barge for this purpose. The Port of Grays Harbor has agreed to provide a spot somewhere inside the Port where the barge can be moored. In the event of a spill in the Harbor, local tugs will be used to move the barge to whatever location is deemed best for the recovery effort.

Vessel Route Spill Prevention:

- Inbound Vessels will have a pilot on board from the 3 mile nautical limit offshore till the vessel reaches the Westway dock at Terminal 1. The pilot will provide heading and speed direction to the Captain. Empty, inbound vessels will not have a tug escort. The Pilot will determine if weather conditions are acceptable to bring the vessel in across the bar. If the vessel arrives when the tide is low, the Pilot may have the vessel wait offshore and time the arrival of the vessel to concur with a high tide. Ecology and the USCG will be given advanced notice of all outbound shipments of crude oil from the terminal.

- Being familiar with the Harbor and the ship channel, a Pilot will be on board all outbound crude oil vessels to provide heading and speed directions to the Captain. To provide steerage and movement in the event of a rudder or engine failure, two tugs will escort the loaded outbound vessels from the terminal to the offshore three nautical mile line. If the vessel does suffer a rudder or engine failure, there is a safe mooring area outside of the ship channel at buoy 13 which the tugs can move the vessel to. The water in this mooring area varies in depth from 41' to 66'. As an additional precaution, the Pilot will schedule outbound vessels to coincide with high tide. Also taken into consideration will be wind speed, swell height and amplitude (a laden vessel taking a full draft, at the bottom of a large wave swell, could contact the harbor bottom). If conditions prevent a vessel from leaving the Harbor, they will also prevent one from entering so outbound vessels can stay at the Terminal 1 dock until weather conditions allow it to leave. Information provided by the Pilots indicate that the bottom of the Harbor, as well as the sides of the ship channel consists of a soft, silty type material. A vessel grounding would likely not do any damage to the vessel. There are no boulders, rock or reefs noted along the ship channel on the NOAA Grays Harbor Navigational Map (chart 18502).

Vessel Route Spill Response:

- Loaded tank vessels or tank barges outbound from the West Way Terminal are intended to be covered by the WA State Maritime Cooperative Oil Spill Contingency Plan, meeting the requirements of the Grays Harbor Planning Standard or an Alternative Planning Standard. Westway is in negotiations with WSMC to arrange a sharing of response resources, primarily, making it's barge available for storage of oil recovered from a spill in the Harbor or just outside the entrance to the Harbor. The same scenario will apply to empty inbound vessels; they will operate under the WSMC plan.

POTENTIAL IMPACTS TO SENSITIVE AREAS FROM VESSEL

The increase in vessel traffic will not disturb existing sensitive area such as Fishing and Shellfish grounds, Bird Habitat or Migration areas as the vessels will be moving thru the existing ship channel.

POTENTIAL IMPACTS TO SENSITIVE AREAS FROM RAIL

- The Puget Sound and Pacific Railroad (PSAP) will move unit trains of crude oil from Centralia to Hoquiam. As required by 49CFR130, PSAP has a spill response

plan on file with the Federal Railroad Administration. PSAP has informed Westway that they have a contract with a spill response contractor (NRC Environmental) who will respond to any derail and spill along the route. Included in Appendix D is a list of the response equipment that is currently staged in the Westport/Aberdeen/Olympia area by NRC. The average railcar contains approx. 650 barrels; the EDRC (estimated daily recovery capacity) of the equipment NRC has in the area is 3,019 barrels, enough recovery capacity to handle the full release of the contents of 4.5 rail cars. Also in Appendix D is a list showing response times NRC has calculated for all counties in the state of Washington. Response times for Grays Harbor, Thurston and Lewis Counties are hi-lighted.

- Drinking water supplies – Both Hoquiam and Aberdeen get their water from surface water (rivers) that run into the Chehalis River. An oil spill at the terminal or in the Harbor will have no effect on their drinking water supply. All other cities between Aberdeen and Centralia get their drinking water from wells.

- Wetlands and Rivers – Rail traffic from Centralia to Aberdeen will cross the Chehalis and other small streams as well as pass along some wetlands. Under normal operations, this rail movement will have no impact on these areas. Should a simple derail occur where a single or multiple rail cars leave the track, there will likely be no impact to the environment. If the derail is such that a single or multiple cars turn over, there is still little likelihood of environmental damage due to the sturdiness of the rail cars.

SPILLS AND DISCHARGES INTO THE ENVIRONMENT (WAC 173-303-145)

- Discharges of crude oil onto the ground, surface water or groundwater will be considered "incidents" and managed according to Westway's "Incident Reporting" procedure. The procedure defines what is considered a "Reportable Spill" and based on that, what notifications are to be made inside Westway and what outside agencies are to be notified. Since crude meets the definition of a hazardous substance in WAC 173-303-040, any spills (other than minor drips) will be reported.
- Spills in the rail unloading area and the tank farm will be contained. Any contaminated soil/rock will be removed, then profiled to a permitted disposal facility. Inside the tank farm, soil will be excavated until samples indicate background levels of total petroleum hydrocarbons have been reached. In the rail area, spills will be recovered from the sump and "dirty" concrete cleaned. Oil that cannot be placed in the storage tanks will be sent off-site for disposal along with any debris (boom, pads, etc) generated during remediation activities. Due to the containment structures at the facility, it is unlikely that any spilled material will reach groundwater.
- Spills that reach surface water will be subject to and remediated according to the Ecology Oil Spill Response plan the facility will have in place before start of operations.

1. Describe special emergency services that might be required.

Due to the flammable nature of crude oil, there is the remote possibility of a fire inside the terminal; this would require the response of both local fire departments to help bring the fire under control.

Westway will continue to work with all regulatory agencies to ensure that all bulk materials on site will be properly stored, handled, and used in accordance with all applicable regulations. The facility will continue to maintain a list of emergency service providers that can be called upon including fire, Emergency Medical Services (EMS), Department of Ecology and the U.S. Coast Guard. An Emergency Action Plan and Hazardous Materials Management Plan will be filed with the local fire department which will include chemical storage data and locations.

2. Proposed measures to reduce or control environmental health hazards, if any.

Westway will have significant procedures and engineering controls in place to prevent releases of crude oil that will be unloaded at the rail facility and loaded at Terminal 1. The crude oil storage tanks will be constructed to American Petroleum Institute (API) 650 standards with impervious containment to capture the largest tank and accumulated precipitation. Tanks will be equipped with high and high-high level alarms

Air emissions from the project will come from the storage tanks and from the loading of vessels and barges. Air emissions from the tanks will be controlled by the use of internal floating roofs inside the tanks. Vapors resulting from the loading of vessel and barges will be collected and routed to a marine vapor combustion system

b. Noise

1. What types of noise exist in the area which may affect your project (e.g., traffic, equipment operation, other)?

This project will occur in an active industrial and shipping area. Noise generated by industry in the area will have no on the facility.

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (e.g., traffic, construction, operation, other)? Indicate what hours noise would come from the site.

During construction, noise generated would be limited to typical "8-5" working hours and would include truck traffic, typical construction noise. Pile driving for tanks supports would be the only likely source of off-site complaints. A recent project at AGP involved extended periods of pile driving with no complaints being filed.

After construction, there would be an increase in noise associated with increased train traffic. This traffic could occur at anytime of the day. The actual operation of the terminal, excluding increased rail traffic, will not increase the noise coming from the facility.

