PERMIT GVA0153

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:

Westshore Terminals Limited Partnership

(the "Permittee")

To Authorize:

the discharge of air contaminants to the air from

a Multi Product Bulk Terminal

Located at:

1 Roberts Bank Road, Delta, BC V4M 4G5

Effective Period:

The terms and conditions set out in the Permit apply to the existing or planned works as of April 11, 2025 and this Permit will expire on April 30, 2041.

All previous versions of this Permit are invalid.

Issued: November 30, 1992
Amended: April 11, 2025

Kathy Preston, PhD, PEng
District Director

SECTION 1 – AUTHORIZED EMISSION SOURCES

Authorization to discharge air contaminants from the authorized Emission Sources and Works listed below is subject to the specified terms and conditions.

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

EMISSION SOURCE 03: **Coal and coke products loading of marine vessels at Berth 1 and Berth 2 discharging air contaminants from ships' holds via ship loader spouts and related appurtenances to loading area (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **The authorized rate of discharge is that resulting from the loading operations, as well as displacement air from the ships' holds**
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee: **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 2.2 t/y Coarse particulate matter
2. 62 kg/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 03 is only valid if the ship loader spouts and related appurtenances (as applied for by the Permittee) are operational, and operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan.

Personnel must conduct opacity surveys during ship loading in accordance with the most recently approved Fugitive Dust Mitigation Action Plan. Surveys must be completed by staff certified as a US EPA Method 9 qualified observer. Records of the opacity surveys must be maintained and available for inspection.

The Permittee must take immediate action to reduce particulate matter emissions if an opacity exceedance is observed as per the most recently approved Fugitive Dust Mitigation Action Plan.

EMISSION SOURCE 04: **Coal and coke products car dumper No. 31 discharging through rail car building entrance and exit and related appurtenances (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **The authorized maximum rate of discharge is that resulting from coal and coke products car dumping operations**

MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 1.4 t/y Coarse particulate matter
2. 24 kg/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 04 is only valid if the rail car building entrance and exit and related appurtenances (as applied for by the Permittee) are operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan.

EMISSION SOURCE 06: **Coal and coke products car dumper No. 32 discharging through rail car building entrance and exit and related appurtenances (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **The authorized maximum rate of discharge is that resulting from coal and coke products car dumping operations**
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 1.4 t/y Coarse particulate matter
2. 24 kg/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 06 is only valid if the rail car building entrance and exit and related appurtenances (as applied for by the Permittee) are operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan.

EMISSION SOURCE 07: **Stacking, reclaiming, conveying, and storage of coal and coke products discharging from coal and coke products storage area using spray trucks, and a local or remote operated water spray system and related appurtenances (as applied for by the Permittee).**

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 HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 185 t/y Coarse particulate matter
2. 2.0 t/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 07 is only valid if the coal and coke products storage area; spray trucks for freezing and non-freezing periods; a local or remote operated water spray system for non-freezing periods, pile crusting of applicable piles for freezing periods; and related appurtenances (as applied for by the Permittee) are operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan. Freezing periods are defined as air temperatures forecasted less than 2°C, and the process for assessing forecasted temperatures must be detailed in the most recently approved Fugitive Dust Mitigation Action Plan.

Personnel must conduct opacity surveys during stacking/reclaiming/conveyance in accordance with the most recently approved Fugitive Dust Mitigation Action Plan. Surveys must be completed by staff certified as a US EPA Method 9 qualified observer. Records of the opacity surveys must be maintained and available for inspection.

The Permittee must take immediate action to reduce particulate matter emissions if an opacity exceedance is observed as per the most recently approved Fugitive Dust Mitigation Action Plan.

EMISSION SOURCE 08: **Potash loading of marine vessels at Berth 2 discharging air contaminants through ships' holds and loading area with use of ship loader spouts and related appurtenances (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **The authorized rate of discharge is that resulting from the potash loading of marine vessels**
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **3000** h/y

MAXIMUM EMISSION QUANTITY:
1. 2.3 t/y Coarse particulate matter
2. 165 kg/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 08 is only valid if: the de-dusting oil has been applied to the potash, ship loader spouts and related appurtenances (as applied for by the Permittee) are installed and operational, and operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan.

