

OWNER'S TABLE OF COMMITMENTS AND ASSURANCES

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|---|--|---|--|---|-----------------------------------|
| Responsible Environmental Management | | | | | |
| 1 | <i>As an overriding objective of responsible environmental management, the Owner shall ensure that an Environmental Management System (EMS) shall be implemented for the Project. The Owner will ensure that the design, construction and operation, including maintenance, of the Project is carried out in an environmentally responsible manner, and will employ Best Management Practises (BMPs) and comply with federal, provincial and municipal statutes, where applicable. The Owner will instruct and advise the selected container terminal operator to abide by all relevant commitments in this Table and as reflected in the EAC.</i> | Pre-construction, Construction, Operation, Maintenance | VPA, Contractors, Terminal Operator | DFO, EC, EAO NOTE: <i>The agency listing applies to all subsections of a main section, unless otherwise specified.</i> | FN, MOE, COD, GVRD, FHA, HC |
| 1.1 | The Owner will ensure that required statutory Permits, Approvals and Authorizations are in place before proceeding with construction. | | | | |
| 1.2 | The Owner will prepare or have prepared a Construction Environmental Management Plan (EMP) for the Project as outlined in section 2 below and prior to the start of construction. The Construction EMP will provide contractors and on-site workers with procedures and requirements for meeting Permits, Approvals and Authorizations and for carrying out on-site activities using accepted BMPs and complying with conditions of the EAC. | Pre-construction, Construction | VPA, Contractors | | |
| 1.3 | The Owner will prepare or have prepared an Operation EMP, as outlined in section 3 below and dealing with environmental management aspects of the longer-term operations and maintenance of the Project. The Owner will ensure compliance with applicable BMPs, as well as with the EAC and with federal, provincial and municipal requirements of the Project. | Operation, Maintenance | VPA, Contractors | | |
| 1.4 | The Owner will ensure that the general content and intention of the Construction and Operation EMPs comply with the listing in section 21.2.1 of the EAC Application. | Construction, Operation | VPA, Terminal Operator | | |
| Construction Environmental Management Plan | | | | | |
| 2 | <i>The Owner will develop or have developed and implement or have implemented a detailed Construction EMP. The development of this plan is</i> | Pre-Construction, Operation | VPA, Contractors | DFO, EC, HC | FN, GVRD, MOE, FHA, |

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| | <i>described in the EAC Application (Section 21, pg. 694 onwards).</i> | | | | COD |
| 2.1 | <p>The Construction EMP shall include the following sub-plans which are further specified in section 2.2 through 2.12 below:</p> <ul style="list-style-type: none"> • Construction/Dredging Timing Plan • Surface Water Quality Management and Sediment Control Plan • Hazardous Waste Management and Spill Control Plan • Health and Safety/Emergency Response Plan • Waste Management Plan • Noise Management Plan • Wildlife and Vegetation Impact Mitigation Plan • Marine Environment Management Plan • Marine Water Quality Plan • Air Quality Impact Mitigation Plan • Traffic Management Plan | As above | As above | As above | As above |
| 2.2 | <p>The <i>Construction/Dredging Timing Plan</i> shall form the basis for an Application for an EC “Disposal at Sea Permit”, and must cover or include information that can be found on EC’s website: http://www.pyr.ec.gc.ca/disposal_at_sea/index_e.htm See also section 28 of this Table.</p> | Pre-Construction (following determination under CEAA | VPA, Contractors | EC | DFO, TFN, COD, MOE |

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| 2.3 | <p>The <i>Surface Water Quality Management and Sediment Control Plan</i> shall be prepared for upland activities, largely associated with construction of additional rail siding from 57B Street to 64th Street. The plan must describe the following:</p> <ul style="list-style-type: none"> Measures to minimize sedimentation of watercourses (ditches), and to prevent the discharge of deleterious substances or debris into the receiving environment; Procedures for collection and analysis of water quality samples to ensure that site runoff complies with project-specific requirements identified by regulatory agencies; Protocols for regular monitoring, maintenance and repair of sediment control systems to ensure that these systems function effectively under all site conditions; Responsibilities of the environmental monitor with respect to plan implementation; Procedures for immediate notification of VPA's authorized site personnel and/or responsible authorities, in the event of an environmental incident such as discharge of deleterious substance from the project site occurs; and Measures taken to address and resolve issues arising from non-compliance with applicable standards, criteria, guidelines and/or approvals to the satisfaction of VPA and the responsible authorities. | Construction | VPA, Contractors | EC, DFO, MOE, COD | GVRD, TFN |
| 2.4 | <p>A <i>Hazardous Waste Management and Spill Control Plan</i> shall be prepared to describe how the contractor will manage any hazardous waste material generated during Project construction as well as spill control procedures. The plan will describe the following:</p> <ul style="list-style-type: none"> Regulatory requirements of the federal <i>Transportation of Dangerous Goods Act</i> and other requirements pertaining to the handling and disposal of hazardous materials and wastes; | | | | |
| | <ul style="list-style-type: none"> Procedures for fuelling of equipment and storage and handling of petroleum products in accordance with all applicable guidelines, legislation, and best management practices; Outline a spill prevention, containment and cleanup contingency plan for hydrocarbon products, and all other deleterious substances that may be used in association with the Project. Include a list of appropriate containment and clean up materials to be present on site throughout the construction of the Project.; and List of contacts and emergency numbers. | Construction | VPA, Contractors | TC, MOE, EC | GVRD, FHA |

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| 2.5 | <p>Under the direction of the Owner, all contractors will develop a <i>Health and Safety/Emergency Response Plan</i> (Plan) for their component of work prior to the start of construction. The Plan would also outline emergency response procedures during construction. Although the primary responsibility for on-site emergency planning and response during construction rests with the contractors, the Owner will ensure that the developed Plans are not only site specific, but also meet all standards, BMP and guidelines applicable to emergency planning and incident response. Local government's emergency services (fire, police, and ambulance) are responsible for operational support to the extent that expertise and resources are available and to the extent that the response functions are within their mandate.</p> <p>The Plan would typically include, but not be limited to:</p> <ul style="list-style-type: none"> • Site location and prime contacts; • Local emergency and Project contact numbers; • Description and map of emergency routes; • Safety equipment required; • List of site hazards and mitigation; and • Potential waste generation and disposal methods. | Construction | VPA, Contractors | HC, FHA, EC, MOE | GVRD, COD, TFN |
| 2.6 | <p>A <i>Waste Management Plan</i> for construction activities will be prepared and include the following:</p> <ul style="list-style-type: none"> • Detail measures to minimize the amount of waste generated; and • Outline how waste and deleterious substances generated by construction of the Project will be appropriately contained by the contractors in the immediate work area, collected, and appropriately disposed of in accordance with all applicable legislation, guidelines, and best management practices (see also section 9 below). | Construction | VPA, Contractors | MOE, COD, FHA | GVRD, EC, HC, TFN |
| 2.7 | <p>A <i>Noise Management Plan</i> will be developed to ensure identified mitigation measures are implemented. This plan will include the following:</p> <ul style="list-style-type: none"> • Describe procedures for construction activities to meet the intent of Delta Noise Control Bylaw No. 1906, 1972 to avoid disturbance of the local community with 24 hour – 7 day per week construction periods. • Set maximum allowable noise emissions for each type of machinery prior to construction to ensure that contractors do not utilize any excessively noisy equipment. • Outline training requirements to ensure construction workers are aware of noise issues and act to minimize noise where possible. • List an environmental helpline and management procedure to deal with | Construction | VPA, Contractors | COD, HC, FHA | GVRD, TFN |

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| | noise complaints that may arise from construction activities. Outline procedures to ensure complaints are investigated, and appropriate noise amelioration measures established to mitigate future occurrences. See also section 22 and 23 of this Table. | | | | |
| 2.8 | <p>A <i>Wildlife and Vegetation Impact Mitigation Plan</i> for off causeway rail and road works must be developed by the Owner to ensure identified mitigation measures are implemented. The plan will include the following:</p> <ul style="list-style-type: none"> • Procedures to ensure vegetation clearing during construction is kept to a minimum; • Outline procedures for areas disturbed by construction activities to be re-vegetated with native grass species, thereby enhancing native species in the study area and minimizing the potential for establishment of non-indigenous species. In addition backshore planting plans will be developed to meet the Authorization requirements under section 35(2) of the Canadian <i>Fisheries Act</i> for the Project; • Describe protocols to erect fences and silt curtains around the ditch between 57B Street and 64th Street to prevent disturbance to the grassy margins of the ditch, and to limit siltation to aquatic habitats; • Outline procedures to store and/or dispose of food, garbage and petroleum products in an appropriate manner to prevent attraction of wildlife to construction sites; • Outline a schedule to undertake construction works in upland areas in the winter months to limit sensory disturbance to wildlife or additional mitigation may apply; • Outline the procedures to place barn owl nest boxes, through support of environmental stewardship programs, in areas towards Brunswick Point where they are less vulnerable to major motorways; and • Relevant breeding seasons for: <ul style="list-style-type: none"> • Terrestrial mammals and breeding birds March 15 - July 31; and • Raptors/herons January 01- August 15. | Construction | VPI, Contractors, | EC, MOE, COD, DFO | GVRD, TFN |