3. Proposed measures to reduce or control noise impacts, if any:

The only significant construction noises will be the pile driving which will be limited to daylight hours. There are no measures available to reduce or control noise impacts resulting from increased train traffic.

8. LAND AND SHORELINE USE

a. What is the current use of site and adjacent properties?

The current site is an above ground tank farm dedicated to receiving, storing and shipping methanol. The adjacent sites are: North - biodiesel production facility, South - AGP's grain elevators, West - the Chehalis River, and to the East, a railroad, lumber yard/chip mill and Port Industrial Road.

OFFICE USE ONLY

b. Has the site been used for agriculture? If so, describe.
No

c. Describe any structures on site.

Currently, the terminal consists of four - 3,340,000 gallon above ground storage tanks, two rail spurs with 18 loading/unloading spots, office building, locker/change building, associated pipelines, valves and pumps and an old warehouse.

d. Will any structures be demolished? If so, what?

The remaining portion of an old wood frame warehouse on site will be demolished to make way for the proposed rail expansion. Approx half of this structure was demolished when the terminal was built in 2009. A Demolition Permit for the removal of the remaining structure will be obtained from the City of Hoquiam. Also, a Demolition Permit will be obtained from the Olympic Region Clean Air Agency (ORCAA). An AHERA survey was performed in 2009, no asbestos materials were found in the structure.

e. What is the current zoning classification of the site?

Current land use designation is Heavy Industrial (for both the City of Hoquiam and City of Aberdeen).

f. What is the current comprehensive plan designation of the site? **Current land use designation is Industrial (for both the City of Hoquiam and City of Aberdeen).**	
g. If applicable, what is the current shoreline master program designation of the site? **The shoreline master plan designation for the site is urban development.**	
h. Has any part of the site been classified as an "environmentally sensitive" area? **No**	
i. Approximately how many people would reside or work in the completed project? **The proposed project will require between 10-20 new employees working at the site. No employees will reside in the completed project.**	
j. Approximately how many people would the completed project displace? **None**	
k. Proposed measures to avoid or reduce displacement impacts, if any: **Does not apply**	
l. Proposed measures to ensure proposal is compatible with existing and projected land uses and plans, if any: **None**	
9. HOUSING	
a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **None**	
b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **Does not apply**	
c. Proposed measures to reduce or control housing impacts, if any: **Does not apply**	
10. AESTHETICS	
a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? **The new tanks will be 64' high and will be built of carbon steel, painted white.**	
b. What views in the immediate vicinity would be altered or obstructed? **Adjacent parcels are currently under industrial use; therefore, the proposal will be consistent with other aesthetics in the vicinity. The four new tanks will be visible in the surrounding area, but will not obstruct any views. Note: in 2010/2011, AGP built a new grain silo facility adjacent to the proposed Westway site which include numerous concrete silos >150" in height.**	
c. Proposed measures to reduce or control aesthetics impacts, if any: **Area lighting will be restricted to that amount necessary for safe operation of the facility. The site is located inside the Port and only visible from portions of Port Industrial Road.**	
11. LIGHT AND GLARE	
a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **Lighting in the new tank storage and rail areas will be required between the hours of dusk and dawn that will slightly raise ambient light levels in the area.**	
b. Could light or glare from the finished project be a safety hazard or interfere with views? **The facility is in an existing industrial area and is consistent with other activities in the area. Light from the facility is not expected to be a safety hazard or interfere with views.**	
c. What existing off-site sources of light or glare may affect your proposal.? **None**	
d. Proposed measures to reduce or control light and glare impacts, if any: **Only that lighting sufficient to provide a safe work environment will be installed.**	
12. RECREATION	

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Chehalis River and Grays Harbor provide informal recreational opportunities. The 28th Street boat ramp and viewing tower, owned by Port of Grays Harbor, are adjacent to the parcel.

b. Would the proposed project displace any existing recreational uses? If so, describe. **No**

OFFICE USE ONLY

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Project will have no effect on recreational activities.

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state or local preservation registers known to be on or next to the site? If so, generally describe.

There are no places or objects of historical significance on or near the site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.

No landmarks of significant value have been identified near the site.

c. Proposed measures to reduce or control impacts, if any:
This proposed project will result in an increase of up to five additional vessel movements in and out of the Harbor each month, increasing the total movements in and out from seven to twelve (from one every 4 days to one every 3 days). This increase in traffic is will be restricted to the ship channel and will have no greater effect on the Tribal Fishing areas and Shellfish Growing areas than existing traffic does.

The most likely place and time for a spill into the Harbor is during vessel loading operations. With spill response personnel and equipment on site during transfers, a spill can be contained in the immediate area of the dock, thus minimizing any potential impact to fishing or shell fish growing areas.

14. TRANSPORTATION

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

This project will require access to West First Street via Port Industrial Road.

b. Is site currently served by public transit? If not, what is the approximate distance to nearest transit stop?

No transit services are available.

d. How many parking spaces would the completed project have? How many would the project eliminate?

The facility currently has 14 parking spaces in front of the existing office building. The City of Hoquiam Building Official has determined that an additional 6 spaces would be needed for the project. This would allow for 6 operators, 12 at shift change, plus additional spots for office staff (3) and several visitor spots with one being designated as a Handicapped Parking space. A bike rack with four spaces would also be added.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

The raw material terminal will be serviced by the existing west First Street. Minor modification to allow rail access may be made.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

<u>TRAIN TRAFFIC:</u>

<u>Increase in Rail Traffic:</u>
Train traffic in and out of the Aberdeen/Hoquiam area will increase from an average of 3 unit trains per week (three full trains in, three empty trains out), to four, then eventually to five in, five out per week. Spread out over the week, this increase is not expected to significantly impact existing traffic patterns.

Affect on local traffic:
There are two areas that may be impacted by increased rail traffic: 1) entrances/exits to and from the Olympic Gateway shopping center and 2) two crossings on Port Industrial Road.

Unit trains passing the Gateway shopping center will be slowing down to cross the bridge over the Wishkah River. It is estimated that unit trains will take approx 13-15 minutes to clear Spread out over the week, this increase of two trains per week is not expected to significantly impact existing traffic patterns. The same applies to the two crossings over Port Industrial Road; the impact of two more train movements spread over a week will not be significant.

VESSEL TRAFFIC:

At this time, it is believed that all or most of the crude oil shipments leaving the Westway terminal will be via Articulated Tug Barges (ATBs). However, we cannot rule out the possibility of some movements being made by tanker vessels. It is anticipated that vessels transporting crude oil out of the Westway Terminal at Port Terminal 1 will be either 150,000 or 180,000 barrel ATBs. In Appendix E are two photos of "typical" ATBs that could be used for this project and a sheet that provides some specific detail on the tug/barge combination. The specific vessels/barges that will be used for this project have not been identified and thus we can only provide "typical" specifications for what we think will be used. Our potential customer has suggested that they might be using Crowley ATB's, which are part of the ECOPRO certification program.

Increase in Vessel traffic:
Currently there are approx. 7 vessel movements monthly at Port docks 4, 2 and 1 (AGP, Pasha auto ships, methanol, etc). Westway's CBR project will start off adding 2 to 3 movements per month, increasing over the life of the current project to as many as 5 movements per month. The Port can handle this volume of 12 movements per month (one every three days) without causing congestion in the port; the Port and Pilots will schedule movements as described below.