Personnel must conduct opacity surveys during ship loading in accordance with the most recently approved Fugitive Dust Mitigation Action Plan. Surveys must be completed by staff certified as a US EPA Method 9 qualified observer. Records of the opacity surveys must be maintained and available for inspection.

The Permittee must take immediate action to reduce particulate matter emissions if an opacity exceedance is observed as per the most recently approved Fugitive Dust Mitigation Action Plan.

EMISSION SOURCE 09a: Potash railcar dumper discharging from the potash dumper building through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **750** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 09a is only valid if the hopper is under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 81300-E0040-7000
Donaldson DLMC 4/8/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 24 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.89 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 09b: Potash railcar dumper discharging from the potash dumper building through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **750** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 09b is only valid if the hopper is under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 81300-E0040-7001
Donaldson DLMC 4/8/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 24 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.89 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 09c: Potash railcar dumper discharging from the potash dumper building through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **327** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 09c is only valid if the hopper is under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

Issued: November 30, 1992
Amended: April 11, 2025

Kathy Preston, PhD, PEng
District Director

Permit GVA0153

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 81300-E0040-7002
Donaldson DLMC 2/6/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 24 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.58 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 10: Enclosed conveyor system (P40) to transport potash from the railcar dumper to the potash storage building discharging at the enclosed transfer tower P42 through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **327** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 10 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85342-E0140-7000
Donaldson DLMC 2/6/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 19 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.58 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 11: **Enclosed conveyor system (P45) to transport potash from the railcar dumper to the potash storage building discharging at the enclosed transfer tower P47 through a Dust Collector Exhaust(s) (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **327** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 11 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85347-E0140-7000
Donaldson DLMC 2/6/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 35 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.58 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 12: **Enclosed conveyor system (P50) to transport potash from the railcar dumper to the potash storage building discharging at the enclosed transfer tower P52 through a Dust Collector Exhaust(s) (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **421** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **1800** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 12 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85352-E0140-7000
Donaldson DLMC 3/5/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 47 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.66 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 13: Enclosed conveyor system (P55) to transport potash from the railcar dumper to the potash storage building discharging at the enclosed transfer tower P57 through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **327** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **700** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 13 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85357-E0140-7000
Donaldson DLMC 2/6/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 23 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.58 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 14: Enclosed conveyor system (P65) to transport potash from the storage shed to the enclosed transfer tower P67 discharging through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **389** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **3000** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 14 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85667-E0240-7000
Donaldson DLMC 3/5/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 23 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.63 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 15: Enclosed conveyor system (P70) to transport potash from the storage shed to the enclosed transfer tower P72 discharging through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **716** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **3000** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 15 is only valid if the conveyors and transfer tower are enclosed, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 85662-E0340-7000
Donaldson DLMC 4/8/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 25 m
Cross-Section: Circular
Inside Diameter at Stack Top: 0.86 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 16: Covered conveyor system to transport potash from the enclosed transfer tower P72 through covered transfer tower #30 to Berth 2 ship loaders #3 and #4 discharging through a Dust Collector Exhaust(s) (as applied for by the Permittee).

MAXIMUM EMISSION FLOW RATE: **1308** m^3/min
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **3000** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Coarse particulate matter
2. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 16 is only valid if the conveyors and transfer tower are covered and have solid decking below, transfer points are under negative pressure, the Dust Collector and related appurtenances (as applied for by the Permittee) are installed and operational, and good operating practices are employed.