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| 2.9 | <p>A <i>Marine Environmental Management Plan</i> must be developed by the owner, and applicable to the Project's operational phase as well, to meet the Authorization requirements under sub-section 35(2) of the Canadian <i>Fisheries Act</i> for the Project. Project and biota monitoring for the Adaptive Management Strategy. The VPA has submitted a conceptual draft Habitat Compensation Proposal (dated March 12, 2006) to DFO and EC, agreed by VPA and DFO/EC to contain satisfactory information and plan details to proceed with determination under CEAA and certification under the Act.</p> <p>The purpose and content of the Marine Environmental Management Plan is outlined in Schedule 1 of this Table.</p> | Construction, Operation | VPA, Contractors, Terminal Operator | DFO, EC | TFN |
| 2.10 | <p>A Project specific <i>Marine Water Quality Plan</i> must be designed by the Owner based on the baseline water quality information to confirm the construction mitigation measures are functioning and no impacts are occurring in the marine environment. The <i>Marine Water Quality Plan</i> will form part of the <i>Fisheries Act</i> Authorization and support the Adaptive Management Strategy for the Project. The plan would:</p> <ul style="list-style-type: none"> • Outline procedures for collection and analysis of water quality samples to ensure that marine water quality complies with Project specific requirements identified by regulatory agencies; • List protocols for regular monitoring, maintenance and repair of sediment control systems to ensure that these systems function effectively under all site conditions; • Describe the responsibilities of the environmental monitor; • Identify procedures for immediate notification of VPA's authorized site personnel and/or responsible authorities, in the event of an environmental incident such as discharge of deleterious substances from the project site occurs; and • Identify measures to be taken in order to address and resolve issues arising from non-compliance with applicable standards, criteria, guidelines and/or approvals to the satisfaction of VPA and the applicable regulatory agencies. | Construction | VPA, Contractors | DFO | EC, TFN |
| 2.11 | <p>The Owner will develop an <i>Air Quality Impact Mitigation Plan</i> as addressed in Table 20.1 of the Application and further discussed in section 18 of this Table. The Plan will cover but not be limited to:</p> <ul style="list-style-type: none"> • The Owner, through the tendering of the Project, will implement air | Construction | VPA | GVRD | EC, COD, FHA, HC, TFN |

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| | <p>quality initiatives that will be undertaken during construction to reduce emissions to the air wherever possible.</p> <ul style="list-style-type: none"> • Use on-road (ultra low sulphur) diesel, where practical for all Project site based equipment that are capable of using such fuels. • Use diesel particulate filters and/or other appropriate retrofits on construction equipment where possible (such as automatic anti-idling shut-offs). • Use, where practicable, post 1996 shore based construction equipment and vehicles to reduce emissions of PM, hydrocarbons and nitrous oxides. • Other measures using best available technology and continuous improvement to reduce air emissions discussed in detail in section 18 of this Table. | | | | |
| 2.12 | <p>The Owner will develop a <i>Traffic Management Plan</i> as discussed during the Project review. The Plan must reflect other conditions discussed in section 7 of this Table and include:</p> <ul style="list-style-type: none"> • The Owner will develop a Plan to reduce the potential for traffic incidents in the local community resulting from construction activities related to the Project. All construction truck traffic, with the exception of materials sourced locally, shall access the site solely via provincial highways rather than roadways within Delta's municipal jurisdiction. • The Owner will instruct contractors to adopt reasonable efforts to use water borne delivery methods for construction materials and the removal of waste materials. | Construction | VPA | MOT, COD, TransLink | GVRD, TFN |
| Operation Environmental Management Plan | | | | | |
| 3 | <i>The Owner will develop or have developed and implement or have implemented a detailed Operation EMP. The development of this plan is described in the EAC Application (Section 21, pg. 694 onwards).</i> | Operation | VPA, Terminal Operator | EC, DFO, EAO | GVRD, COD, FN; HC, FHA |
| 3.1 | <p>The Operation EMP shall include the following sub-plans which are further outlined below:</p> <ul style="list-style-type: none"> • A <i>Deltaport Terminal Environmental Management Plan</i> • A <i>VPA Operations Environmental Management Plan</i> • A <i>TSI Emergency Response Plan</i> <p>(Note operational air impact mitigation strategies are in sections 19-21.)</p> | Operation | VPA, Terminal Operator | As above | As above |
| 3.2 | The Owner will ensure that the Terminal Operator updates the existing <i>Deltaport Terminal Environmental Management Plan</i> (September 2004) to ensure that operation of the DP3 Project is carried out in accordance with | Operation | VPA, Terminal Operator | As above | As above |

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| | the environmental goals and requirements presented in the EAC Application and discussed in section 21.2.3 of the EAC Application. In addition, the Terminal Operator must add environmental management measures to assess and minimize noise from the operation of the Project. The Deltaport Terminal EMP must be updated to include mitigation measures identified in this Assessment Report and would include equipment alarms, machinery noise, and operator awareness and training. Further details of this requirement and commitment are included in section 17 onwards of this Table. | | | | |
| 3.3 | The Owner will ensure that the VPA <i>Operations Environmental Management Plan</i> available for the DP3 Project is updated to incorporate the latest Project design as it applies to ballast water and bilge water. For reference, see VPA Harbour Operations Manual Revision Date December 12, 2005. http://www.portvancouver.com/the_port/harbour_operations.html | Operation | VPA, Terminal Operator | DFO, TC | GVRD, COD, TFN |
| 3.4 | The Owner must ensure that an <i>Emergency Response Plan</i> is available and updated by the Terminal Operator. The Terminal Operator must update the terminal Emergency Response Plan (ERP) prior to the commencement of terminal operations. The ERP would ensure that an organized and practiced response is provided to incidents and emergency situations that might affect the provision of port services at the Roberts Bank port facility. The ERP would distinguish the individual responsibilities of the Terminal Operator, Corporation of Delta, BC Rail, and MOT and would cover sections listed in Schedule 1 to this Table. | Operation | VPA, Terminal Operator | EC, COD | GVRD, TFN |
| 3.5 | The Owner has committed to a number of other operational environmental planning and management activities and they are listed in the relevant bio-physical and socio-community sections of this Owner's Table. | | | EAO | |
| Environmental Monitoring | | | | | |
| 4 | <i>The Owner will ensure that general environmental monitoring and reporting for the construction and operation phases of the Project will be conducted, with respect to the terms and conditions of the EAC and other regulatory Permits, Approvals and Authorizations as applicable.</i> | Pre-construction, Construction, Operation | VPA, Contractors, Terminal Operators | EAO, DFO, EC | HC, FHA, GVRD, COD, FN |
| 4.1 | The Owner will ensure that the monitoring of the Construction EMP, outlined in section 21.2.4 of the EAC Application and in section 2 of this Table, will incorporate all plans developed for the construction phase of the Project and as detailed in the respective monitoring plans of the independent | | | | |

