



## PERMIT GVA0081

**Pursuant to:**

Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008  
and the BC Environmental Management Act, S.B.C 2003, c.53

**Issued to:**

Neptune Bulk Terminals (Canada) Ltd.  
(the "Permittee")

**To Authorize:**

the discharge of air contaminants to the air from  
a bulk commodities receiving, storage and shipping terminal

**Located at:**

1001 Low Level Road, North Vancouver, BC V7A 2P9


**Effective Period:**

The terms and conditions set out in the Permit apply to the existing or planned works as of  
September 23, 2016

All previous versions of this Permit are hereby rescinded and rendered null and void.

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Issued: November 30, 1992  
Amended: September 23, 2016

  
R.H. (Ray) Robb, P. Eng.  
District Director

**SECTION 1 – AUTHORIZED EMISSION SOURCES**

Authorization to discharge air contaminants from the authorized emission sources listed in this Permit is subject to the specified terms and conditions.

Approximate locations of the authorized emission sources are shown on the Site Plan in section 4.

**EMISSION SOURCE 01: Enclosed rotary dumper handling coal discharging through one of two stacks (104).**

MAXIMUM EMISSION FLOW RATE: **1650 m<sup>3</sup>/min**  
MAXIMUM ANNUAL OPERATING HOURS: **8760 h/y**

MAXIMUM EMISSION QUALITY:  
1. 20 mg/m<sup>3</sup> Particulate Matter  
2. 10% Opacity.

WORKS AND PROCEDURES:  
Peabody Ventri-Slot high energy water scrubber and related appurtenances, together with good operating practices.

Neptune stack number: 104  
Stack height above ground level: 8.6 m and 10.6 m  
Equivalent diameter at stack tops: 1.3 m  
Orientation of stacks: horizontal  
Presence of raincap/weather hoods: yes

**EMISSION SOURCE 07: Conveyors, surge bin, and transfer points on the coal handling system associated with Berth No. 1 discharging through conveyor transfer areas located in the Berth No. 1 area of the terminal.**


MAXIMUM EMISSION FLOW RATE: **The authorized rate of discharge is that resulting from conveying and transfer operations**  
MAXIMUM ANNUAL OPERATING HOURS: **8760 h/y**

MAXIMUM EMISSION QUANTITY:  
1. 59 t/y Particulate Matter  
2. 377 kg/d Particulate Matter

MAXIMUM EMISSION QUALITY:  
1. 20% Opacity.

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**WORKS AND PROCEDURES:**

Conveyors, four enclosed reciprocating feeders, and the enclosed product flooded transfer surge bin together with the maintenance of adequate material moisture for dust suppression and good operating practices.

**EMISSION SOURCE 11: Conveyors, a surge bin and transfer points handling dry bulk commodities to Berth Nos. 2 & 3 discharging through 4 stacks (208, 209, 210 & 727).**

MAXIMUM EMISSION FLOW RATE: **2475** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

**MAXIMUM EMISSION QUALITY:**

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

**WORKS AND PROCEDURES:**

All transfer points will be under partial vacuum and ventilate to a Hosakawa Micron (Ducon) Dynamic Wet Scrubber (210), and Entoleter Centrifield Wet Scrubbers (208, 209 & 727) and related appurtenances together with good operating practices.

Neptune stack number: 208  
Stack height above ground level: 23.0 m  
Diameter at stack top: 1.4 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no


Neptune stack number: 209  
Stack height above ground level: 14.3 m  
Diameter at stack top: 1.2 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

Neptune stack number: 210  
Stack height above ground level: 21.0 m  
Diameter at stack top: 1.3 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

Neptune stack number: 727  
Stack height above ground level: 12.7 m  
Diameter at stack top: 0.8 m

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Orientation of stack: vertical  
Presence of raincap/weather hood: no

**EMISSION SOURCE 12: Two potash storage buildings discharging through a Building Opening(s).**

**MAXIMUM EMISSION FLOW RATE: The authorized rate of discharge is that resulting from the handling of potash in the storage buildings.**  
**MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y**

**MAXIMUM EMISSION QUANTITY:**

1. 6.4 t/y Particulate Matter
2. 138 kg/d Particulate Matter

**MAXIMUM EMISSION QUALITY:**

1. 20% Opacity.