DUST COLLECTOR INFORMATION (as applied for by the Permittee):
Dust Collector No. 82230-E0340-7000
Donaldson DLMC 6/8/15 or equivalent control technology approved by the District Director

STACK INFORMATION (as applied for by the Permittee):
Height (above ground): 13.5 m
Cross-Section: Circular
Inside Diameter at Stack Top: 1.12 m
Orientation: Vertical
Minimum Exit Temperature: Ambient
Rain Cap: No

EMISSION SOURCE 17: **Enclosed potash storage building discharging through a Building Opening(s) (as applied for by the Permittee).**

MAXIMUM EMISSION FLOW RATE: **The authorized maximum rate of discharge is that resulting from potash storage operations**
MAXIMUM ANNUAL HOURS OF EMISSION DISCHARGE (as applied for by the Permittee): **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 1.4 t/y Coarse particulate matter
2. 37 kg/d Coarse particulate matter

MAXIMUM EMISSION QUALITY:
1. 20% Opacity

WORKS AND PROCEDURES:
The authorization of the discharge of air contaminants from EMISSION SOURCE 17 is only valid if the enclosed potash storage building and related appurtenances (as applied for by the Permittee) are installed and operated in accordance with the most recently approved Fugitive Dust Mitigation Action Plan.

SECTION 2 – GENERAL REQUIREMENTS AND CONDITIONS

A. DISCHARGE CRITERIA

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.

B. NOTIFICATION OF MONITORING NON-COMPLIANCE

The District Director must be notified immediately of:

1. 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;
2. Any (a) interruption, (b) damage or (c) interference to any (i) continuous ambient air analyzer, (ii) meteorological sensor or (iii) related equipment required in Section 1 or Section 3 of this permit that would cause the continuous ambient air analyzer or meteorological sensor to be offline for a period greater than 48 hours; and
3. Any exceedance of a Metro Vancouver ambient air quality objective measured by an ambient monitoring station required in Section 1 or Section 3 of this permit.

The Permittee must then:

1. Take corrective action
2. Document it
3. Let Metro Vancouver know, in writing, what corrective action was taken, within 24 hours of taking the action

Notification must be made to Metro Vancouver's 24-hour number: 604-436-6777, or to EREnotifications@metrovancouver.org.

C. POLLUTION NOT PERMITTED

Notwithstanding any conditions in this permit, no person may 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 exceed discharge limits as a result of a control works bypass 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 leads to unauthorized discharge, the Permittee must:

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 must be made to Metro Vancouver's 24-hour number: 604-436-6777 or EREnotifications@metrovancouver.org; and
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 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 must also be reported immediately to Emergency Management British Columbia by telephoning 1-800-663-3456 and the Permittee must otherwise comply with requirements of the Act and the Regulation.

F. AMENDMENTS

The terms and conditions of this permit may be amended, as authorized by applicable legislation.

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_2 for natural gas and fuel oil; or
   - 8% O_2 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 United States Environmental Protection Agency (US EPA) Method 9: Visual Determination 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 must not exceed 15 milligrams per kilogram (mg/kg) and emissions during fuel oil firing must 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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District Director

Permit GVA0153

8. Sulphur Oxides (SO_x) are expressed as Sulphur Dioxide.
9. Nitrogen Oxides (NO_x) 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 (PN1180)" must be adhered to for all applicable tanks unless otherwise stated in this permit.

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

This permit is only valid if natural gas-fired heating, ventilation or air conditioning systems for buildings and any internal combustion engines located at the discharge site are maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel with minimum discharge of air contaminants.

J. CONDITIONAL PERMIT EXTENSION

If:

- at least 12 months and no more than 36 months before the expiry date of this permit, the Permittee submits an application for authorization to discharge air contaminants from the works and sources authorized in this permit; and
- the application is complete, including that the Permittee has complied with all applicable requirements in the Public Notification Regulation, and that it contains all information and studies the District Director considers relevant to the application; and
- the District Director has not made a decision in respect of the completed application by the expiry date specified on page 1 of this permit,

then the expiry date specified on page 1 of this permit is extended to the date the District Director makes a decision in respect of the completed application.