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| | EMPs. | | | | |
| 4.2 | The Owner will ensure that each of the environmental monitoring plans will outline the rationale for monitoring, the parameters to be monitored, monitoring program details, and follow-up actions to be taken by the Owner or the Terminal Operator as appropriate. | | | | |
| 4.3 | The Owner will engage or have engaged an independent Environmental Monitor, or an environmental monitoring firm, for the construction phase of the Project. The Environmental Monitor will undertake environmental monitoring activities, and will implement each of the environmental monitoring plans developed for the Project and as reflected in the appropriate EMP. The Environmental Monitor will review, evaluate, and report to regulators on the construction activities and the effectiveness of the environmental control strategies and mitigation measures, with respect to the terms and conditions of the EAC and other regulatory Permits, Approvals and Authorizations that may apply. | | | | |
| 4.4 | A program of archaeological monitoring will be implemented if any excavation activities occur in the vicinity of the Cohilukthan Slough (west of 46A Street). If any archaeological sites are discovered during the proposed site construction, these sites would be reported to the British Columbia Archaeology Branch and the TFN and works would cease, pending their consideration. These sites would then be assessed for significance and, if required, protection measures established with construction proceeding under the supervision of an archaeologist. | Construction | VPA, Contractors | MCS | MCS, TFN |
| 4.5 | The Owner will ensure that the monitoring of the Construction EMP, outlined in section 21.2.4 of the EAC Application and in section 3 of this Table, will incorporate all EMPs developed for the operation phase of the Project and as detailed in the respective monitoring plans of the independent EMPs. | Operation | VPA, Terminal Operator | EAO | |
| Adaptive Management Strategy | | | | | |
| 5 | <i>The Owner and the Government of Canada, represented by EC, have taken steps to conclude an Agreement on the compliance with the terms and conditions of an Adaptive Management Strategy for the inter-causeway marine and wildlife habitats. The Owners shall ensure that this Agreement and its environmental monitoring plan are fully complied with.</i> | Construction, Operation | VPA, Terminal Operator | EC | DFO,GVRD, COD, FN |
| 5.1 | The Owner will ensure that all details of Schedule B, dated April 2006, to the Agreement are complied with and shall conduct all required meetings to ensure that all parties to the Agreement, as specified in the Agreement and its Schedule B, comply with the intent of the Agreement and its | | | | |

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| | amendments as required. | | | | |
| 5.2 | The Owner commits to participate in the Roberts Bank Environmental Stewardship Program. | | | | |
| Consultation with the Public and First Nations | | | | | |
| 6 | <i>The Owner will involve the local community, other stakeholders and First Nations within an open and interactive consultation process during final design, construction and throughout the first year of operation. Consultation will be carried out according to BC government policies included in EAO's Section 11 Order issued on September 17, 2004.</i> | Pre-construction, Construction, early Operation | VPA | EAO, COD, TFN | Agency, FN |
| 6.1 | The Owner will conduct public as well as First Nations open houses and information sessions, at least twice each year, to provide information on the progress of design, construction, schedules, and upcoming milestones. | | | | |
| 6.2 | The Owner will continue to update and make available media information material, as part of its public information commitment. | | | | |
| 6.3 | The Owner will implement a complaint tracking and response mechanism, agreed to by EAO prior to start of construction, for the construction phase of the Project. The Owner will commit to the organization of a Community Liaison Committee (CLC), including a representative from COD, for addressing public concerns. The Owner will also continue to liaise with First Nations, independently or through the CLC, to address relevant concerns over Project impacts. | | | EAO | |
| 6.4 | The Owner will continue to engage in consultation with relevant First Nations identified in the Assessment Report throughout the Post-Review and Construction Phases, including discussions on economic development opportunities, employment and cultural display opportunities generated by the Project. More specifically, such consultation shall continue with those First Nations who have informed EAO or the Owner on the Project's adverse impacts on their asserted aboriginal rights, appropriate accommodation to reflect on such impacts as discussed and described in the EAO Assessment Report. | Pre-construction, Construction | VPA | EAO, FN | |
| 6.5 | Before start of construction, the Owner shall provide to the EAO a report on the results of discussions reflected in section 6.4. The report shall also include a discussion on any aboriginal fishery issues defined in section 13 of this Table. | | VPA | EAO | |
| | Further socio-community commitments are included in section 26 of this Table. | | | | |

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| Specific Construction and Operation Issues | | | | | |
| 7 | <i>The Owner shall implement the Mitigation Measures and Compensation Measures committed to in the Traffic Section of the Application's Table 20.1 – pages 663/664. Further general commitments are listed below and specific impact sector commitments are included in the specific sections below.</i> | Construction, Operation | VPA, Terminal Operator, Contractors | MOT, COD, TFN , ALC | GVRD, TransLink |
| 7.1 | The specific traffic commitments to be undertaken in consultation with MOT and COD include: <ul style="list-style-type: none"> Implement signal modifications at Highway 17/Ladner Trunk Road, as appropriate and approved by MOT and COD; Extend HOV lines lanes on Highway 17; Monitor pre- and post-construction noise adjacent to Highway 17 improvements and if necessary implement appropriate sound attenuation measures, subject to results of monitoring; Expand the Highway 99 Massey Tunnel congestion management system on Highway 17 as part of the highway improvements ; Investigate safety incidents with MOT that were recorded by VPA at Deltaport Way and 41B Street; and Subject to COD approval to close 57B Street rail crossing provide alternate access for farm equipment such as the proposed service road adjacent to the BC Rail Line between 57B Street to 64th Street. | | | | |
| 7.2 | The Owner will ensure that Transport Canada will undertake a warrant review for an overpass at the 80 th Street rail crossing as part of their Roberts Bank rail corridor assessment and determine the appropriate funding if an overpass is required. | Construction, Operation | VPA | TC, COD, ALC | |
| 7.3 | The Owner will implement signal modifications at Ladner Trunk Road and Highway 17 (including Optimize Signal Timing; Move the Detector Loops; and Relocate the Northbound and Southbound Detector Loops). | Operation | VPA | MOT, COD | |
| 7.4 | The Owner will work with MOT to amend the <i>Motor Vehicle Act</i> thereby restricting commercial vehicles to the outside (curb) lane on Highway 17. | | | | |
| 7.5 | The Owner will implement geometric changes to the highway ramps in the southeast quadrant of the Ladner interchange. | | | | |
| 7.6 | The Owner will work with BC Rail Port Sub Ltd. and the Delta emergency service providers to ensure that the existing emergency access protocols are adhered to for the specific grade crossings including access to Boundary Bay Airport (36 th Ave., 72 nd St., 80 th St.), and 64 th Street. | | | COD, ALC | |

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| 7.7 | The Owner will participate with the COD and other stakeholders in the preparation of an incident management plan regarding traffic management and assist with the geometric and structural improvements to accommodate incident management bypass traffic and response measures along with safety improvement measures on Deltaport Way associated with truck incidents on the corridor. | | | MOT, COD | |
| 7.8 | The Owner will work with the Corporation of Delta to conduct a preliminary design of improvements to the intersection of Arthur Drive/34B Avenue to correct the existing sight line problems. | | | | |
| 7.9 | The Owner will continue to work with the COD, City of Surrey, City of Langley and Township of Langley to reduce traffic impacts. | | | Non-specific | |
| 7.10 | The Owner commits to working with relevant authorities and parties to optimize the performance, efficiency and reliability of container truck movements to relieve traffic congestion on local roads. | | | Non-specific | |
| Coastal Geomorphology | | | | | |
| 8 | <i>The Owner shall commit to a long-term coastal geomorphology monitoring program, as reflected in the AMS referenced in section 5 above, and consistent with the Habitat Compensation Plan and any future Fisheries Act Habitat Authorization monitoring requirements.</i> | Construction, Operation | VPA, Terminal Operator | EC, DFO | COD, FN, MOE, NRCan |
| 8.1 | The Owner will ensure that shoreline protection (sloping rock revetment) along the newly created shoreline is designed to minimize reflection and propagation of waves. | | | | |
| 8.2 | The Owner will ensure that any repairs to the crest protection in the new tug basin, if required, will be planned and constructed to maintain its current location and function, thereby mitigating any potential effects. | | | | |
| Water Quality | | | | | |
| 9 | <i>The Owner will ensure that the construction works and operations for the Project are conducted in compliance with legislated requirements and BMPs, with particular attention to construction practices that prevent the introduction of deleterious substances, pursuant to section 36(3) of the federal Fisheries Act, into fish frequented waters.</i> | Construction, Operation | VPA, Contractors, Terminal Operator | EC | COD, TFN, DFO |
| 9.1 | The Owner will ensure that all reasonable measures are taken to prevent the discharge to the marine environment of substances that are deleterious to fish, fish habitat or man's use of fish at the construction sites at any time during dredging, filling and construction of the terminal supportive structures | | | | |