**WORKS AND PROCEDURES:**

Good operating practices.

**EMISSION SOURCE 14: Loading of marine vessel with coal from two ship loaders located in the Berth No. 1 area discharging through marine vessel holds and Berth No. 1 ship loading equipment.**

**MAXIMUM EMISSION FLOW RATE: The authorized rate of discharge is that resulting from the loading operations, as well as displacement air from the ship's holds**  
**MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y**

**MAXIMUM EMISSION QUANTITY:**

1. 5.3 t/y Particulate Matter
2. 79 kg/d Particulate Matter

**MAXIMUM EMISSION QUALITY:**


1. 20% Opacity.

**WORKS AND PROCEDURES:**

Water sprays, the maintenance of adequate material moisture for dust suppression and related appurtenances together with good operating practices.

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**EMISSION SOURCE 15:** Loading of marine vessel with dry bulk commodities from two ship loaders located in the Berth No. 2 area discharging through marine vessel holds at Berth No. 2 ship loader.

**MAXIMUM EMISSION FLOW RATE:** The authorized rate of discharge is that resulting from the loading operations, as well as displacement air from the ship's holds

**MAXIMUM ANNUAL OPERATING HOURS:** 8760 h/y

**MAXIMUM EMISSION QUANTITY:**

1. 11.6 t/y Particulate Matter
2. 220 kg/d Particulate Matter

**MAXIMUM EMISSION QUALITY:**

1. 20% Opacity.

**WORKS AND PROCEDURES:**

Berth No. 2 east & west ship loader spouts (cascade chutes). The procedures to control the discharge of air contaminants shall include good operating practices.

**EMISSION SOURCE 16:** Offloading of phosphate rock associated with Berth No. 3 receiving hoppers located in the Berth No. 3 area of the terminal with dry filtration system vent.

**MAXIMUM EMISSION FLOW RATE:** The authorized rate of discharge is that resulting from the unloading operations, as well as displacement air from the ship's holds

**MAXIMUM ANNUAL OPERATING HOURS:** 5000 h/y

**MAXIMUM EMISSION QUANTITY:**

1. 4.9 t/y Particulate Matter
2. 135 kg/d Particulate Matter

**MAXIMUM EMISSION QUALITY:**

1. 20% Opacity.

**WORKS AND PROCEDURES:**

Water sprays, three Mac Process cartridge dust collectors (380-1, -2, -3) and related appurtenances together with the maintenance of adequate material moisture for dust suppression and good operating practices.


Neptune stack number: 380-1,2,3

Stack height above ground level: 11.0 m

Equivalent diameter at stack top: 0.8 m

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Orientation of stack: horizontal  
Presence of raincap/weather hood: yes

**EMISSION SOURCE 17: Conveying, stacking, storage and reclaiming of coal discharging from coal storage area and coal handling equipment.**

**MAXIMUM EMISSION FLOW RATE:** The authorized rate of discharge is that resulting from the stacking and reclaiming operations as well as stockpile wind erosion effects  
**MAXIMUM ANNUAL OPERATING HOURS:** 8760 h/y

**MAXIMUM EMISSION QUANTITY:**  
1. 138 t/y Particulate Matter  
2. 382 kg/d Particulate Matter

**MAXIMUM EMISSION QUALITY:**  
1. 20% Opacity.

**WORKS AND PROCEDURES:**  
A water spray truck, water sprays on the stacker reclaimers, and automatically activated water spray poles to maintain adequate material moisture at all times. The procedures to control the discharge of air contaminants shall include the use of good operating practices.

**EMISSION SOURCE 18: Conveyers and transfer points associated with Berth No. 3 used to transport phosphate rock discharging through conveyer transfer areas located in the Berth No. 3 area of the terminal.**

**MAXIMUM EMISSION FLOW RATE:** 480 m<sup>3</sup>/min  
**MAXIMUM ANNUAL OPERATING HOURS:** 5000 h/y


**MAXIMUM EMISSION QUALITY:**  
1. 20 mg/m<sup>3</sup> Particulate Matter  
2. 10% Opacity.

**WORKS AND PROCEDURES:**  
Covered conveyors and enclosed transfer points together with the maintenance of adequate material moisture for dust suppression and a Mac Process cartridge dust collector (380-9) and related appurtenances together with good operating practices.