It is a condition of the extension that during the period of extension, the discharge of air contaminants is conducted strictly in accordance with all other terms and conditions in this permit, the Greater Vancouver Regional District Air Quality Management Bylaw No. 1082, 2008 (as amended or replaced) and the *Environmental Management Act*. This permit shall be invalid and of no force and effect immediately on and after the date the District Director makes a decision in respect of the completed application, or on April 11, 2042, whichever occurs sooner.

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Permit GVA0153

SECTION 3 – REPORTING REQUIREMENTS

A. MONITORING REQUIREMENTS AND REPORTING

Unless otherwise approved in writing by the District Director prior to any sampling or analysis, all measurements must 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 written 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 EREnotifications@metrovancouver.org).

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

Unless otherwise specified or approved in writing by the District Director, stack sampling must not occur more than 120 calendar days prior to the due dates specified below.

The Permittee must conduct the following monitoring and sampling and submit electronic reports of the results to the District Director by the due dates specified in the following table 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/TITLE
09a, 09b, 09c, 10, 11, 12, 13, 14, 15, 16	October 31, 2027	Every 3 years, on or before October 31 every third year.	Submit for review by Metro Vancouver staff a written report, detailing the measured discharge rate and concentration of coarse particulate matter in the emissions. The stack test sampling used in the report must follow the approved Stack Test Plan.	Coarse particulate matter	EPA Test Method 5	Stack

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B. INFORMATION REPORTING REQUIREMENTS

The Permittee must submit electronic reports containing the required information to the District Director by the due dates specified in the following table using a password enabled web based application provided by Metro Vancouver.

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/TITLE
03, 04, 06, 07, 08, 17	May 30, 2025	N/A	Submit for review, comment, and written approval by the District Director an Air Contaminant Discharge Calculation Method that must include details of method(s) that will be used to quantify emissions of coarse particulate matter in kilograms per day and tonnes per year.	Air Contaminant Discharge Calculation Method
Facility	May 30, 2025	N/A	Submit for review, comment, and written approval by the District Director a plan, referred to as the Fugitive Dust Mitigation Action Plan (FDMAP), summarizing plant site fugitive particulate matter (dust) emission sources and an assessment of overall site operations and actions to minimize the release of fugitive dust emissions at the facility. The plan must include but not be limited to: - roles and responsibilities of staff - potential sources and activities - methods of monitoring fugitive dust - opacity measurement surveys by certified staff - means to minimize drop heights of coal, coke products, and potash loading chutes - triggers and planned actions to reduce fugitive dust - preventative maintenance and repairs - complaint handling and communication	Fugitive Dust Mitigation Action Plan

Issued: November 30, 1992
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Kathy Preston, PhD, PEng
District Director

Permit GVA0153

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/TITLE
			- notification to Metro Vancouver of any public complaints - continuous improvement - procedures for responding to newly detected sources of fugitive emissions - staff training - record keeping Any changes to the plan must be documented and are subject to written approval by the District Director.	
03, 04, 06, 07	June 30, 2025	N/A	Submit for review, comment, and written approval by the District Director a scope of work, prepared by a Qualified Professional*, for assessing control technologies that will reduce emissions of fugitive coal and coke products dust from the facility. The plan must include an outline or annotated table of contents for the Fugitive Coal Dust Emissions Control Technology Assessment Report and must also include methodologies that will be used to: - identify potential control technologies - assess effectiveness - quantify emission reductions - identify environmental and community impacts - quantify capital and operating costs - assess the feasibility of implementation - rank the potential control technologies	Fugitive Coal Dust Emissions Control Technology Assessment Scope of Work

