



# Facilities Environmental Protection Plan: Burnaby Terminal

# Facilities Environmental Protection Plan: Overview



- **What**

- The Environmental Protection Plan (EPP) communicates environmental procedures and mitigation measures to construction and inspection personnel
- Intended to be a comprehensive compilation of all environmental protection procedures, mitigation measures and monitoring commitments to avoid or reduce adverse environmental effects
- Provides direction to more detailed information (*i.e.*, resource-specific mitigation tables, management and contingency plans, and facility drawings)

- **When**

- All phases of the Project, from planning, through construction, reclamation and operations

# Facilities EPP: Mitigation Overview

- **Pre-construction:** Protect environmental resource features
  - Determine appropriate timing for construction
  - Identify and mark environmental resources and overhead/underground utilities
  - Delineate Burnaby Terminal construction site and access routes to prevent trespass
  - Mark all approved access points
- **Construction:** Avoid or reduce potential adverse environmental or socio-economic effects associated with construction of the Burnaby Terminal
  - ***Wildlife, rare plants, weeds and watercourses***
  - Clear outside migratory bird nesting period
  - Suspend activity if previously unidentified resources (e.g. rare plants or wildlife encountered)
  - Adhere to Project Weed and Vegetation Management Plan
  - Prevent construction materials, debris or deleterious substances (e.g. gasoline, oil) from entering watercourses
- Storm water management
  - Install erosion and sediment control measures to prevent surface water from entering natural drainage system, watercourse, or wetlands
- Groundwater management
  - Prevent spills
  - Dewater excavation sites

# Construction Mitigation (Cont'd)

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- **Noise** [NEB Condition 80: Noise Management Plan for Construction at Terminals and Pump Stations]
  - Adhere to all applicable federal, provincial and municipal guidelines and legislation, regarding noise management, where practical. Where compliance not possible, abide by applicable permit/approval conditions.
  - Develop a noise management plan for construction at terminals and pump stations
- **Air Emissions** [NEB Condition 54 Fugitive Emissions Management Plan]
  - Control dust
  - Includes complaint response process
- **Traffic Management**
  - Develop a traffic management plan for hauling of construction materials
- **Cleanup and Reclamation**
  - Re-establish the construction site to meet safety and operational requirements

# Examples of Water Management: Burnaby Terminal

- Water Management Plan to handle on-site water
- Water Management Plan
  - Contain all construction runoff water in sediment ponds and treat as required prior to releasing from site
  - Designated water treatment system located on the site
  - Full-time environmental monitoring during instream creek relocations
- Keep all off-site water sources from entering construction areas through interceptor ditches or perimeter berms
- Soil stripping activities will not occur until following work operation ready to begin
- Hydroseed completed work areas and material stockpiles as soon as possible to minimize soil erosion



*Image for illustrative purposes only*

# Examples of Measures to Suppress Dust: Burnaby Terminal

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- Water trucks on site to keep haul roads and work areas moist during construction
- Full-time wheel wash for trucks leaving the terminal
- Temporary roads can have dust suppression agent applied to limit dust
- Hydroseed stockpiles and completed work areas
- Trucks will cover all loads when transporting granular materials to and from site
- Street sweeper will regularly maintain access roads around the site as well as main site entrances



# Burnaby Mountain Tunnel Environmental Protection Plan

# Burnaby Mountain Tunnel EPP: Overview



- **What**

- The EPP communicates environmental procedures and mitigation measures to field/construction personnel
  - Provides instructions for carrying out construction activities in a manner that will avoid or reduce adverse environmental effects
  - Serves as reference information for environmental inspection staff to support decision-making
  - Identifies mitigation measures to be implemented during construction activities
  - Provides direction to more detailed information (*i.e.*, resource-specific mitigation, management and contingency plans)

- **When**

- All phases of the Project, from planning, through construction and reclamation and operations



# Burnaby Mountain Tunnel EPP: Mitigation Overview



- **Pre-construction:** Protect environmental resource features
  - Identify and mark environmental resources
  - Delineate construction site to prevent trespass
  - Mark all approved access points
- **Construction:** Avoid or reduce adverse effects on residents and socio-economic and environmental resources
  - ***Wildlife, rare plants and weeds***
  - Clear outside migratory bird nesting period
  - Suspend activity if previously unidentified resources (e.g. rare plants or wildlife encountered at entry and exit points of tunnel)
  - Adhere to Project Weed and Vegetation Management Plan
- Storm water management
  - Site-specific erosion and sediment control plan to prevent run off from entering natural drainage systems, watercourses, or wetlands
- Groundwater management
  - Prevent spills
  - Dewater excavation sites

# Construction Mitigation (cont'd)

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- **Noise** [NEB Condition 86: BMT Construction Noise Management Plan]
  - Adhere to all applicable federal, provincial and municipal guidelines and legislation regarding noise management, where practical
  - Where compliance is not possible, abide by applicable permit/approval conditions.
- **Air Emissions** [NEB Condition 85 Air Emissions Management Plan]
  - Notify nearby residents
  - Control dust
- **Traffic Management**
  - Develop a traffic management plan for hauling of tunnel waste materials
- **Cleanup and Reclamation**
  - Re-establish the construction site to meet safety and operational requirements