Neptune stack number: 380-9  
Stack height above ground level: 12.0 m  
Diameter at stack top: 0.8 m

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Orientation of stack: horizontal  
Presence of raincap/weather hood: yes

**EMISSION SOURCE 19:** One phosphate rock storage building discharging through two dry filtration system vents.

MAXIMUM EMISSION FLOW RATE: 3400 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 5000 h/y

MAXIMUM EMISSION QUALITY:  
1. 20 mg/m<sup>3</sup> Particulate Matter  
2. 20% Opacity.

WORKS AND PROCEDURES:  
Building and headbox dampers, two Mac Process Cartridge Dust Collectors (380-5&6, -7&8) together with the maintenance of adequate material moisture for dust suppression and good operating practices.

Neptune stack number: 380-5&6  
Stack height above ground level: 8.0 m  
Equivalent diameter at stack top: 1.5 m  
Orientation of stack: horizontal  
Presence of raincap/weather hood: yes

Neptune stack number: 380-7&8  
Stack height above ground level: 8.0 m  
Equivalent diameter at stack top: 1.5 m  
Orientation of stack: horizontal  
Presence of raincap/weather hood: yes

**EMISSION SOURCE 20:** Phosphate rock loadout building discharging through dry filtration system vent.

MAXIMUM EMISSION FLOW RATE: 900 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 5000 h/y

MAXIMUM EMISSION QUALITY:  
1. 20 mg/m<sup>3</sup> Particulate Matter  
2. 10% Opacity. May be exceeded for a total of 3 min/h to a maximum of 30%.

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**WORKS AND PROCEDURES:**

Four railcar loader spouts aspirated to a Mac Process cartridge dust collector (380-10) American Air Filter baghouse and related appurtenances.

Neptune stack number: 380-10  
Stack height above ground level: 11.0 m  
Equivalent diameter at stack top: 1.1 m  
Orientation of stack: horizontal  
Presence of raincap/weather hood: yes

**EMISSION SOURCE 21: Enclosed dry bulk commodities dumper building discharging through 1 stack (202) and Rail car entrance and exit.**

MAXIMUM EMISSION FLOW RATE: 1500 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y

**MAXIMUM EMISSION QUALITY:**

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

**WORKS AND PROCEDURES:**

Rail car bottom unloading through a vee type hopper and a Hosakawa Micron (Ducon) Dynamic Wet Scrubber No. 202 and related appurtenances together with good operating practices.


Neptune stack number: 202  
Stack height above ground level: 34.0 m  
Diameter at stack top: 1.6 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

**EMISSION SOURCE 22: Conveyors, transfer points and ship loading spouts handling dry bulk commodities on Berth Nos. 2 & 3 discharging through four stacks controlling emissions from the conveyor transfer areas and ship loading spouts located in the Berth Nos. 2 & 3 area of the terminal (240, 241, 728 & 740).**

MAXIMUM EMISSION FLOW RATE: 1350 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y

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MAXIMUM EMISSION QUALITY:

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

WORKS AND PROCEDURES:

Three Hosakawa Micron (Ducon) Dynamic Wet Scrubbers (240, 241 & 728), and Entoleter Centrifield (740), three cascade chutes and related appurtenances together with good operating practices.

Neptune stack number: 240  
Stack height above ground level: 13.4 m  
Diameter at stack top: 0.7 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

Neptune stack number: 241  
Stack height above ground level: 13.4 m  
Diameter at stack top: 0.7 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

Neptune stack number: 728  
Stack height above ground level: 17.0 m  
Diameter at stack top: 0.6 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no


Neptune stack number: 740  
Stack height above ground level: 19.3 m  
Diameter at stack top: 0.2 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

**EMISSION SOURCE 23: Dry bulk commodities dumper and transfer point for conveyors 33 and 34 discharging through two stacks (622 & 636).**

MAXIMUM EMISSION FLOW RATE: 1780 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y

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MAXIMUM EMISSION QUALITY:

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

WORKS AND PROCEDURES:

Two Hosakawa Micron (Ducon) Dynamic Wet Scrubbers (622 & 636) and related appurtenances together with good operating practices.