Vessel Traffic Coordination:
The Port of Grays Harbor and the Pilots coordinate all commercial traffic between the Port docks and open waters of the Pacific. During outbound movements of crude oil, the Pilots will not allow any other vessel traffic in the ship channel between the terminal 1 dock and the off-shore three nautical mile line. The Pilots have a safe mooring area located just inside the harbor at buoys 13 and 14 where ships can be staged if required.

Inbound Vessel Traffic:
Agents for inbound empty vessels will contact the Port to place their vessel/barge on the incoming vessel schedule, giving the Port an estimated arrival date and time. As the date gets closer, the agent will update the Port, stating that their arrival date is still accurate or that the estimated date and time has changed. When the vessel arrives off-shore, a Port Pilot will board the vessel at the three nautical mile line. He will provide direction to the vessel Captain on heading and speed, staying on board till the vessel is docked.

If the weather in the area is such that the Pilot will not allow a vessel to cross the bar and enter the harbor, the empty inbound vessel we be required to "keep station" offshore until weather improves.

Outbound Vessel Traffic:
Loaded outbound crude vessels will have two tugs in attendance. The two tugs regularly available are 2,500 horsepower tugs. There is a third tug that can be called on if needed. The Pilot will remain on the vessel, providing heading and speed directions to the Captain. The tugs will accompany the vessel from the Port dock to the Three Nautical Mile Line outside the Harbor.

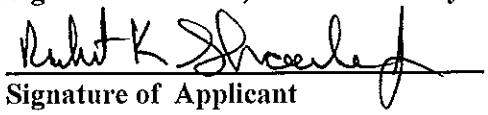
Disabled Vessels inside the Harbor:
Should an inbound empty ATB or vessel become disabled in the Harbor, there are two local tugs that can be called upon to assist the vessel. These tugs can complete the inbound portion of the movement by assisting the vessel to the destination dock or to the Harbor's safe mooring area at buoy 13. At these sites, the vessel can be evaluated and repaired, or readied for further movement to a repair facility as needed. Once past the bar, there is little danger from grounding as the bottom is silty and free of rocks, boulders, reefs, etc that could damage the hull.

Disabled Vessels outside the Harbor: **ATBs and Vessels traveling up and down the Pacific Coast stay in a "tow lane" approx. 25 miles off the coast. One barge company, Crowley, has a company policy of staying 35 miles off-shore when transporting oils. Should an ATB or vessel become disabled, whether loaded or unloaded, they would drift at approx. 2 knots per hours. If the drift is towards the shoreline, a disabled vessel could reach the shoreline in 12 to 13 hours. To assist disabled vessels off of the Washington coast, there are two ocean-going tugs available in the Grays Harbor area. One is located approx 90 miles north of Grays Harbor at Neah Bay, another approx 40 miles south of Grays Harbor at the Columbia River. If an ATB or vessel were to become disabled somewhere equally between the two tug locations (65 miles from either tug), it would be possible for a tug to arrive on station no later than 11 hours after initiating a response. This assumes responding in a worst case scenario of severe weather where a responding tug would be limited to a best speed of 6 knots per hour. This should allow the ocean going tug reach the disabled vessel prior to it grounding on th e shoreline.**	
f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **The project will not create an increase in vehicle traffic. The addition of 5-6 persons per shift will have no affect on local traffic.**	
g. Proposed measures to reduce or control transportation impacts, if any: **None.**	
15. PUBLIC SERVICES	
a. Would the project result in an increased need for public services (e.g., fire protection, police protection, health care, schools, other)? If so, generally describe. **The project will not result in an increased need for public services. Westway has met with the City of Hoquiam's Fire Department and will incorporate their needs into the design of the project**	
b. Proposed measures to reduce or control direct impacts on public services, if any. **None.**	
16. UTILITIES	
a. Circle utilities available at the site: **electricity**, **natural gas**, **water**, refuse service, **telephone**, **sanitary sewer**, septic system, other.	
b. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed. **The utilities proposed for this project require working with existing service companies. Electricity required for the project will come from the Gray's Harbor PUD, an upgrade to the service will be required as the main electrical building will be increased in size and capacity and a second electrical service will need to be installed for the rail area. Natural gas will come from Cascade Natural Gas; due to the addition of a second vapor control unit, the gas service may need to be upgraded.**	

C. SIGNATURE

I declare under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

Signed at Houston, TX on February 19, 2013



Signature of Applicant

Robert K. Shoemake Jr.
Print Name

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (do not use this sheet for project actions)

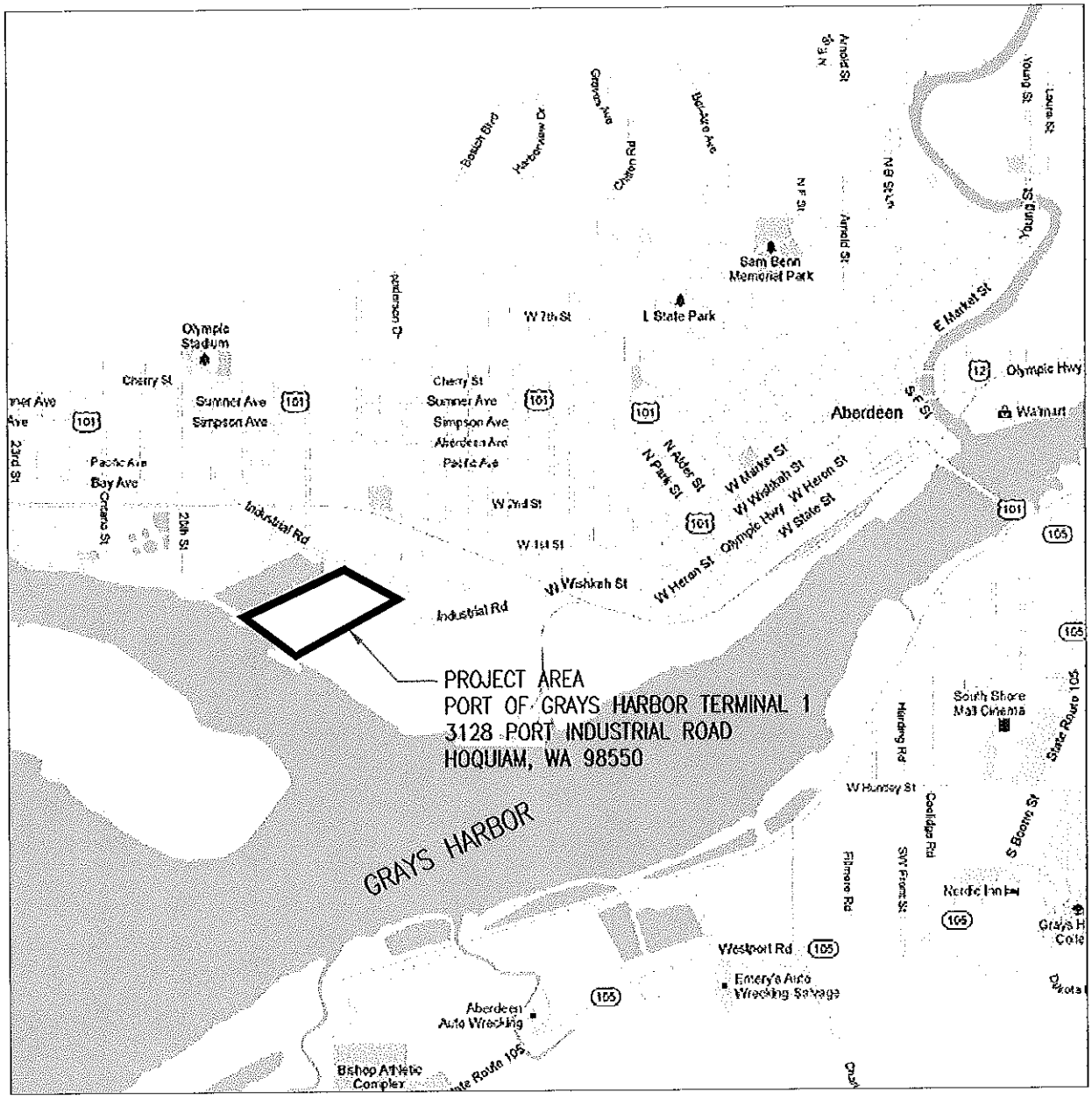
Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