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| | and auxiliary facilities or at any other construction sites in the proximity of fish and aquatic habitat. Particular attention should focus on discharges of suspended sediments, construction waste, handling of uncured concrete and other potentially deleterious substances. | | | | |
| 9.2 | <p>The Owner will also commit to the following measures during construction:</p> <ul style="list-style-type: none"> • Implement containment dykes for dredging and terminal land fill operations to contain materials and prevent spill-over into surrounding foreshore areas. • Dredged material will be pumped into the contained terminal area where the solids settle out. • Decant water and suspended silt will be completely contained during the landfill process and will either be re-pumped via submerged pipeline or deposited via bottom dump barge to approved EC ocean disposal sites. • Comply with DFO dredging guidelines for the protection of marine resources susceptible to total suspended solids (TSS) levels at Roberts Bank. • Implement a marine water quality monitoring plan referenced in section 2.10 of this Table. | | | | |
| Sediment Quality | | | | | |
| 10 | <i>The Owner will ensure that the construction works and operations for the Project are conducted in compliance with environmental protection requirements, the EMPs discussed above and relevant BMPs and shall commit to sediment quality monitoring as reflected in the AMS referenced in section 5, above</i> | Pre-construction, Construction, Operation | VPA, Contractors | EC, MOE | COD, TFN |
| 10.1 | The Owner will meet suspended sediment recommendations of the “Canadian Water Quality Guidelines for the Protection of Aquatic Life” and the “BC Approved Water Quality Guidelines”. | | | | |
| 10.2 | Stormwater from the Deltaport DP3 terminal will be directed through an oil interceptor and catch basins to act as a sedimentation tank to collect possible contaminants prior to discharging storm water effluent to the ocean. | | | | |
| 10.3 | The Owner will decommission and replace the eight existing storm outfalls, located along the northern perimeter of Deltaport, with new storm outfalls, located away from intertidal areas to drain into deeper water off of the new berth face. | | | | |