Neptune stack number: 622  
Stack height above ground level: 33.0 m  
Diameter at stack top: 1.6 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

Neptune stack number: 636  
Stack height above ground level: 33.0 m  
Diameter at stack top: 0.6 m  
Orientation of stack: vertical  
Presence of raincap/weather hood: no

**EMISSION SOURCE 24: Enclosed rotary dumper handling coal discharging through one stack (189).**

The authorization to discharge air contaminants from this emission source expires on August 15, 2035. If, by August 15, 2034, the Permittee submits an application in accordance with the Air Quality Management Bylaw, as amended or replaced, to continue the discharge of air contaminants from this emission source and the District Director is satisfied that the application includes all required information, then the authorization to discharge air contaminants from this emission source is extended and does not expire until the District Director issues a permit, approval, or notice of decision in respect of the application.


MAXIMUM EMISSION FLOW RATE: **1650** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

1. 15 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

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WORKS AND PROCEDURES:

Best commercially available proven control technology as approved by the District Director and related appurtenances, together with good operating practices.

Neptune stack number: 189

Stack height above ground level: 8.6 m


Diameter at stack top: 1.3 m

Orientation of stack: horizontal

Presence of raincap/weather hood: yes

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**SECTION 2 – GENERAL REQUIREMENTS AND CONDITIONS**

**A. AUTHORIZED WORKS, PROCEDURES AND EMISSION SOURCES**

Works and procedures, which this permit authorizes in order to control the discharge of air contaminants, shall be employed during all operating periods of the related sources. The Permittee shall regularly inspect and maintain all such works, procedures and emission sources.

The District Director must be provided with reasonable notice of any changes to or replacement of authorized works, procedures or emission sources, other than changes required for routine maintenance. Any changes to or replacement of authorized works, procedures or emission sources that may materially increase the Facility's contribution to ambient particulate matter concentrations must be approved by the District Director in advance of operation.

The discharge criteria described in Section 1 of this permit are applicable on the issued or last amended date of this permit unless specified otherwise. If a date different to the issued or last amended date is specified, the existing works, procedures and emission sources must be maintained in good operating condition and operated in a manner to minimize emissions.

**B. NOTIFICATION OF MONITORING NON-COMPLIANCE**

The District Director must be notified immediately of any emission monitoring results, whether from a continuous emissions monitor or periodic testing, which exceed the quantity or quality authorized in Section 1 of this permit. Notification shall be made to Metro Vancouver's 24-hour number: 604-436-6777, or to [regulationenforcement@metrovancover.org](mailto:regulationenforcement@metrovancover.org).

**C. POLLUTION NOT PERMITTED**

Notwithstanding any conditions in this permit, no person shall discharge or allow or cause the discharge of any air contaminant so as to cause pollution as defined in the Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008 and the Environmental Management Act.

**D. BYPASSES**

The discharge of air contaminants that have bypassed authorized control works is prohibited unless advance approval has been obtained and confirmed in writing from the District Director.


**E. EMERGENCY PROCEDURES**

In the event of an emergency or condition beyond the control of the Permittee that prevents effective operation of the authorized works or procedures or leads to unauthorized discharge, the Permittee shall:

1. Comply with all applicable statutory requirements;
2. Immediately notify the District Director of the emergency or condition and of contingency actions invoked or planned to mitigate adverse impacts and restore compliance; Notification shall be made to Metro Vancouver's 24-hour number: 604-436-6777; and

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3. Take appropriate remedial action for the prevention or mitigation of pollution.

The District Director may specify contingency actions to be implemented to protect human health and the environment while authorized works are being restored and/or corrective actions are being taken to prevent unauthorized discharges.

If an emergency situation results in a "spill" as defined in the Environmental Management Act Spill Reporting Regulation, the spill shall also be reported immediately to the Provincial Emergency Program by telephoning 1-800-663-3456.

### **F. AMENDMENTS**

The terms and conditions of this permit may be amended, as authorized by applicable legislation. New emission sources must receive authorization in advance of operation. Alterations to existing works, procedures or emission sources that may materially increase the Facility's contribution to ambient particulate matter concentrations must receive authorization in advance of operation.