	OFFICE USE ONLY
1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise? Proposed measures to avoid or reduce such increases are:	
2. How would the proposal be likely to affect plants, animals, fish, or marine life? Proposed measures to protect or conserve plants, animals, fish, or marine life are:	
3. How would the proposal be likely to deplete energy or natural resources? Proposed measures to protect or conserve energy and natural resources are:	
4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands? Proposed measures to protect such resources or to avoid or reduce impacts are:	
5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans? Proposed measures to avoid or reduce shoreline and land use impacts are:	
6. How would the proposal be likely to increase demands on transportation or public services and utilities? Proposed measures to reduce or respond to such demand(s) are:	
7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.	

Westway Terminal Company LLC
Grays Harbor Terminal
"Crude By Rail" Project
SEPA Checklist

Appendix A
Facility Site Maps

Figure 1



Mark	Date	By	Description
A	10/12/12	RSM	ISSUED FOR PERMIT

Harris Group Inc.
www.harrisgroup.com

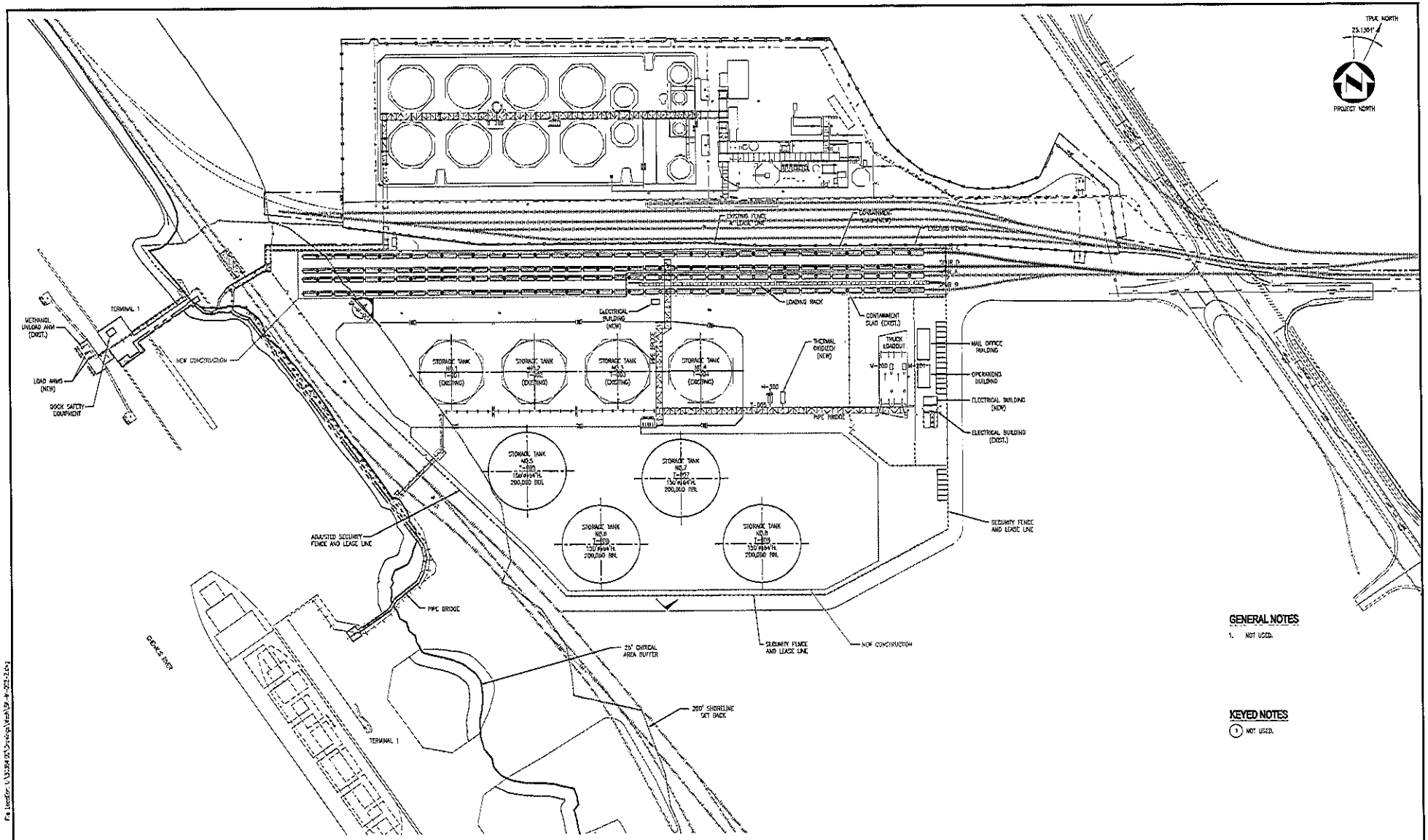
WESTWAY TERMINAL COMPANY

Scale:	NTS
Drawn:	SWH
Designed:	
Approved:	
Date:	
Project No:	30354.00

VICINITY MAP

Drawing Number:

Issue: A



PLAN

PRELIMINARY-NOT FOR CONSTRUCTION

Reference Drawings		Revisions				Revisions			
Drawing No	Title	Rev	Date	By	Description	Rev	Date	By	Description
		A	08/12/11	RSM	ISSUED FOR REVIEW	G	11/30/12	RSM	ISSUED FOR PERMIT
		B	10/17/11	RSM	ISSUED FOR REVIEW				
		C	10/26/11	RSM	ISSUED FOR REVIEW				
		D	10/12/12	RSM	ISSUED FOR REVIEW				
		E	11/18/12	MDH	ISSUED FOR PERMIT				
		F	11/29/12	RSM	ISSUED FOR PERMIT				

Rev | Date | Appr'd | Client Approval Milestone

Westway Terminal Company
GRAYS HARBOR, WA

Harris Group Inc.
Engineering for Optimum Performance
www.harrisgroup.com

Subconsultant:
Drawn: CAP Check:
Engr: Check:
Appr: Mgr: RSM

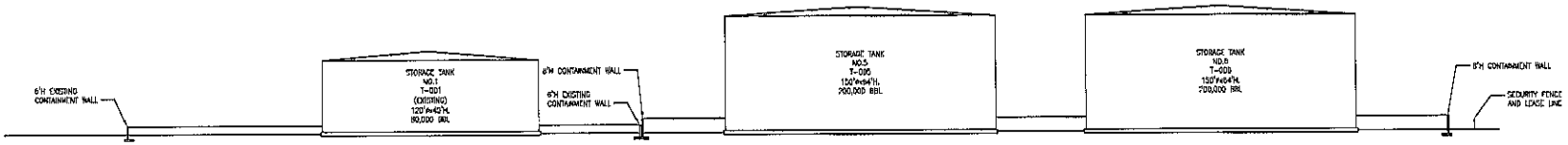
WESTWAY TERMINAL COMPANY
SITE ARRANGEMENT
2-TANK PLAN