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| 10.4 | The Owner will fit new storm outfalls with shut-off valves to terminate flow from the Project should a sizeable spill occur on the terminal and enter the stormwater system. | | | | |
| | Conditions pertaining to disposal at sea are included in section 27 below. | | | | |
| Marine Environment | | | | | |
| 11 | <i>The Owner has agreed to develop a final Habitat Compensation Plan that meets DFO Policy objectives in support of a Fisheries Act authorization for the construction of the Deltaport Third Berth Project. See Schedule 1 EMP – Marine Environment Management Plan for additional details on the final Habitat Compensation Plan and monitoring.</i> | Pre-construction, Construction, Operation | VPA | DFO | FN, EC, MOE |
| 11.1 | The Owner has agreed that the final Habitat Compensation Plan and Habitat Authorization will reflect all onsite and off site options identified in the Proposed Habitat Compensation Plan (March 12, 2006). The owner recognizes that the habitat targets specified in the Proposed Habitat Compensation Plan (March 12, 2006) may change as more detailed information and plans are developed to meet the requirements of a Section 35(2) <i>Fisheries Act</i> authorization. | | | | |
| 11.2 | As part of the Habitat Compensation Plan, the owner is committed to entering an agreement with Ducks Unlimited Canada, DFO, EC and such other agencies or organizations as may be identified as being appropriate to ensure that the proposed off-site compensation is delivered in a timely and efficient manner. This agreement will commit the owner to providing \$1.5 million in funding to ensure the off-site compensation program is achieved. | | | | |
| 11.3 | The Owner commits to the following measures to protect the fish habitat: <ul style="list-style-type: none"> The Owner will comply with DFO guidelines to minimize disruption of intertidal/subtidal mudflat habitat or loss of individual adult crabs and fishes: <ul style="list-style-type: none"> No dredging is permitted in waters less than -5 m CD deep from March 1 to August 15 for the protection of juvenile salmon unless the works area is adequately isolated from fish bearing waters to the satisfaction of DFO; and From October 15 to March 31 there shall be no works conducted which would result in a significant disturbance to the seabed of outer Roberts Bank which is situated in water greater than -5 m CD deep at daily low water for the protection of adult ovigerous female Dungeness crabs. Bubble or silt curtains will be used to keep juvenile salmon away from | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|--|----------------------------|--------------|--------------------------------|----------------------|
| | <p>specific works in water less than -5 m CD if monitoring indicates they are present.</p> <ul style="list-style-type: none"> • Monitor over time to determine whether crab nursery habitat re-establishes itself along the newly created foreshore. If re-establishment is unsuccessful, two adjacent crab nursery areas will be enhanced to ensure full compensation; • Survey the intertidal mudflat area within the Project footprint immediately prior to construction. Relocate any adult Dungeness crabs found to a suitable adjacent habitat prior to completion of containment dyke; and • To the extent possible reasonable efforts will be made to relocate adult Dungeness crabs from intertidal areas prior to dredging. | | | | |
| 11.4 | The Owner commits to an appropriate monitoring plan to assess the performance of the compensation habitat designs and to ensure there is “no net loss” in the productive capacity of fish habitat. If the compensation habitat is not functioning to DFO’s satisfaction, by the end of the monitoring period specified in the subsection 35(2) <i>Fisheries Act</i> authorization additional works and monitoring will be required to ensure the compensation habitat functions as designed or if appropriate, additional habitat compensation is provided. | | | | |
| 12 | <i>The Owner accepts that the additional container ship traffic as a result of the Project has the potential for some impacts on marine mammals. This issue is generally covered in the Marine Environment EMP, included in section 2.10 above and outlined in Schedule 1 of this Table.</i> | Construction, Operation | VPA | DFO | FN |
| 12.1 | The Owner will ensure an underwater noise inventory of all equipment proposed for the Project will be developed and a marine noise-monitoring program will be established to measure acoustic frequencies of all marine construction equipment (dredge equipment, vibro-flotation equipment, other marine construction equipment). See Schedule 1 Marine Environment Management Plan for additional details on underwater noise and marine noise monitoring and noise mitigation measures to protect marine mammals. | Construction | | | |
| 12.2 | The Owner will ensure that any densification equipment (i.e. vibro-flotation head) is shut down while densification equipment is being relocated. | Construction | | | |
| 12.3 | The Owner commits to prepare a report on Orca pods in the vicinity of the Project and to assess avoidance and mitigation measures (the 0.5 kHz trigger threshold, vessel speeds) when pods are traversing the offshore areas of Roberts Bank. DFO marine mammal scientists will be consulted to ensure the report complements marine mammal monitoring requirements | Construction | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|--|--|-----------------------------------|------------------|--------------------------------|----------------------|
| | identified in the <i>Fisheries Act</i> authorization. A copy of the final report will be provided to DFO. | | | | |
| 12.4 | The Owner will work with BC Pilots to develop an education and awareness program about marine mammals and have pilots of vessels transiting to Roberts Bank steer away from observed marine mammal pods when vessel safety is not compromised. | Operation | | | |
| 13 | <i>The Owner will monitor and evaluate any aboriginal or commercial fisheries issues during Project dredging and construction.</i> | Pre-construction, Construction | VPA | EAO, DFO | FN |
| 13.1 | The Owner and its contractors will use reasonable efforts to avoid any disruption of aboriginal or commercial fisheries. | | | | |
| Waterfowl and Coastal Seabirds | | | | | |
| 14 | <i>The Owner will ensure that the applicable mitigation and compensation regarding waterfowl and coastal seabirds is implemented and shall commit to bird monitoring as reflected in the AMS referenced in section 5 above.</i> | Construction, Operation | VPA, Contractors | EC | MOE |
| 14.1 | The Owner will ensure that it is in compliance with the <i>Migratory Birds Convention Act</i> (MBCA), the <i>Species At Risk Act</i> (SARA), and the <i>Migratory Birds Regulations</i> (MBR) for the life-cycle duration of the Project. | | | EC, MOE | |
| 14.2 | Although construction of the Project would not impact the pelagic cormorant colony nesting on the Westshore jetty structure, the Owner commits to consult with government and non-government agencies to establish pelagic cormorant resting/roosting structures in the study area away from port docks. | | | | |
| 14.3 | Relocation of the osprey nest to a safer location. The Owner will work with the appropriate regulatory authorities to relocate this nest. | | | | |
| 14.4 | The Owner will undertake construction works in upland areas (off causeway) in the winter months to prevent impacts to nesting species and to limit sensory disturbance to wildlife. Nesting time windows are listed in section 2.8. | | | | |
| 14.5 | Limit disturbance of the ditch between 57B Street and 64 th Street and prevent siltation of its aquatic habitats, by erecting fences and silt curtains prior to construction. | | | | |
| Terrestrial Wildlife and Vegetation | | | | | |
| 15 | <i>The Owner will ensure that the land-based construction works for the off causeway rail corridor components of the Project are conducted in</i> | Pre-construction, | VPA, Contractors | MOE, EC | COD, TFN |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|--|-----------------------------------|------------------|--------------------------------|----------------------|
| | <i>compliance with applicable legislative requirements and BMPs, with particular attention to storm water management on the sites during construction, excavation and disposal of fill and concrete works. Further the Owner must ensure that municipal community planning is reflected in mitigation of terrestrial and vegetation impacts along the rail corridor. This may include applicable permits for development along watercourses, permits to deposit or remove soil or other material, and environmental reviews of specific works in and around environmentally-sensitive areas.</i> | Construction | | | |
| 15.1 | The Owner will comply with all terms and conditions of Permits, Approvals and Authorizations, and environmental BMPs. | | | | |
| 15.2 | The Owner will follow or have followed the Construction EMP for storm water management on the site during construction, in relation to material excavation and disposal of fill, concrete works, and other activities. | | | | |
| 15.3 | The Owner will ensure vegetation cleared during construction is kept to a minimum. This would maximize the habitat buffer between the edge of rail bed and adjacent habitats (e.g. ditches). | | | | |
| 15.4 | The Owner will re-vegetate areas disturbed by construction activities with native grass species. This would enhance native species in the study area and minimize the potential for establishment of non-indigenous species. | | | | |
| 15.5 | The Owner will minimize the movement of people and machinery through vegetated areas. | | | | |
| 15.6 | The Owner will manage interactions between employees/contractors and wildlife and will store and/or dispose of food, garbage and petroleum products in an appropriate manner to prevent attraction of wildlife to construction sites. | | | | |
| 16 | <i>The Owner must, through their Contractors, take every reasonable step to ensure that the landscape, vegetation, bushes and trees are protected during construction of the rail works.</i> | Pre-construction, Construction | VPA, Contractors | COD | EC, TFN |
| 16.1 | The Owner commits to meet the intent of COD's Official Community Plan policies regarding environmentally-sensitive areas, specifically sections 2.4.1 – 2.4.15 and 2.4.21 – 2.4.26. | | | | |
| 16.2 | The Owner must ensure that vegetation clearing is undertaken without contravening section 34 of the British Columbia <i>Wildlife Act</i> . In this regard, it is the owner's responsibility to determine appropriate timing for vegetation clearing activities. If assistance is required in the determination of appropriate time periods, the owner will retain the services of appropriately | | | MOE | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|--------------------|---|-------------------------|-------------------------------------|--------------------------------|-----------------------|
| | qualified environmental professionals. | | | | |
| 16.3 | The Owner will ensure that it is in compliance with the <i>Migratory Birds Convention Act</i> (MBCA), the <i>Species At Risk Act</i> (SARA), and the <i>Migratory Birds Regulations</i> (MBR) for the life-cycle duration of the Project. | | | | |
| 16.4 | The Owner will support appropriate environmental stewardship programs to place barn owl nest boxes in areas towards Brunswick Point where they are less vulnerable to major motorways. | | | | |
| 16.5 | The Owner will become involved in barn owl management planning, either through a Barn Owl Management Team, or its ad hoc equivalent. | | | | |
| 16.6 | The Owner will minimize impacts to foreshore marshes by adhering to the following mitigation measures: <ul style="list-style-type: none"> Where possible, minimize construction access across foreshore marshes and limit damage to riparian zone habitats; and. Avoid dredging and/or filling in marsh areas. | | | | |
| Air Quality | | | | | |
| 17 | <i>The EAC Application Chapter 13.0 - Air Quality Assessment refers to the ambient air quality objectives. The Owner will ensure continuous improvement to air quality using applicable BMPs and available technology to meet applicable ambient air quality objectives.</i> | Construction, Operation | VPA, Contractors, Terminal Operator | GVRD | EC, COD, TFN, FHA, HC |
| 17.1 | The Owner commits to working with the GVRD, in consultation with the COD, to fund and locate an air quality station, in the local community to provide for continuous ambient air quality monitoring. | | | | |
| 17.2 | The Owner and the Terminal Operator must comply with the federal Canada Wide Standards (CWS), and specifically Annex A of the CWS Agreement, during construction and operation that commits the Owner and the Terminal Operator to "Continuous Improvement" and "Keeping Clean Areas Clean" (CI/KCAC). Where applicable, the GVRD's "Air Quality Management Plan, September 2005" and any subsequent changes to that document, and/or provincial or federal ambient air quality objectives, whichever is more stringent, will be used as the guide for ambient air quality objectives for the Project area. | | | | |
| 17.3 | The Owner shall ensure that all contractors and the Terminal Operator construct and operate the Project with due attention to adverse public health effects. | | | | |
| 18 | <i>The Owner must commit to develop a Construction Air Quality Mitigation Program that addresses all Project construction impacts on the ambient air</i> | Construction | VPA, Contractors, | GVRD | EC, COD, TFN, |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|---|-----------|------------------------|--------------------------------|----------------------|
| | <i>quality in the Project area.</i> | | Terminal Operator | | FHA |
| 18.1 | <p>This Program must cover the marine construction program (undertaken by the Owner) and the terminal construction program (undertaken by the Terminal Operator) and other relevant and project specific off-site road and rail improvements. The construction air quality program will include the following:</p> <ul style="list-style-type: none"> • On-road diesel fuel will be included in bid-tenders for use in off-road construction equipment. • Diesel particulate filters and/or other appropriate retrofits where possible (such as automatic anti-idling shut-offs) will be used on all construction equipment and construction vehicles capable of use. • Covered road vehicles will be used in the transport of bulk fine materials to or from the Project site. • Paved sections of the worksite and roads that are subject to accumulations of dust will be wetted/cleaned on a regular basis. • A worksite speed limit will be put in place to further reduce dust. • An ongoing program of implementation of a worker education program to address: <ul style="list-style-type: none"> • Engine idling reduction (including provision for automatic anti-idling shut-off mechanism, if feasible), • Operation of equipment at optimum rated loads, • Routine equipment maintenance procedures, • Options to reduce construction worker trips (i.e., carpooling, transit, other non-polluting transportation modes), • Visual inspections on a daily basis for potential dust and odor issues, and • Potential for impacts from equipment exhaust, dust and odors. | | | | |
| 19 | <i>The Owner commits, and must ensure that the Terminal Operator also commits, to diligently work towards a reduction of emissions from container vessels calling at Deltaport.</i> | Operation | VPA, Terminal Operator | EC, GVRD | COD, TFN |
| 19.1 | The Owner confirms their willingness to continue to actively work with other ports, industry, regulators and other organizations to influence the IMO to create a "SO _x Emission Control Area" (SECA) for the West Coast where vessels must use fuel oil with a sulphur content of no more than 1.5% by 2009. | | | | |
| 19.2 | The Owner commits to assessing a differential port tariff system where cleaner ships (less emitting) calling on the Port of Vancouver are charged lower fees as a reward system to encourage a reduction in marine | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|--|----------------------------|--|--------------------------------|----------------------|
| | vessel air emissions. | | | | |
| 19.3 | The Owner commits to undertake a vessel speed assessment of marine vessels approaching Roberts Bank to determine the potential benefit of lowering vessel approach speeds with the intention to reduce potential impacts on marine mammals and air emissions. | | | | |
| 19.4 | The Owner must ensure that the Terminal Operator commits to the incorporation of infrastructure for shore power for ships in the Project design and construction. Further the Owner must commit to complete a feasibility study for shore based power within 8 months of receipt of Project EA approval. The feasibility study will identify the ships currently calling on the Port of Vancouver capable of connecting to shore power, their power requirements as well as timelines and targets for potential conversions. | | | | |
| 20 | <i>The Owner and Terminal Operator will use all reasonable efforts to reduce emissions from terminal operations and container trucks as described and concluded in the revised Application Chapter of December 2005.</i> | Construction, Operation | VPA, Contractors, Terminal Operator | EC, GVRD | FHA, COD, TFN |
| 20.1 | The Owner will ensure the Terminal Operator uses ultra low sulphur diesel in off-road terminal equipment starting September 2006. | | | | |
| 20.2 | The Owner will ensure the Terminal Operator uses diesel oxidation catalysts in all applicable Deltaport terminal equipment. | | | | |
| 20.3 | The Owner will ensure the Terminal Operator completes the testing of the hybrid powered rubber tired gantry cranes (RTGs) at Vanterm and if successful, ensure that the Terminal Operator retrofits existing RTGs at Deltaport. | | | | |
| 20.4 | The Owner or its security personnel must ensure that non-reservation trucks continue to shut down their engines while waiting in queue during times when the Deltaport Terminal gates are closed (i.e. currently before 7:00 AM, 12:00 PM to 12:30 PM, and after 4:00 PM). Signs should be posted along the causeway to inform truckers of the environmental benefits of turning off engines while in queue for extended time periods | | | | |
| 20.5 | The Owner and Terminal Operator commit to full implementation of the container truck reservation system, which may include the use of extended terminal gate operating hours, to reduce congestion and emissions from container trucks calling on Deltaport. | | | | |
| 20.6 | The Owner commits to using mechanisms such as the truck licensing system to implement strategies to reduce truck emissions such as promoting the use of the newest and cleanest trucks, as well as the use of | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|----------------------------------|--|--------------------------------|---------------------------------------|--------------------------------|----------------------|
| | retrofit technologies for trucks making frequent visits to Deltaport. | | | | |
| 21 | <i>The Owner must commit to work with the Railways serving the Project to reduce emissions due to rail operations at Roberts Bank</i> | Operation | VPA | TC | COD, GVRD, TFN, EC |
| 21.1 | The Owner commits to working with the Railways to develop an Operational Rail Emission Reduction Program. Elements of this emission reduction program are outlined in Schedule 1 to this Table. | | | | |
| Noise, Dust and Vibration | | | | | |
| 22 | <i>The Owner will ensure that instructions are provided to their contractors throughout the pre-construction and construction phases to minimize possible effects related to noise, dust and vibration. The Owner must comply with the intent of COD Noise Bylaw No. 1906, 1972 and the Delta Zoning Bylaw (section 802)) to avoid disturbance of the local community with 24 hour -7 day per week construction periods.</i> | Pre-construction, Construction | VPA, Contractors | FHA GVRD, COD, FHA | HC, TFN , EC |
| 22.1 | The Owner will ensure that the Construction and Operation EMPs and BMPs are complied with, as indicated in Table 20.1 of the EAC Application and reflected in this Table. | | | | |
| 22.2 | The Owner will incorporate BMP and mitigation measures reflected in this Table into the contract documentation for construction contractors, including the requesting of low emission equipment. | | | | |
| 23 | <i>The Owner shall ensure that all contractors and the Terminal Operator construct and operate the Project with due attention to adverse public health effects.</i> | Construction, Operation | Owner, Contractors, Terminal Operator | FHA | HC, COD, TFN |
| 23.1 | The Owner shall commit to organizing a Community Liaison Committee referenced in section 6.3 of this Table, with a sub-committee on noise issues, with the participation of VPA, the Terminal Operator, COD and the Railways, specifically focussing on rail noise impacts and public concerns, such as whistles, train shunting and speed. The terms of reference for this committee shall be developed by the Owner and accepted by government regulators, TFN and COD prior to start of construction. | | | | |
| 23.2 | The Owner will prepare a <i>Construction Noise Management Plan</i> containing environmental management measures to assess and minimize noise from the construction of the Project. Mitigation measures for terminal construction would include: <ul style="list-style-type: none"> • Machinery noise control – a maximum allowable noise emission from each type of machinery set prior to construction to ensure that contractors do not utilize any excessively noisy equipment; and | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------------------------|--|--|------------------------|--------------------------------|----------------------|
| | <ul style="list-style-type: none"> Awareness and training – Provision of training to ensure that construction workers are aware of the noise created during construction and are appropriately trained to minimise noise. | | | | |
| 23.3 | A management procedure, such as a 24-hour helpline, will be put in place by the Owner to deal with noise complaints that may arise from construction activities. Each complaint would be investigated and appropriate noise reduction measures established to mitigate future occurrences. | | | | |
| 23.4 | <p>The Owner will ensure that the Terminal Operator prepares an <i>Operation Noise Management Plan</i> containing environmental management measures to assess and minimize noise from the operation of the Project. The Plan would be included in the Operational EMP for the Deltaport Third Berth Project. Mitigation measures for terminal operations would include:</p> <p><i>Equipment Alarms</i> – New ship-to-shore gantry cranes and rail mounted gantries will be purchased with “alarms” that will be normally inaudible on shore;</p> | | | | |
| 23.5 | The Owner will ensure that the Terminal Operator must conduct regular training of Operator awareness. Proper training and awareness of noise issues will be implemented to minimise noise associated with the operation of the proposed Project. | | | | |
| 24 | <i>The Owner will ensure that the design, construction, operation and maintenance of the Project attempts to minimize any public health concerns associated with the Project.</i> | Pre-construction, Construction, Operation, Maintenance | VPA | HC, FHA, COD, TFN | EAO |
| 24.1 | The Owner will ensure that construction contractors are aware of their obligations to comply with all applicable standards and regulations regarding the handling and use of any hazardous materials that they may be using during construction (e.g., uncured concrete). | | | | |
| | Other public health issues must be observed as reflected in other sections of this Table. | | | | |
| Visual/Lighting | | | | | |
| 25 | <i>The Owner shall ensure that all contractors and the Terminal Operator construct and operate the Project with minimal adverse visual and lighting effects.</i> | Construction, Operation | VPA, Terminal Operator | none | COD, TFN |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|--|--|---|------------------------|--------------------------------|---------------------------|
| 25.1 | The Owner shall commit to organizing a CLC referenced in section 6.3 of this Table, whose terms of reference shall include any visual and lighting impacts generating public concerns. The Owner shall develop a 24-hour help line for visual/lighting concerns/events, enabling contractors and terminal personnel to identify what events and operations are causing adverse impacts in the Tsawwassen communities, including the TFN Reserve. | | | | |
| 25.2 | The Owner must ensure the dredge lighting system shields light from spilling outside the basic working footprint of the dredge. | | | | |
| 25.3 | The Owner will ensure that the Terminal Operator undertakes the following measures: <ul style="list-style-type: none"> • Ensure lighting equipment is pointed north and west, where possible, to reduce impacts to residents who are typically located east and south of the Roberts Bank port facility. • Implement shielding on construction lighting. • Use downlight style, cut-off luminaries for illumination of wharf and container yard areas. • Use less intrusive lighting sources such as metal halide luminaries exclusively for illumination of new wharf and container yard areas. • Reduce the amount of lighting during periods of low activity using lighting control systems. • Incorporate an automatic light shutdown system when the booms of new ship-to-shore gantry cranes are raised and inactive for longer than 15 minutes. | | | | |
| 25.4 | The Owner will evaluate the use of innovative mounting systems for lighting on ship-to-shore gantry cranes to minimize light throw during raising and lowering of the equipment. The Owner will examine options for mounting luminaries on the arms of ship-to-shore gantry cranes to prevent them from rotating when the arms are raised and lowered. | | | | |
| 25.5 | The Owner will consider change of gantry crane colour and, where practical, options for a landscape buffer strip to be established along the outer edge of the Roberts Bank causeway. | | | | |
| Socio-economic/Socio-community Issues and Economics | | | | | |
| 26 | <i>The Owner will ensure that consideration is given to enhanced socio-economic aspects of the Project. If the Owner transfers the EAC to the Terminal Operator, the Owner will ensure the transfer to the Terminal Operator of all relevant commitments, including but not limited to those</i> | Pre-construction, Construction, Operation | VPA, Terminal Operator | none | GVRD, COD, TFN, TransLink |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|--|--------|--------------|--------------------------------|----------------------|
| | <i>listed in this Table.</i> | | | | |
| 26.1 | The Owner will develop a community liaison plan to minimize construction-related impacts. The plan will ensure that adequate notification is provided and will be developed with meaningful consultation with COD and TFN. This community liaison plan shall provide opportunities for the local community, COD and TFN to provide meaningful input throughout the final design, construction and first year of operation, and it will also result in a CLC, both as discussed in section 6 of this Table. | | | | |
| 26.2 | The Owner will ensure that the Project implementation team designs, constructs and operates the Project with care and attention provided to transportation and traffic considerations, so as to minimize and mitigate negative impact and effects. The Owner will resolve Project related transportation and traffic issues in consultation with COD and TFN. | | | | |
| 26.3 | The Owner will ensure that the Project implementation team designs, constructs and operates the Project with care and attention to the provision of emergency services to the Project. The Owner will resolve issues in consultation with COD as the Project design and infrastructure is finalized. | | | | |
| 26.4 | The Owner will ensure that the Project implementation team designs, constructs and operates the Project in accordance with applicable bylaws and codes. | | | | |
| 26.5 | The Owner will participate in Transport Canada's assessment of the Roberts Bank rail corridor to identify and seek solutions to rail crossing issues in Delta, Surrey and Langley. | | | | |
| 26.6 | The Owner and the Terminal Operator will use reasonable efforts to transport construction materials to and waste materials from the Project by barge to minimize additional highway traffic. | | | | |
| 26.7 | The Owner will monitor the impact of construction activities on community services such as fire, police and emergency response during construction and commits to discuss appropriate levels of emergency access to the Project with COD. | | | | |
| 26.8 | The Owner and Terminal Operator will use reasonable efforts to purchase goods and services and source employment in the local community during construction and operation of the Project. | | | | |
| 26.9 | The Owner shall continue to participate in discussions with the Gateway Program, COD and other agencies regarding regional solutions to potential road and traffic issues in Delta. | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|----------------------------------|--|---------------------------------------|--|--------------------------------|----------------------|
| 26.10 | The Owner will construct traffic improvements as described in Section 7.1. | | | | |
| Accident and Malfunctions | | | | | |
| 27 | <i>The Owner must ensure that all commitments designed to prevent or minimize accidents and malfunctions resulting from the Project are implemented.</i> | Design, Construction, Operation | VPA, Contractors, Terminal Operator | TC, EC, COD | GVRD |
| 27.1 | The Owner will ensure that the transport and storage of dangerous goods is carried out in compliance with the federal <i>Transportation of Dangerous Goods Act</i> (TDG). All dangerous goods transported by water within the Port of Vancouver must also be under permit issued by the Harbour Master Office. | | | | |
| 27.2 | The Owner will observe the International Convention for the Prevention of Pollution from Ships (MARPOL), and MARPOL Annex V. | | | | |
| 27.3 | <p>The Owner will ensure that the following fuelling and spill measures are committed to by all contractors and the Terminal Operator:</p> <ul style="list-style-type: none"> • Conduct fuelling of equipment and storage of petroleum products (e.g. fuel, oil, lubricants) over and adjacent to the marine environment in an appropriate manner and handle in compliance with all applicable guidelines, legislation, and best management practices. • Have an appropriate spill prevention, containment and cleanup contingency plan for hydrocarbon products (e.g., fuel, oil, hydraulic fluid, lubricants), and all other deleterious substances used in association with the Project. • The spill prevention, containment and cleanup contingency plan will be put in place prior to work commencing at the Project site. • Be required to have appropriate containment and clean up materials on site throughout the course of work on the Project. • Submit contractor's spill prevention, containment and cleanup contingency plans to the appropriate regulatory agencies for review prior to work commencing. • Comply with the operator's Fuel Management and Dispensing Operating Procedure, which is part of the existing Deltaport Terminal <i>Environmental Management Plan</i>. • Conduct fuelling for road container trucks or employee vehicles off-site, away from the existing Deltaport Container Terminal at approved fuelling facilities. | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|------|--|--------|--------------|--------------------------------|----------------------|
| 27.4 | <p>The Owner will ensure that the contractor has a <i>Waste Management Plan</i> in place to ensure that all waste and deleterious materials generated by construction of the Project are appropriately contained in the immediate work area, collected, and appropriately disposed of in accordance with all applicable legislation, guidelines, and best management practices. The Owner will enforce procedures for collection and disposal of ship board waste as a requirement of the Project. The Owner will ensure that the Terminal Operator's waste management EMP is updated to include the Project and use the operator's established environmental procedures for items used at the terminal.</p> | | | | |
| 27.5 | <p>The Owner and Terminal Operator will ensure that their contractors develop a health and safety plan for each component of contractor work prior to the start of construction. The health and safety plan would typically include:</p> <ul style="list-style-type: none"> • Site location and prime contacts; • Local emergency and project contact numbers; • Description and map of emergency routes; • Safety equipment required; • List of site hazards and mitigation; • Potential waste generation and disposal methods; and • Outline emergency response procedures to be followed during construction in the health and safety plan. | | | | |
| 27.6 | <p>The Owner and the Terminal Operator will enforce the following design, measures:</p> <ul style="list-style-type: none"> • Design storm drainage systems to consist of a combination of catch basins, slot drains and open cover manholes; • Locate storm drains in areas to avoid equipment operating areas and runways; • Design drainage structures to withstand loads from the container operating equipment; • Grade the container yard in the direction parallel to the RTG runways with drainage grades of 1% or less; • Design drainage systems to accommodate rainfall flows generated from a 1 in 10 year rainstorm; • Direct stormwater from the DP3 Terminal through an oil interceptor and catch basin to collect possible contaminants prior to discharging storm water effluent to the ocean; • Ensure that the eight existing storm outfalls, located along the northern perimeter of Deltaport, will be decommissioned and replaced by new storm outfalls; and | | | | |