### **G. STANDARD CONDITIONS AND DEFINITIONS**

Unless otherwise specified, the following applies to this permit:

1. Gaseous volumes are corrected to standard conditions of 20 degrees Celsius (°C) and 101.325 kilo Pascals (kPa) with zero percent moisture.
2. Contaminant concentrations from the combustion of specific fuel types are corrected to the following Oxygen content, unless specified otherwise:
  - 3% O<sub>2</sub> for natural gas and fuel oil; or
  - 8% O<sub>2</sub> for wood fuel
3. Where compliance testing is required, each contaminant concentration limit in this permit will be assessed for compliance based on a valid test using test methods approved by the District Director.
4. Visual opacity measurements are made at the point of maximum density, nearest the discharge point and exclude the effect of condensed, uncombined water droplets. Compliance determinations are based on a six-minute average in accordance with the provincial "Source Testing Code for the Visual Measurement of The Opacity of Emissions from Stationary Sources". Continuous Emission Monitor System (CEMS) opacity compliance determinations are based on a one-hour average (taken from the top of each hour).
5. If authorized in Section 1 of this permit, standby fuel use is restricted to a maximum of 350 hours per year and to those periods during which the primary authorized fuel is not available. Fuel oil sulphur content shall not exceed 15 milligrams per kilogram (mg/kg) and emissions during fuel oil firing shall not exceed 10% opacity.
6. Definitions in the Environmental Management Act and Air Quality Management Bylaw apply to terminology used in this permit.
7. Threshold Limit Values (TLV) refer to the Time Weighted Average (TWA) exposure limits for substances specified in the American Conference of Governmental Industrial Hygienists Threshold Limit Values handbook, current on the latest date that this permit issuance or amendment came into effect.

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8. Sulphur Oxides (SO<sub>x</sub>) are expressed as Sulphur Dioxide.
9. Nitrogen Oxides (NO<sub>x</sub>) are expressed as Nitrogen Dioxide.
10. The Canadian Council of Ministers of the Environment (CCME) "Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks (June 1995, CCME-EPC-87E)" shall be adhered to for all applicable tanks unless otherwise stated in this permit.
11. Authorized 'Maximum Annual Operating Hours' of 8760 hours per year for an emission source is equivalent to authorization for continuous operation of the emission source for an entire calendar year, including leap years.

### **H. RECORDS RETENTION**

All records and supporting documentation relating to this permit must be kept for at least three years after the date of preparation or receipt thereof, and be made available for inspection within 48 hours of a request by an Officer.

### **I. HEATING, VENTILATION, AIR CONDITIONING AND INTERNAL COMBUSTION ENGINES**

Air contaminants discharged from any natural gas-fired heating, ventilation or air conditioning system for buildings and any internal combustion engine located at the discharge site shall be maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel with minimum discharge of air contaminants.

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**SECTION 3 – REPORTING REQUIREMENTS**

**A. MONITORING REQUIREMENTS AND REPORTING**

Unless otherwise approved by the District Director prior to any sampling or analysis, all measurements shall be performed by an independent agency in accordance with Metro Vancouver Air Emissions Sampling Program Manual of Methods and Standard Operating Procedures and the BC Ministry of Environment Field Sampling Manual, as they may be amended from time to time. Any variance from these procedures must receive prior approval from the District Director.

A minimum of 5 working days advance notice must be given prior to taking measurements required by this Monitoring and Sampling Program. Notification must be given to the Metro Vancouver Environmental Regulation & Enforcement Division (phone 604-436-6777, Fax 604-436-6707, email [regulationenforcement@metrovancover.org](mailto:regulationenforcement@metrovancover.org)).

Unless otherwise specified, sampling shall be performed under operating conditions representative of the previous 90 calendar days of operation. All field data and calculations must be submitted with monitoring results and they shall be reported in the metric units which are used in this permit. These submissions shall include process data relevant to the operation of the source of the emissions and the performance of the emission control works.

The Permittee shall conduct the following monitoring and sampling and submit electronic reports of the results to the District Director by the dates specified below using a password enabled web based application provided by Metro Vancouver.