GRAYS HARBOR TERMINAL EXPANSION

Project No: 30354.00
Drawing: SK-M-002-2
Rev: C

Plot Date: 11/30/12 By: CHRISSORRA
File Location: L:\30354.00\Drawings\Westway-4-202.dwg

Figure 3



SECTION A
SCALE: 1"=30' SK-M-402

PRELIMINARY-NOT FOR CONSTRUCTION

Reference Drawings		Revisions				Revisions				Westway GRAYS HARBOR, WA	Harris Group Inc. www.harrisgroup.com	WESTWAY TERMINAL COMPANY SITE ARRANGEMENT SECTIONS
Drawing No	Title	Rev	Date	By	Description	Rev	Date	By	Description			
		A	10/12/12	RSM	ISSUED FOR REVIEW						Subconsultants	GRAYS HARBOR TERMINAL EXPANSION
											Drawn CRM Check	Project No. 30354.00 Drawing SK-M-003 Rev A
											Dsgn Check	
											Appr Mgr RSM	
										Rev Date Appd Client Approval Milestone		

Plot Date: 12/11/12 By: Karen Dias
File Location: \\Seven13.net\Data\Projects\Westway\Terminal\SK-M-003.dwg

Westway Terminal Company LLC
Grays Harbor Terminal
"Crude By Rail" Project
SEPA Checklist

Appendix B
Green House Gas Calculations

Westway Terminal Company LLC
Proposed Crude By Rail project
Estimated Increase in Marine GHG Emissions

Marine Vessel Combustion Emissions for Bakken Crude

Table 1. Crude Oil Specifications

API [a]	42.30
Specific gravity	0.820
Crude Density (lbs/bbl)	286.8
Average Daily Crude Throughput (bbls/day)	26,301
Annual Crude Throughput (bbls/yr) [a]	9,600,000

Table 2. Marine Vessel Specifications:

Marine Vessel Description [b]	Barge
Tare (empty) light displacement, tons [d]	3,000.00
Tare (empty) light displacement, lbs	6,000,000
Crude load, bbls [b]	150,000
Crude Deadweight Tonnage, tons	21,511.1
Tanker Deadweight Tonnage, tons	24,511.1

Table 3. SEPA Distance Calculations: [f]

Distance Used for Calculations:	STATE
Transport Route Included:	Round Trip
Distance to Destination from Departure Point	N/A
Distance from Departure Point to WA Border	16.2
Per Trip Gross Ton-Miles	
Empty tanker, inbound, ton-miles	48,600
Full tanker, outbound, ton-miles	397,081
Total round-trip, ton-miles	445,681

Table 4. Fuel Consumption Calculations

Inbound Emission Factors from Efficiency Typ	Total
Outbound Emission Factors from Efficiency T	Loaded
Marine Vessels/Year	64
Total Gross Ton-miles/year	28,523,552
Residual Fuel Oil combusted in all ships, tonn	504.68
Crude Unloading Energy Consumption Calculations:	
Auxiliary Engine Load, kW [h]	497
Auxiliary Boiler Load, kW [h]	3,000
Hours in Port, hr [b]	12
Energy Used in Port, MMBtu/unload	143.19

Table 5. GHG Emission Calculations:

Emission Type:	g/tonne-km	kg/year	MT/year	GWP [n]
CO_2 from Inbound Transport (metric tons) [k,l]	33.3	1,386,730	1,387	1
CO_2 from Outbound Transport (metric tons) [k,l]	5.2	192,933	193	1
	kg C /MMBtu	**kg/year**	**MT/year**	**GWP [n]**
CO_2 from Fuel Burned during Loading (metric	21.49	-	-	1
	kg/tonne fuel	**kg/year**	**MT/year**	**GWP [n]**
N_2O (metric tons) [m]	0.08	40	0.0	310
CH_4 (metric tons) [m]	0.30	151	0.2	21
GWP	**1,595**	**metric tons/yr CO_2e**		

Westway Terminal Company LLC
Proposed Crude By Rail Project
Estimated Increase in Rail Emissions

Locomotive Combustion Emissions for Bakken Crude

Table 1. Crude Oil Specifications

Train Departure Point	North Dakota
API [a]	42.3
Specific gravity [a]	0.8198
Crude Density (lbs/bbl)	286.8
Average Daily Crude Throughput (bbls/da	26,301
Trains per Year	134
Annual Crude Throughput (bbls/yr) [a]	9,600,000

Table 2. Train Specifications

Locomotive Weight (tons) [b]	108.0
Tank Car Capacity (bbls) [c]	595.2
Tank Car Empty Weight (tons) [d]	31.0
Crude Weight in Tank Car (tons)	85.4
Filled Tank Car Weight (tons) [e]	116.4

Table 3. SEPA Distance Calculations

Distance to Hoquiam from Departure Poir	1,154
Distance to Centralia from WA Border (mi	366
Distance for Railcar Swap (mi) [l]	59
Distance Used for Calculations:	STATE
Transport Route Included:	Round Trip
Per Trip Gross Ton-Miles	
Inbound Train (ton-miles/railcar)	49,454
Outbound Train (ton-miles/railcar)	13,175
Round-trip Train (ton-miles/railcar)	62,629

Table 4. Fuel Consumption Calculations

Rail cars per Train	120.0
Rail cars per Year	16,128
Railcar Gross Ton-Miles/Year	1,010,075,865
Locomotive Gross Ton-Miles/Year [b]	17,476,301
Total Gross Ton-Miles/Year	1,027,552,166
Locomotive Fuel Use (ton-miles/gal) [b,h]	929.47
Diesel Fuel (gals/year)	1,105,525
Locomotive Idling Fuel Use at Facility	
Train Idling Fuel Use (gals/hr/locomotive)	10
Total Idling Fuel Use (gals/yr) [h,k]	-

Table 5. GHG Emission Calculations:

Emission Type:	(g/gal)	(lbs/yr)	(tonnes/yr)	GWP [m]
CO_2 (metric tons) [h]	10,150	24,738,370	11,221.15	1
N_2O (metric tons) [j]	0.26	634	0.29	310
CH_4 (metric tons) [j]	0.80	1,950	0.88	21
GWP	**11,329**	**metric tons/yr CO_2e**		

Westway Terminal Company LLC
Proposed Crude By Rail Project
Estimated Increase in MVCU GHG Emissions

Table D-11. MCVS Criteria Pollutant and GHG Emission Calculations

Emission Type	Emission Factors (mg/L Product Loaded) [a]		Total Emissions (tpy)	
NO_x	4		6.73	
CO	10		16.82	
	Natural Gas (lb/MMScf) [b]	aptured VO lb/MMScf)	Total Emissions (tpy)	
PM_{10}	7.6	7.6	0.13	
$PM_{2.5}$	7.6	7.6	0.13	
VOC	5.5	N/A [b]	2.13	
SO_2	0.6	0.6	9.91E-03	
Sulfuric Acid Mist [e]	1.20E-02	1.20E-02	1.98E-04	
	(g/MMBtu) [c]	(g/MMBtu) [c]	(metric tons/y	GWP [d]
CO_2	53,060	53,060	1,928	1
N_2O	0.1	0.1	0.00	310
CH_4	1	1	0.04	21
GWP	1,930 metric tons/yr CO_2e			