| Ref | Objective Commitments and Assurances | Timing | Delivered By | Approving/ Lead Agencies | Advisory Agencies |
|---|---|--|---------------------------|--------------------------------|----------------------|
| | <ul style="list-style-type: none"> Ensure that the new storm outfalls will be fitted with shut-off valves to terminate flow from the Project are should a spill occur on the terminal. | | | | |
| 27.7 | The risk of ship collisions or grounding will be minimized through observation of the <i>International Regulations for the Prevention of Collision at Sea (ColRegs)</i> . The Owner will observe requirements of the <i>Transportation of Dangerous Goods Act</i> , and the <i>Canada Shipping Act</i> . | | | | |
| Disposal at Sea | | | | | |
| 28 | <i>Based on information available in the EAC Application ocean disposal of dredged material will be required. The Owner will be responsible for all required regulatory approvals pursuant to the Disposal at Sea Regulations (2001) under the Canadian Environmental Protection Act, 1999.</i> | Pre-construction, Construction | VPA, Contractors | EC | COD, TFN |
| 28.1 | The Owner must ensure that if required by the EC Disposal at Sea Program staff, the Contractors have Disposal at Sea Program staff on site during sampling of any material proposed for disposal at sea; the Owner must provide the results of chemical analysis to the Program; the Program will then consult with the Regional Ocean Disposal Advisory Committee and if the results are acceptable, the Contractor may apply for a Disposal at Sea Permit under the direction of the Owner. | | | | |
| Miscellaneous Commitments and Assurances | | | | | |
| 29 | The Owner commits to adhere to, or in the transfer of responsibilities to the Terminal Operator, ensure such contractual compliance, with all mitigation proposals, relevant to the Project, that are described in the Application, or reflected in all other Owner generated documents listed in <i>Appendix A</i> to this Assessment Report or otherwise defined in this Table. | Construction, Operation, Maintenance | VPA, Terminal Operator | | All listed |