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
11	March 31, 2017	On or before March 31 for each subsequent year.	The measured discharge rate and concentration of particulate in the emissions of one of the wet scrubbers 208, 209, 210 & 727. One to be sampled	Particulate Matter	Those approved by the District Director	Stack



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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
22	March 31, 2017	On or before March 31 for each subsequent year.	The measured discharge rate and concentration of particulate in the emissions of one of the scrubbers 240, 241, 728 & 740. One to be sampled annually on a rotating schedule such that each is sampled once every four years.	Particulate Matter	Those approved by the District Director	Stack
21, 23	March 31, 2017	On or before March 31 for each subsequent year.	The measured discharge rate and concentration of particulate in the emissions of one of the scrubbers 202, 622 & 636. One to be sampled annually on a rotating schedule such that each is sampled once every three years.	Particulate Matter	Those approved by the District Director	Stack
01, 24	March 31, 2017	On or before March 31 for each subsequent year.	The measured discharge rate and concentration of particulate in the emissions of one of the scrubbers 104 and 189. One to be sampled annually on a rotating schedule such that each is sampled once every two years.	Particulate Matter	Those approved by the District Director	Stack

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
Facility	January 31, 2017	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	<p>Continuous monitoring of PM<sub>10</sub> and PM<sub>2.5</sub> in the ambient air at the onsite location of the Facility using methods approved by the District Director. Results must be reported as 24-hour rolling averages in micrograms per cubic metre of air (µg/m<sup>3</sup>).</p> <p>All monitoring equipment must be located on the roof of the Facility's electrical substation office and operated by the Permittee. All equipment and data is subject to audit(s) by Metro Vancouver.</p>	Particulate Matter	Those approved by the District Director	Monitoring - Other
Facility	April 30, 2017	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	<p>Written report summarizing the results for the previous calendar quarter of the approved ambient air quality monitoring program in the neighbouring community. All results must be compared to the Metro Vancouver Ambient Air Quality Objectives applicable to each contaminant. Detailed records are to be maintained in a format approved by the District Director considerate of operating</p>	Particulate Matter	Those approved by the District Director	Monitoring - Other



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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
Facility	March 31, 2018	On or before March 31 for each subsequent year.	<p>requirements.</p> <p>Written report summarizing the results for the preceding calendar year of the approved ambient air quality monitoring program in the neighbouring community and onsite. The report should compare results to Metro Vancouver Ambient Air Quality Objectives, results from previous years, and predicted concentrations for the Permitted Scenario referenced in the RWDI's Air Dispersion Modelling Study dated May 6, 2015. Results should also be analyzed and presented in the following formats: wind roses, pollutant roses, frequency distributions, trend analyses etc.</p>	Particulate Matter	Those approved by the District Director	Monitoring - Other



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**B. INFORMATION REPORTING REQUIREMENTS**

The Permittee shall submit electronic reports containing the required information to the District Director by the dates specified below using a password enabled web based application provided by Metro Vancouver.

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
Facility	March 31, 2017	On or before March 31 for each subsequent year.	Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.	Materials and Products
11, 22, 23, 01, 24	March 31, 2017	On or before March 31 for each subsequent year.	Written report summarizing frequency and results of all inspections and maintenance carried out on the scrubber(s). The report shall also include any actions, taken or proposed, to solve identified problems.	Scrubber
18, 20	March 31, 2017	On or before March 31 for each subsequent year.	Written report due indicating baghouse inspection frequency, baghouse condition and action taken or proposed to solve any problems detected.	Baghouse
01, 07, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24	March 31, 2017	On or before March 31 for each subsequent year.	Written report providing details of the total number of hours and days operated in the preceding calendar year. Detailed records are to be maintained in a written bound log or other format approved by the District Director.	Operating Period
Facility	October 31, 2016	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	All verifiable complaints regarding air emissions received directly by the Permittee for the previous calendar quarter from individuals in the neighbouring community shall be anonymized and submitted along with a summary of any follow-up actions taken or proposed, including lab analysis reports of any collected sample material.	Information - Other

