APPENDIX V

Spill Prevention & Emergency Response Plan

FIBRECO

Fibreco Export Terminal Enhancement
Permit Application Document

APPENDIX V

Spill Prevention & Emergency Response Plan - Executive Summary

Purpose: To ensure the highest level of Environmental protection is maintained by the Terminal and all vessels, contractors and personnel while at the site.

Highlights of the plan include

- Emergency Response
    - Contacts
    - Protocol
- Environmental Spill Response
    - Emergency Spill Response
    - Incident Clean Up
    - Incident Investigation and Reporting
- Spill Prevention
    - Oil and Hazardous Material Storage
    - Best Management Practices for Spill Control and Reduction
    - Refueling
    - Spill Kits
    - Clean Up
    - Storage Area Inspection
    - Training

The purpose of this plan is to demonstrate compliance with applicable contractual and regulatory requirements governing incident prevention, incident response, notification, and reporting as well as fire response. More specifically, the Plan provides information on: Incident Response Procedure; Responsibilities in Case of an incident; Incident Notification and Reporting and Best Management Practices.

1.0 Emergency Response

During operation there are risks of potential accidents occurring, malfunctions of equipment, spills or general environmental incidents which all may require a level of emergency response. It is important to outline and train on procedures to follow in the event of emergencies to assist in making appropriate decisions at a time when tensions may be elevated and personnel safety is of utmost concern. If accidents and malfunctions are not properly mitigated or responded to, they could have a significant impact on the Project.

1.1 Emergency Communication

In the event of an emergency where it is important for quick and clear communication to minimize potential impacts to workers, the public, property and the environment in emergency situations, the phone numbers of key emergency responders are provided in Table 1. Any hazardous material spill on land over the required spill reporting volumes (e.g. >100 L for hydrocarbons) will be reported to Emergency Management BC. Any spill to the marine environment will be reported to Emergency Management BC and Canadian Coast Guard.

Table 1: Key Emergency Contact Phone Numbers

Authority/Company Name	Phone Number
Canadian Coast Guard	604.775.8881
Duty Manager	604.998.4111
Emergency Management BC (formerly PEP)	1.800.663.3456
Emergency Services	911
Fire (Non-Emergency)	604.980.5021
Fisheries Department Radio Room	604.666.3500
HazCo Emergency Response (3rd party spill response)	1.800.667.0444
Lions Gate Hospital	604-988-3131
On-Site Security	604.983.7913
Police (Non-Emergency)	604.985.1311
Port of Vancouver Operations Centre	604.665.9086
Tri-Arrow Industrial Recovery Inc. (3rd party spill response)	604.682.2751
Western Canada Marine Response Corporation	604.294.9116

1.2 Environmental Emergency and Spill Response

The FIBRECO on-call manager will be responsible for responding to on any spills to ground within the confines of the facility boundaries and for any spill to water that is sourced from FIBRECO lands, docks or ships that are at berth at the Fibreco facility.

1.3 Emergency Spill Response

A spill is defined as a discharge of a pollutant into the natural environment from or out of a structure, vehicle, or other container, that is abnormal in quality in light of all the circumstances of the discharge.

Spill kits are to be readily available in all work areas and will be provided in construction vehicles. The Environmental Team will ensure that an adequate spill response equipment inventory is kept on site at all times including adequate supplies for initial spill response to the marine environment.

The Fibreco Foreman will immediately notify the Duty Manager and take the necessary steps, including reliance on external resources, to abate an uncontrolled discharge. They will provide the necessary labour, equipment, materials and absorbents to contain and remove the spill, clean up the affected area, dispose of waste materials at an approved disposal site, and restore the area.

Any individual who notices a potential spill, spill, or equipment malfunction is to stop work immediately and shut down equipment. The person involved will contact the Foreman. The Foreman will respond with additional spill response equipment if necessary with assistance of the Duty Manager, who will also respond. All parties are to remain at the scene until required information is gathered.

Initial response to spills during the works will be as follows:

1. Assess safety risks in the spill area.
2. Notify Foreman
3. Stop the flow of the hazardous material if it is safe to do so.
4. Secure and isolate the spill area.
5. Assess the situation (identify product, equipment involved, affected area, spill status, time of spill).
6. Begin containing and recovering the spill with on-site emergency spill equipment if it is safe to do so.
7. Complete the spill notification and reporting procedure.

1.4 Incident Clean Up

The Environment Team will remain at the scene until incident cleanup is under control. Any contaminated soil will be disposed of in the on-site contaminated soil bin, and spent adsorbent material will be disposed of in the hazardous waste bin. All fluid contained in drip trays, will be disposed of in the used oil recycling container. The Environment Team will document all clean-up activities with pictures.

Following clean-up of a significant spill, an investigation will be performed. The investigation will occur following any reportable spill as defined by the Spill Reporting Regulation. This debriefing will include review of the following:

1. Root cause of the spill;
2. Actions taken to mitigate the spill;
3. Measures to prevent the spill from occurring again;
4. Review with associated crew members; and,
5. How the response could have been improved.

A more informal debriefing (e.g. one-on-one between foreman and workers) may be held for lesser spills as part of ongoing on-site training in spill prevention and response.

1.5 Incident Investigation and Reporting

An initial investigation will be implemented at the scene and will address the following questions:

1. Have there been injuries?
2. Is there need for outside help?
3. What was spilled?
4. How much has been spilled?
5. Has the source been isolated?
6. Has the area in which the spill occurred been contained?

The Duty Manager will determine the amount of fluid released from the equipment or vessel. Witnesses statements will be gathered from all parties involve. Both the Maintenance and

Operations Department will identify action items to reduce the risk of similar incidents occurring in the future.