Abbreviations of Approving and Advisory Agencies

Agency Canadian Environmental Assessment Agency
ALC Agricultural Land Commission
COD Corporation of Delta
CWS Canadian Wildlife Service
DFO Fisheries and Oceans Canada
EAO BC Environmental Assessment Office
EC Environment Canada
FHA Fraser Health Authority
GVRD Greater Vancouver Regional District
FN First Nations identified in section 1.4.1 of PART A

HC Health Canada
MOE Ministry of Environment
MOT Ministry of Transportation
TransLink Greater Vancouver Regional District Transportation Authority
TFN Tsawwassen First Nations
TC Transport Canada

SCHEDULE 1

Details of Construction and Operation Environmental Management Plan (EMP) included in sections 2 and 3 of this TABLE.

| EMP Identification | EMP Details |
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| Construction EMP | |
| Marine Environmental Management Plan | <p>The <i>Marine Environment Management Plan</i> will:</p> <ul style="list-style-type: none"> • Outline the terms and conditions contained in the <i>Fisheries Act</i> authorization for the Project, including commitments for the habitat compensation. • The owner has agreed to develop a final Fish Habitat Compensation Plan that meets DFO Policy objectives in support of a <i>Fisheries Act</i> authorization for the construction of the Deltaport Third Berth Project, and shall commit to an appropriate monitoring plan to assess the performance of the compensation habitat designs and to ensure there is “no net loss” in the productive capacity of fish habitat. If the compensation habitat is not functioning to DFO’s satisfaction, by the end of the monitoring period specified in the subsection 35(2) <i>Fisheries Act</i> authorization additional works and monitoring will be required to ensure the compensation habitat functions as designed or if appropriate, additional habitat compensation is provided. • The Owner has agreed that the final Habitat Compensation Plan and Habitat Authorization reflects all onsite and off site options identified in the Proposed Habitat Compensation Plan (March 12, 2006). The owner recognizes that the habitat targets specified in the Proposed Habitat Compensation Plan (March 12, 2006) may change as more detailed information and plans are developed to meet <i>the requirements of a section 35(2) Fisheries Act</i> authorization. • As part of the Habitat Compensation Plan, the owner is committed to entering an agreement with Ducks Unlimited Canada, DFO, EC and such other agencies or organizations as may be identified as being appropriate to ensure that the proposed off-site compensation is delivered in a timely and efficient manner. This agreement will commit the owner to providing \$1.5 million in funding to ensure the off-site compensation program is achieved. • The owner shall carry out, to the satisfaction of DFO OHEB, a Monitoring Program to assess the form and function of the habitat associated with the Project and its success as fish habitat (habitat monitoring program). Monitoring requirements/commitments will be developed in detail at the time any future <i>Fisheries Act</i> authorization for the Project is prepared. The monitoring program components will describe experimental designs and monitoring frequencies that are appropriate for assessing habitat productivity. Monitoring requirements for the proposed compensation projects are likely to extend beyond 5 years at 4-6 month intervals. The monitoring program will be designed to verify that the project was implemented as designed and approved and to quantify the net change in habitat productivity to ensure a net gain is achieved. • Outline the required DFO dredging guidelines and BMP’s to minimize disruption of habitat or losses of individual adult Dungeness crabs, fishes adult lingcod and their egg masses: <ul style="list-style-type: none"> ○ No dredging is permitted in waters less than -5 m CD deep from March 1 to August 15 for the protection of juvenile salmon unless the works area is adequately isolated from fish bearing waters to the satisfaction of DFO; and ○ From October 15 to March 31 there shall be no works conducted which would result in a significant disturbance to the seabed of outer Roberts Bank which is situated in water greater than -5 m CD deep at daily low water for the protection of adult ovigerous female Dungeness crabs. |