  
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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
Facility	December 31, 2016	N/A	<p>Written report, referred to as the Fugitive Dust Mitigation Action Plan (FDMAP), summarizing plant site fugitive particulate emission sources and an assessment of overall site operations and actions to minimize the release of fugitive dust emissions at the facility.</p> <p>The plan should include but not be limited to: opacity measurement surveys by trained staff, actions that could be taken to reduce fugitive particulate matter emissions and a review to consider if improved technology is available to reduce particulate matter emissions at the facility.</p>	Information - Other
Facility	October 31, 2016	N/A	<p>Submit for approval by the District Director a written proposal for conducting an ambient air quality monitoring program at two locations in the neighbouring community within the area of exceedance of Metro Vancouver's ambient objective for PM<sub>10</sub> predicted for the Permitted Scenario (as referenced in RWDI's Air Dispersion Modelling Study dated May 6, 2015): the roof of the Neptune office building (340 Brooksbank) and in the Moodyville community. The Brooksbank monitoring station is to include: Federal Equivalent Method (FEM) analyzers for continuous PM<sub>2.5</sub> and PM<sub>10</sub>, a dustfall canister for monthly measurements, and meteorological instrumentation for wind speed and direction. The Moodyville monitoring station is to include a Federal Equivalent Method (FEM) analyzer for continuous PM<sub>10</sub> and similar instrumentation to monitor continuous PM<sub>2.5</sub> as well as meteorological instrumentation for wind speed and direction.</p>	Information - Other



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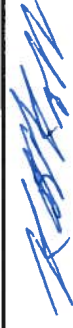
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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
24	July 31, 2017	N/A	Written report detailing the progress and commissioning of the scrubber and related appurtenances associated with the second rotary coal dumper.	Information - Other
07, 14, 15, 16, 17	October 31, 2016	Monthly, on or before the last day of each month.	Written report summarizing estimated daily fugitive particulate matter emissions from each Emission Source in kg/d for the preceding calendar month. Methodology used to calculate estimated emissions should be consistent with RWDI Air Dispersion Modelling Study dated May 6, 2015, however updated site-specific information can be used in the calculations. Detailed records are to be maintained in a format approved by the District Director considerate of operating requirements.	Information - Other
07, 14, 15, 16, 17	March 31, 2017	On or before March 31 for each subsequent year.	Written report summarizing estimated annual fugitive particulate matter emissions from each listed Emission Source in t/y for the preceding calendar year. Methodology used to calculate estimated emissions should be consistent with RWDI Air Dispersion Modelling Study dated May 6, 2015, however updated site-specific information can be used in the calculations.	Information - Other
Facility	July 31, 2017	On or before July 31 for each subsequent year.	An annual review of the Fugitive Dust Mitigation Action Plan (FDMAP) summarizing complaint handling protocols, a summary of measures and actions taken, changes in procedures and/or equipment, and recommendations for on-going improvement.  Any changes to the plan to minimize fugitive emissions shall be documented and be subject to review by the District Director to determine whether additional actions and procedures are necessary for the protection of human health and the environment.	Information - Other

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**C. AMENDED OR ADDITIONAL REQUIREMENTS**

Based on the results of the monitoring program, including the stack sampling results or any other information, the District Director may:

1. Amend the monitoring and reporting requirement of any of the information required by this Permit including plans, programs and studies.
2. Require additional investigations, tests, surveys or studies.

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**SECTION 4 – SITE PLAN**

**LEGAL DESCRIPTION OF DISCHARGE SITE: The land from which the air contaminants are discharged is "City of North Vancouver, including**

- (i) parcel X, a 34.42 acres comprising a portion of D.L. 272 (N.W.D.) and reclaimed portion of the bed of Burrard Inlet as shown on drawing 4-N-2-607**
- (ii) parcel Y, a 26.07 acres comprising a portion of D.L. 272 (N.W.D.) and reclaimed portion of the bed of Burrard Inlet as shown on drawing 4-N-2-607**
- (iii) parcel Z, a 7.67 acres comprising a portion of D.L. 272 (N.W.D.) and reclaimed portion of the bed of Burrard Inlet as shown on drawing 4-N-2-607**
- (iv) parcel F, a 1471 m2 area fronting Block 26, D.L. 273 (N.W.D.) as shown on drawing 85-60**
- (v) parcel G, a 3612 m2 area as shown on drawing 85-62**
- (vi) parcel H, a 56 m2 area as shown on drawing 85-62**
- (vii) parcel A, a 401 m2 area as shown on sketch S2012-097**
- (viii) parcel B, a 3354 m2 area as shown on sketch S2012-097**
- (ix) parcel C, a 1397 m2 area as shown on sketch S2012-097"**