A complete “Environmental Incident Report” will be completed by the Duty Manager in order to communicate the incident accurately with the Port of Vancouver and any outside regulatory agencies.

An “Environmental Incident Report” will also be required when any of the following activities occur:

1. Hazardous material spill to land or marine environment
2. Work beyond established boundaries or timing windows
3. Work resulting in direct harm or death to wildlife including birds or fish
4. Improper heritage resource mitigation
5. Improper hazardous materials management
6. Water quality issue
7. Air quality issue
8. Negative wildlife/human interaction and
9. Work occurred without proper permit or authorization

2.0 SPILL PREVENTION

During operations there are risks of potential accidents occurring, malfunctions of equipment, spills or general environmental incidents which all may require a level of emergency response. It is important to identify potential hazards, develop best management practices and train on procedures to follow in the event of emergencies to assist in making appropriate.

The facility will employ best management practices as a prevention method to spills and a method to limit the environmental damage in the case that a spill or release does occur. The following are examples of mitigation measures that will be practiced on site.

2.1 Oil and Hazardous Material Storage

Oil and hazardous materials stored at the facility are identified in Table 2 - Oil and Hazardous Material Storage

Tank/Storage Description	Material Stored	Tank Capacity (liters)	Tank Type & Construction
Diesel Fuel Tank	Diesel Fuel	3,780	Carbon steel
Gasoline Fuel Tank	Gasoline	3,780	Carbon steel
Drum Storage	Hydraulic Oil	208	55-gallon drums
Drum Storage	Lubricating and Engine Oil	208	55-gallon drums
Miscellaneous (eg.Fire proof cabinets)	Paints and Greases	Varies	Cans and pails

2.2 Refueling

General measures include:

1. Deliver fuel to construction site by approved mobile refueling tanks (either to on-site refueling tanks or directly into the equipment)

2. All dispensing or transferring of fuel will be attended for the duration of the operation

3. The attendant will be trained in fueling procedure

4. Refuel large tank capacity equipment away from water bodies (i.e., minimum 30m)

5. When transferring fuel, place sorbent material around the fuel inlet prior to dispensing, and use pumping equipment, an approved hose and top-fill nozzle

6. Verify that there is a proper connection between the fuel fill hose and the fill pipe of the highway tank, mobile refueling tank or the equipment being filled, and verify that the fill valve is open

7. Do not overflow the receiving tank

8. While refueling, suspend operation of moving equipment in the immediate vicinity of the refueling

9. Maintain regular inspections of fuel systems and their components (check for leakage, deterioration or damage)

10. Refuel marine vessels at a commercial gas dock

2.3 Oil and Hazardous Material Storage

Proper storage of oil and hazardous materials will contribute to preventing spills. The following guidelines shall be followed:

1. Bulk lubricating oils will be stored in a designated area that is configured for secondary containment and protected from the elements. All containers within the containment area will be labeled as to their contents; lids will be on and closed. Empty containers will be removed, labeled and stored for re-use or disposal, as applicable to each particular container.

2. Lubricating oil dispersal locations will have secondary containment to minimize impact from potential releases.

3. Solvents and degreasers will be stored in fire resistant, approved security cabinets to minimize risk of environmental and personnel injury impacts.

4. Propane and other tanks will be stored in safety cages outside, clearly marked as full and empty.

5. Miscellaneous items such as aerosols, washer fluid, paints, roof patch, caulking and non-combustible items, when not in use, will be stored in containment shelters that are protected from the elements, or will use enclosed and vented enclosures.

2.4 Spill Kits

Spill kit control will use the following procedures:

1. Maintain a functional spill kit (e.g. containing sorbent materials, gloves and portable disposal container for used sorbent material) on each construction related vehicle

2. Station properly furnished spill kits at appropriate intervals throughout the facility and near main watercourses. At a minimum, each such kit should contain sufficient hydrophobic absorbent material (e.g. oil absorbent pads and socks) to contain and clean up potential drips, leaks, or spills (e.g. ruptured hydraulic line), gloves and heavy plastic bags to contain used absorbent materials and contaminated soils or wastes

3. A marine-specific spill kit will be located at the wharf structure and be furnished with sufficient absorbent material including a large spill containment boom with a watercraft of sufficient size available to deploy the boom

4. Clearly sign the location of all large, drum style spill kits

5. Spill kits stationed for works in or about water will contain absorbent booms

6. Label spill kits to identify the spill capacity for which the kits are intended

7. A spill kit will be located where refueling occurs

8. Check spill kits on a regular basis to ensure all used contents of spill kits are replenished

2.5 Clean-up

The following clean-up procedures will be employed:

1. Place used (contaminated) sorbent materials in spill kit bag provided for that purpose

2. Used materials can be temporarily stored on-site in a clearly labeled drum dedicated to that purpose - drum contents must be emptied within reasonable time with contents disposed off-site

3. Soil and/or groundwater contaminated by spill(s) of hazardous materials must be remediated

4. The facility Manager will be contacted immediately when a spill of hazardous or deleterious substances enters the natural environment and a spill specific clean-up action plan will be developed and implemented in accordance with CSR and other applicable regulation

2.6 Storage Area Inspection

On a monthly basis, all oil and hazardous material storage areas will be inspected. This will include the inspection of oil storage containers, oil-filled operational equipment and the surrounding areas. The inspections will be documented. The inspection shall evaluate the following:

1. Outside of tank, tank shell;

2. Tank foundation and support

3. Signs of deterioration or discharge;

4. Valves, piping, pumps and fittings;

5. Secondary containment;

6. Spill kit contents;

3.0 Training

On an annual basis, all facility employees will receive training on the content of this plan so they are familiar with the procedures for responding to an emergency or spill, and so they are familiar with the best management practices employed to prevent a spill from occurring. A record of who was trained and last date of training will be maintained.