- Include the following construction monitoring commitments:
 - After placement of the rock berm in the terminal area, but prior to placement of fill in the intertidal area for the terminal footprint, the intertidal area would be surveyed and juvenile and adult crabs would be relocated to a suitable adjacent area away from construction.
 - If any Project dredging activities (in water greater than -5m) are proposed to extend into the October 15 to March 31 “crab window”, a dredge plan will be prepared and forwarded to DFO for review and approval. As potential mitigation the subtidal area for dredging would be surveyed and any adult crabs identified in the immediate work area would be relocated to a suitable area, away from dredging. All future dredging would be contained to the area of existing disturbance.
 - If monitoring indicates juvenile salmon are present in areas where work is occurring in water less than five meters CD, bubble or silt curtains would be deployed to keep fish away from the works area or isolate the works area from fish.
- Outline procedures/schedule so that construction in the intertidal zone would occur during winter unless work is isolated from fish-bearing waters.
- An underwater noise inventory of all equipment proposed for the Project will be developed. A marine noise-monitoring program will be established to measure acoustic frequencies of all marine construction equipment (dredge equipment, vibro-flotation equipment, other marine construction equipment). An interim theoretical zone of audibility having a radius of 7.5 km will be applied at the outset of construction activity. Once construction has begun, a field acoustic study of the actual noise emissions resulting from dredging and other associated activities will be undertaken to determine the true zone of audibility, and that this distance be adjusted to avoid impacts to killer whales and meet the requirements identified in the *Fisheries Act* authorization.
- A marine mammal monitoring /surveillance system will be prepared to satisfy DFO habitat authorization requirements and will include:
 - Dedicated observers stationed at a high vantage point on the site, scanning the area of concern with large (e.g. 20x100) pedestal-mounted binoculars.
 - A camera system to augment dedicated observers;
 - Underwater acoustic monitoring so that whales could be detected before they enter the zone during periods of reduced visibility. It is important to recognize that this will not replace visual surveillance – killer whales often travel in silence, especially while resting. Observers undertaking visual surveillance could also monitor these hydrophones in real time if their signals were linked (by RF or some other means) to the construction site.
 - Communication protocols to ensure observers are connected to the whale-watch industry’s pager notification system, so that they can remain informed regarding the location of southern resident killer whales when known.
- The Owner commits to the following additional Noise mitigation measures for the protection of marine mammals:
 - If a pod of killer whales is sighted within 7.5 km of the Project site, the environmental monitor has authority to stop noise generating construction equipment until the whales have moved outside the zone of temporary measured zone of audibility meeting the requirements of the *Fisheries Act* authorization.
 - to evaluate vessel speeds and marine mammal interactions to assess and reduce the potential risk of marine vessel mammal collisions when ships approach the Roberts Bank port area during operation
 - to assess ways to encourage proper maintenance of deep sea ship propellers during operation
 - In water noisy construction activities will be ramped up slowly to prevent startling of marine mammals and allow them to leave the area.
- The Owner will work with BC Pilots to develop an education and awareness program about marine mammals and have pilots of vessels transiting to Roberts Bank steer away from observed marine mammal pods when vessel safety is not compromised.

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| | <ul style="list-style-type: none"> • The Owner commits to prepare a report on <i>Orca</i> pods in the vicinity of the Project and to assess avoidance and mitigation measures (the 0.5 kHz trigger threshold, vessel speeds) when pods are traversing the offshore areas of Roberts Bank. DFO marine mammal scientists will be consulted to ensure the report compliments marine mammal monitoring requirements identified in the <i>Fisheries Act</i> Authorization. A copy of the final report will be provided to DFO. • Outline procedures to ensure the vibro flotation vibrating head is shut down while it is being relocated to a new location to minimise underwater acoustic noise. • During marine construction, the environmental monitor will report on construction activities and the interaction of waterfowl and coastal seabirds, as outlined in the AMS referenced in section 5, above, and direct mitigation as appropriate to minimize impacts. • Monitoring of eelgrass as reflected in the AMS referenced in section 5, above. • All stormwater, and surface run-off associated with the project site, shall be collected and treated as necessary to prevent the release, either directly or indirectly, of sediment, sediment laden water, turbid water, and deleterious substances (i.e., substances harmful to fish) to the marine environment. This applies to both the period of construction and after completion of the Project. The management of stormwater and surface run-off should comply with all applicable legislation, guidelines, and best management practices. |
| Operation EMP | |
| TSI Terminal Operations EMP | <p>The following TSI Inc. sub-plans must be updated:</p> <ul style="list-style-type: none"> • Oil/water separators and catch basins; • Effluent treatment system management and testing; • Equipment wash pad, steam cleaner, and detergent use; • Empty drums, pails and other containers; • Soil non-hazardous waste; • Used absorbent materials; • Batteries; • Ozone depleting substances; • Used oil filters; • Waste antifreeze; • Waste oil and petroleum products; • Waste solvents; • Contaminated soil management; • Above ground tank management; • Fuel management and dispensing; • Petroleum, oil and lubricant delivery; and, • Contractor orientation. |
| Emergency Response Plan (ERP) | <p>The ERP would:</p> <ul style="list-style-type: none"> ▪ ensure that the appropriate emergency response equipment would be provided; ▪ ensure staff understand their roles and responsibilities and undergo training as required; ▪ put specific procedures in motion to manage an incident or emergency; ▪ establish an emergency response team; ▪ ensure that an emergency or incident would be managed in a systematic way; ▪ deal with enquiries from the public and staff; |

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| | <ul style="list-style-type: none"> ▪ allow the continued delivery of essential services during an incident or emergency situation without increasing risk; ▪ establish procedures for interaction with other agencies and neighbours (BC Rail, COD, MOT) throughout an incident or emergency situation; ▪ clearly define responsibility for emergency and incident management, including clear lines of accountability throughout the organisation; ▪ validate emergency preparedness through exercises and testing of emergency procedures; ▪ allow for monitoring and review to continually update and improve the system; and, ▪ allow for independent auditing. |
| Other Operational Programs | |
| Rail Emission Reduction Program | <p>This program shall reflect the following:</p> <ul style="list-style-type: none"> • Many of the train engines being used at Deltaport are quite old. In part, this is a tax depreciation issue and the VPA supports a change in tax legislation so that CP Rail and CN Rail can depreciate their equipment more quickly and thereby change their rolling stock more frequently. The potential reduction in emissions by replacing or rebuilding old engines is large. Year 2005 manufactured or rebuilt Line Haul locomotives will emit 50% less PM, 47% less hydrocarbons and 28% less NO_x compared to pre-2000 locomotives (US EPA, 1997a). Similarly, year 2005 switch locomotives will emit 56% less PM, 50% less hydrocarbons, and 20% less NO_x than pre-2000 switch locomotives. VPA will work with the Railways to expedite fleet replacement of line haul engines calling on Roberts Bank. • Diesel locomotive engines can reduce their fuel costs and exhaust emissions by shutting down during extended periods of idling. Some new locomotives are equipped with a control system that automatically stops the engine when idling for a certain period of time. CP Rail has this system in place at Roberts Bank whereby the engine is shut down after a period of inactivity as long as the air temperature is above 6 degrees Celsius. CN Rail also has similar equipment within their fleet. VPA will work with the Railways to reducing engine idling times on the causeways. • Hybrid switch locomotives have electric traction motors on the axles that are powered by a large bank of custom-designed lead acid batteries, which are kept charged by a small diesel generator. Compared to standard diesel switch locomotives, the capital cost of the hybrid locomotives is about 30% lower, it consumes 50 to 80% less diesel and therefore emits proportionately less greenhouse gas, and its NO_x emissions are 80 to 90% lower. VPA will work with the Railways to replace the existing Roberts Bank diesel switch engine with a less polluting engine, such as a hybrid-powered switch-engine or other similar technology, for switching service on the Roberts Bank causeway. |