[a] John Zink provided a guarantee for the MVCU of 4 mg NO_X/L and 10 mg CO/L of pr

[b] Natural Gas Emission Factors based on Uncontrolled Small Boilers from Table 1.4-1 and 1.4-2 in AP-42, Section 1.4 Natural Gas Combustion. The MVCU captured VOC is assumed to be natural gas per the guidance in AP-42 Section 5.2, and thus will have the same emission factors as natural gas. Natural gas has a heating

[c] Values obtained from the Climate Registry v1.1, May 2008. The U.S. default CO_2 emission factors from fossil fuel combustion were obtained from Table 12.1. The default CH_4 and N_20 emission factors were obtained from Table 12.9 using the

[d] 40 CFR 98 Subpart A Table A-1 Global Warming Potentials (100-Year Time Horizons)

[e] Sulfuric acid mist emissions for natural gas combustion are based on 2% conversion of SO_2 to SO_3.

Westway Terminal Companby LLC
Proposed Crude By Rail Project
Estimated Increase in Vehicular Emissions

Transportation Method 2 - An estimate of vehicle miles traveled is required to calculate emissions using method 2.

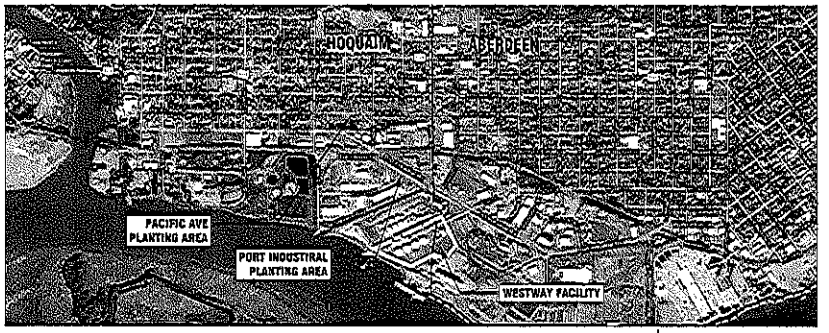
Vehicle ID	Miles Traveled	Vehicle Type	Annual GHG Emission (MT CO2e)
	146000	Car	57
	146000	Van/SUV	71
		(select option)	-
		(select option)	-
		(select option)	-
		(select option)	-

Westway Terminal Company LLC
Grays Harbor Terminal
"Crude By Rail" Project
SEPA Checklist

Appendix C
Landscape Plan

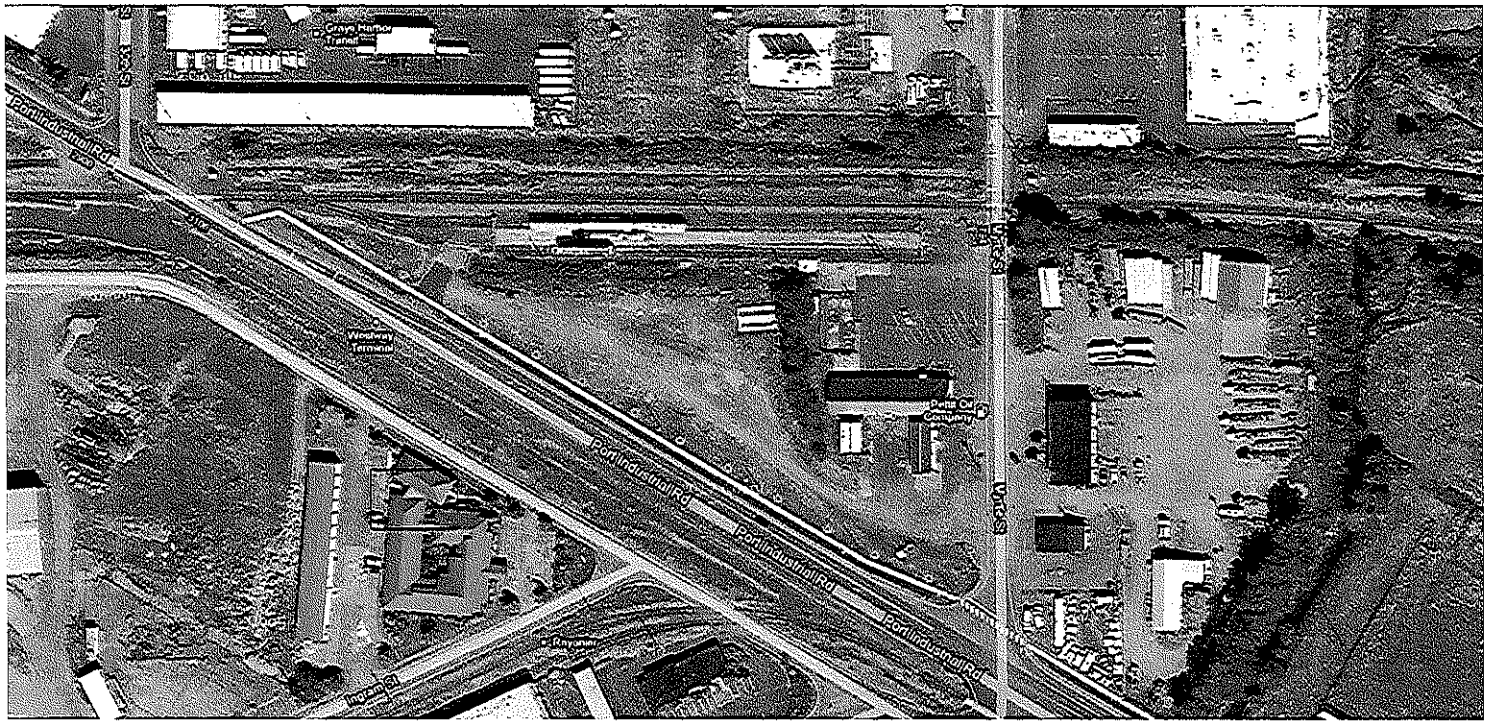
PLANTING SCHEDULE

SYMBOL	QTY	LATIN NAME	COMMON NAME	SIZE	REMARKS
TREES					
	12	Pyrus calleryana 'Chanticleer'	Chanticleer Flowering Pear	1-1/2" Cal.	B&B or Container
	58	Pyrus calleryana 'Red Spire'	Red Spire	1-1/2" Cal.	B&B or Container



VICINITY MAP

PORT OF GRAYS HARBOR



PORT INDUSTRIAL ROAD PLANTING PLAN

0 25 50 100

GERALD MERTL
LANDSCAPE ARCHITECT
ph: 360.532.1753
fax: 360.538.1110
605 McKinley Road
Cosmopolis, WA 98537