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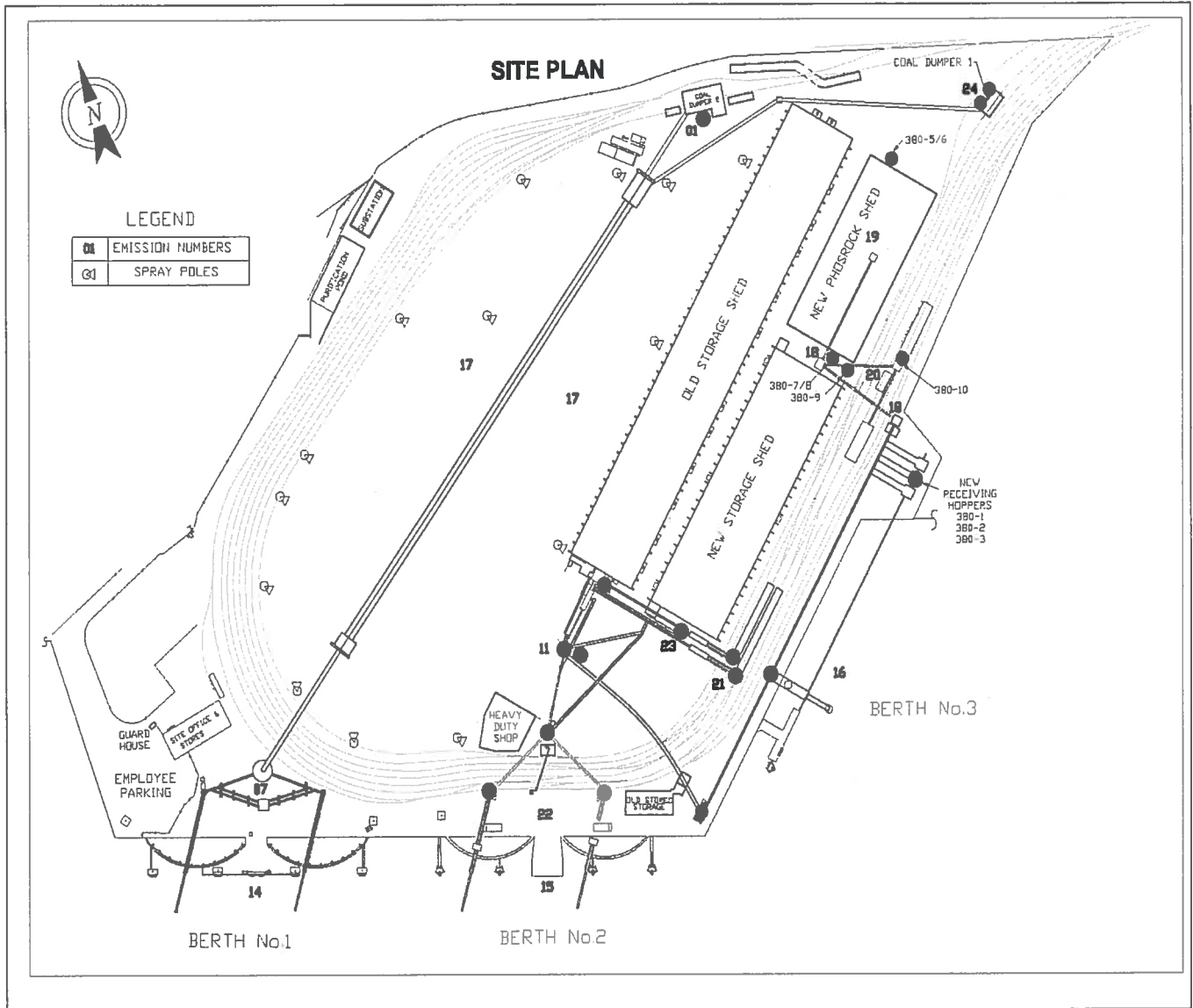
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The following site plan is not to scale and the locations of the discharge points are approximate.



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