REVISIONS

#	DESCRIPTION	DATE

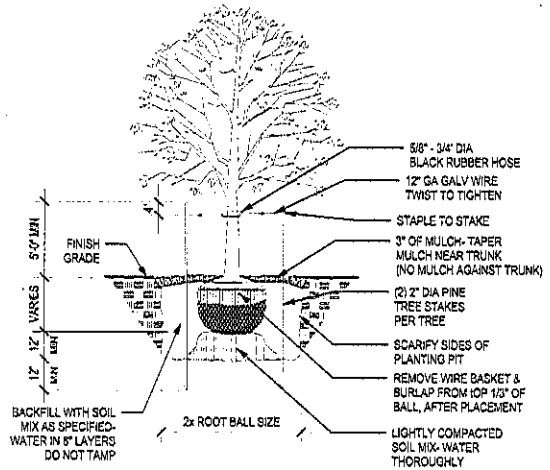
WESTWAY TERMINAL

PORT OF GRAYS HARBORS
HOQUIAM, WA 98550

ISSUE DATE:	11-30-2012
DRAWN BY:	DJH
PROJECT #:	
REVIEW BY:	GM

LANDSCAPE MITIGATION PLANTING

PL1.0



TREE PLANTING DETAIL

PACIFIC AVE PLANTING PLAN

GERALD MERTL
LANDSCAPE ARCHITECT
635 McKay Road
Cosmopolis, WA 98537
ph: 360.532.1153
fax: 360.532.1169

REVISIONS

#	DESCRIPTION	DATE

WESTWAY TERMINAL

PORT OF GRAYS HARBORS
HOQUIAM, WA 98550

ISSUE DATE: 11-30-2012
DRAWN BY: GJN
PROJECT #:
REVIEW BY: GM

LANDSCAPE MITIGATION PLANTING

PL2.0

Westway Terminal Company LLC
Grays Harbor Terminal
"Crude By Rail" Project
SEPA Checklist

Appendix D
NRC Response Times and
Staged Equipment List

Estimated Response Time From NRCES Locations

County	Hours Seattle	Portland	Pasco	Spokane
Adams	4-5	5-6	1-2	0-2
Asotin	6-7	6-7	2-3	2-3
Benton	4-5	4-5	0-2	2-3
Chelan	4-5	6-7	3-4	4-5
Clallam	0-2	7-8	8-9	8-9
Clark	3-4	0-2	3-4	6-7
Columbia	6-7	5-6	1-2	4-5
Cowlitz	2-3	0-2	1-2	6-7
Douglas	4-5	5-6	2-3	3-4
Ferry	6-7	7-8	3-4	3-4
Franklin	4-5	4-5	0-2	3-4
Garfield	6-7	6-7	2-3	3-4
Grant	2-3	5-6	2-3	2-3
Grays Harbor	0-2	3-4	5-6	6-7
Island	2-3	5-6	5-6	6-7
Jefferson	0-2	5-6	5-6	7-8
King	0-2	3-4	4-5	5-6
Kitsap	0-2	3-4	5-6	6-7
Kittitas	2-3	5-6	2-3	3-4
Klickitat	4-5	2-3	2-3	5-6
Lewis	2-3	2-3	4-5	6-7
Lincoln	5-6	7-8	3-4	2-3
Mason	0-2	3-4	5-6	6-7
Okanogan	5-6	7-8	5-6	4-5
Pacific	2-3	3-4	6-7	8-9
Pend Oreille	6-7	7-8	3-4	0-2
Pierce	0-2	3-4	4-5	5-6
San Juan	2-3	6-7	6-7	7-8
Skagit	2-3	5-6	5-6	6-7
Skamania	4-5	0-2	3-4	5-6
Snohomish	0-2	4-5	4-5	5-6
Spokane	5-6	6-7	2-3	0-2
Stevens	6-7	7-8	3-4	2-3
Thurston	0-2	2-3	4-5	5-6
Wahkiakum	3-4	2-3	5-6	7-8
Walla Walla	5-6	5-6	0-2	4-5
Whatcom	0-2	5-6	5-6	6-7
Whitman	5-6	6-7	2-3	2-3
Yakima	3-4	3-4	0-2	3-4

NRC • 9520 10th Ave. South, Suite 150 • Seattle, WA 98108 • +1 206 607 3000
www.nrcc.com

Response Equipment List – Westport/Aberdeen/Olympia

Description	Location
Fast Response Vessel (FRV) (Beaver) 34' w/1000' of 12" boom	Westport
Aberdeen FRV # 6 w/ 1000' of 20" boom	Hoquiam
40' Trailer w/ 4400' of 30" expandable boom	Aberdeen
20' Trailer w/ 1000' of 20" boom	Central Park
10' Container w/ PPE and Sorbent Supplies	Central Park
20' Container w/ Lamor Skimming System 3019 EDRC	Hoquiam
4 Gas PID Air Monitor	Aberdeen
PPE and Sorbent Supplies @ Westport Fire Station	Westport
20' Container w/ 1000' of 20" boom / PPE and Sorbent Supplies	Olympia

Totals:

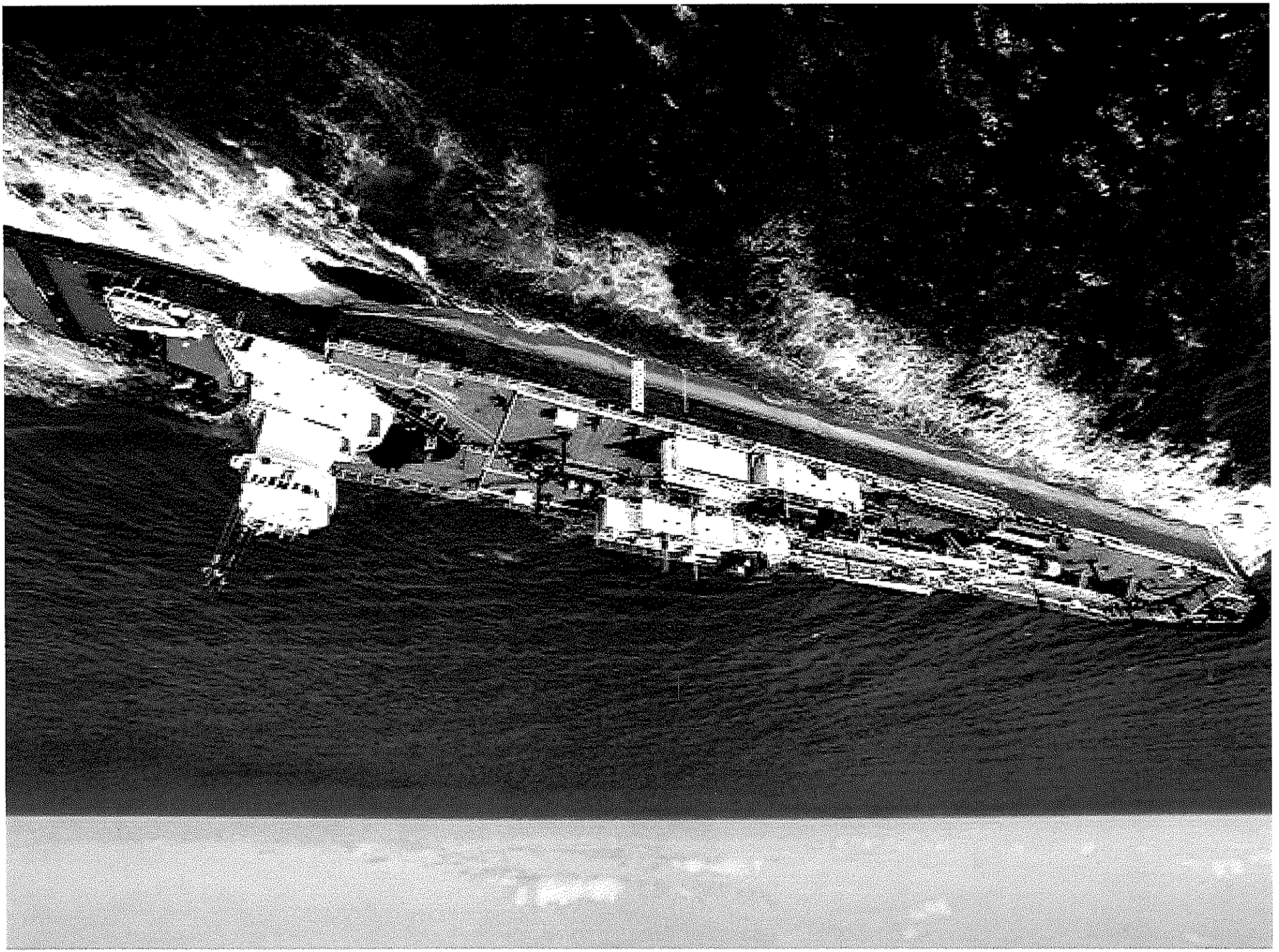
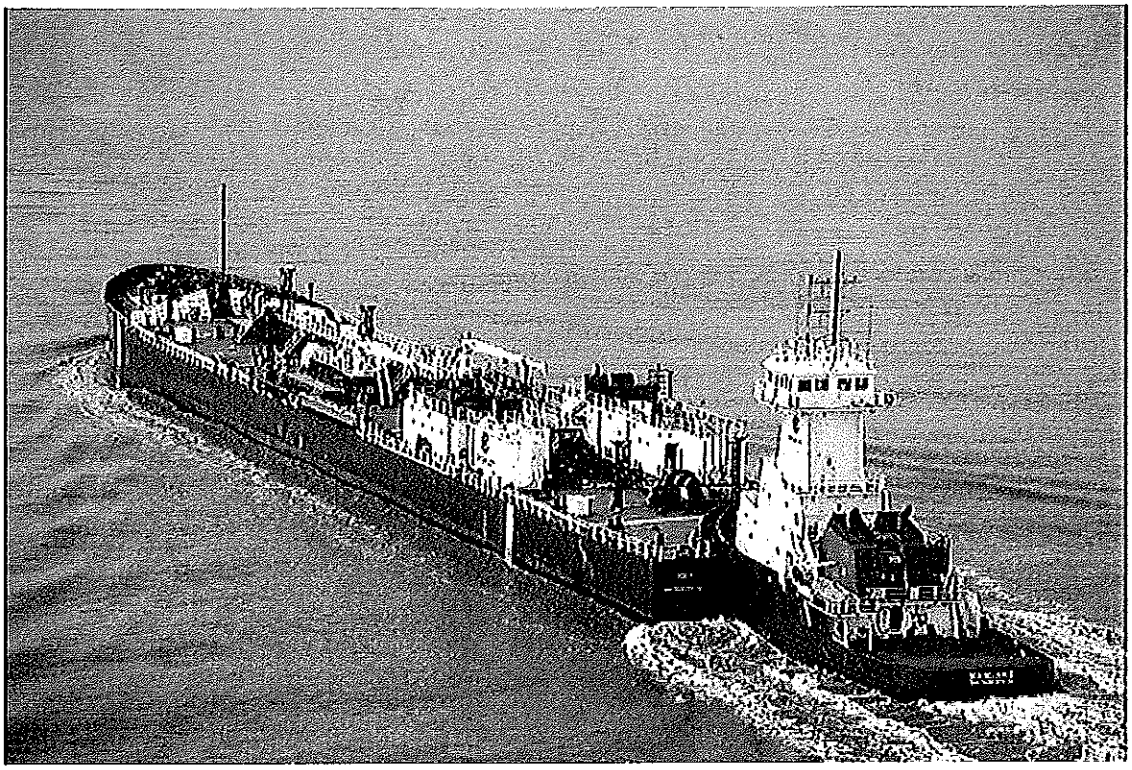
Equipment	UOM	QTY
Boats	EA	2
Boom	Feet	8400
Recovery (EDRC)	Bbl/day	3019

Westway Terminal Company LLC
Grays Harbor Terminal
"Crude By Rail" Project
SEPA Checklist

Appendix E
Typical Articulated Tug Barge Specifications

Westway Terminal Company LLC
3128 Port Industrial Road
Hoquiam, WA 98550
(360) 533-8060

Typical Articulated Tug Barge Specifications

Subject: Sea Reliance/550-2 VPQ

1.49 Length overall (LOA) **180.7 Meters** Air draft 21.22 m
1.50 Length between perpendiculars (LBP) 151.4 Meters
1.51 Extreme breadth 22.55 Meters
1.52 Moulded breadth 22.56 Meters
1.53 Moulded depth 12.195 Meters
1.54 Keel to masthead 26.22 Meters
1.55 Distance bow to bridge 150.32 Meters
1.56 Distance bridge front - mid point manifold 83.12 Meters
1.57 PARALLEL MID-BODY DIAGRAM
1.57.1 Distance bow to mid-point manifold 67.2 Meters
1.57.2 Distance stern to mid-point manifold 113.5 Meters
1.57.3 Parallel body (light ship) 128.66 Meters
Parallel body, forward to mid-point manifold (light 39.86 Meters ship)
1.57.4
1.57.5 Parallel body, aft to mid-point manifold (light ship) 88.8 Meters
1.57.6 Parallel body (normal ballast) 128.66 Meters Parallel body, forward to mid-point manifold (normal 39.86 Meters ballast)
1.57.7 Parallel body, aft to mid-point manifold (normal 88.8 Meters ballast)
1.57.8
1.57.9 Parallel body at loaded summer deadweight (SDWT) 128.66 Meters Parallel body, forward to mid-point manifold at loaded 39.86 Meters SDWT
1.57.10 Parallel body, aft to mid-point manifold at loaded 88.8 Meters SDWT
1.57.11
1.58 Does ship have a bulbous bow? No
1.59 Net Registered Tonnage 6258 Tonnes
1.60 Gross Tonnage 11129 Tonnes
1.63.1 Summer Freeboard 3.88 Meters
1.63.2 Summer Draft **8.34 Meters**
1.63.3 Summer Deadweight 19999 Tonnes
1.63.4 Summer Displacement 24995 Tonnes
1.66.1 Lightship Freeboard 10.192 Meters
1.66.2 Lightship Draft 2 Meters
1.66.3 Lightship Deadweight Tonnes
1.66.4 Lightship Displacement 5300 Tonnes
1.67.1 Normal Ballast Condition Freeboard 7.19 Meters
1.67.2 Normal Ballast Condition Draft 5 Meters
1.67.3 Normal Ballast Condition Deadweight 9400 Tonnes
1.67.4 Normal Ballast Condition Displacement 14427 Tonnes
1.68.1 Segregated Ballast Condition Freeboard 7.19 Meters
1.68.2 Segregated Ballast Condition Draft 5 Meters
1.68.3 Segregated Ballast Condition Deadweight 9400 Tonnes
1.68.4 Segregated Ballast Condition Displacement 14427 Tonnes
1.69 FWA at Summer Draft (Freeboard) 2343.15 Millimeters
1.70 TPC Immersion at Summer Draft (Freeboard) 76 Tonnes
1.71.1 Draught Fore at normal ballast conditions (Freeboard) 4.33 Meters
1.71.2 Draught Aft at normal ballast conditions (Draft) 5.33 Meters