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Permit GVA0153

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			At a minimum, the scope of work must include coal and coke products loading of marine vessels, coal and coke products unloading from rail cars, coal and coke products transfer points, and storage of coal and coke products. In addition, the scope must include possible improvements or alternatives to the operation of the water-based dust suppression system during freezing temperatures. The use of combined technologies for optimal air contaminant removal efficiency must also be explored as a means for continuous improvement.	
03, 04, 06, 07, 08, 17	July 31, 2025	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	Submit a written report summarizing estimated daily emissions in tonnes per day for the preceding calendar quarter and the input parameters used for emission estimation including: quantity of coal, coke products, and potash handled in tonnes per day, daily average of wind speed in metres per second, and precipitation in millimetres. The Q4 report submission, due January 31st, must also include a summary of the data from the previous 12-months (Jan 1 to Dec 31) in the form of: annual emissions in tonnes per year, annual quantity of coal, coke products, and potash handled in tonnes per year, annual average of wind speed in metres per second, and the number of days per year with more than 0.254 millimetres of precipitation. The emission estimates must be prepared in accordance with an approved Air Contaminant Discharge Calculation Method.	Daily Emission Rates Report

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/TITLE
Facility	November 30, 2025	N/A	Submit for review, comment, and written approval by the District Director a written ambient air quality monitoring plan. The plan must be developed by a Qualified Professional* and must include: At least one ambient air quality monitoring station located at or near the Tsawwassen ferry terminal for continuous monitoring of: a) particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometres ($PM_{2.5}$) b) particulate matter with an aerodynamic diameter less than or equal to 10 micrometres (PM_{10}) c) representative wind speed and direction The ambient air quality monitoring station must be operational by June 30, 2026. Proposed instrumentation must be specified in the monitoring plan and must include: 1. a description of the proposed station (tower, data logger, modem, other supporting equipment and configuration) and instrumentation (including make/model and relevant specifications, measurement height) to continuously monitor $PM_{2.5}$, PM_{10}, wind speed and direction at a minimum of one location (minimum height 10 m) 2. the coordinates and photographs of the proposed location(s) 3. a discussion of the relative merits of the proposed location(s) 4. a rationale for the recommended location(s)	Ambient Air Quality and Meteorological Monitoring Plan

Issued: November 30, 1992
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Permit GVA0153

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			5. an orthophoto (plan view map) figure centered on the proposed station location(s) with a scale of 1:560 6. an elevation view diagram of the station(s) and instrumentation indicating relevant measurement heights and surrounding obstacles (if any) 7. a schedule for commissioning and installation of the equipment 8. a description of how particulate matter and meteorological parameters will be sampled (i.e., sample rate and averaging) and logged (i.e., averaging period) Factors to consider for instrument selection include: 1. the use of instruments certified by the US EPA as Federal Equivalent Methods (FEM), near FEM, or comparable monitoring equipment 2. the use of instruments that meet the minimum requirements as outlined in the most recent version of the BC Ministry of Environment Meteorological Data and Sensing Requirements 3. the National Air Pollution Surveillance (Environment and Climate Change Canada) program's most recent guidance on air monitoring (i.e., performance specifications) 4. the most recent guidance in the British Columbia Field Sampling Manual: Part B1 5. comparability to instruments used in the Metro Vancouver air quality monitoring network	

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Permit GVA0153

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			6. the most recent US EPA guidance documents for ambient air measurement systems 7. the most recent version of the US EPA Meteorological Monitoring Guidance for Regulatory Modeling Applications The plan must have a section on the proposed quality assurance program that includes: 1. schedule and description of routine operations and maintenance activities 2. verification and calibration 3. validation 4. amount of downtime allowed 5. notification of downtime and its cause to Metro Vancouver The plan must also include a description of how Metro Vancouver will be provided timely access to any data as necessary.	
Facility	March 31, 2026	N/A	Submit for review, comment, and written approval by the District Director an outline that provides the format for reporting, and example tables and figures, of the annual ambient air quality and meteorological monitoring data reports that include but are not limited to: • data quality assurance, calibration, and maintenance summaries	Outline for Ambient Air Quality and Meteorological Monitoring Data Report

Issued: November 30, 1992
Amended: April 11, 2025

Kathy Preston, PhD, PEng
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Permit GVA0153

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			• annual wind roses • annual pollutant roses for each air contaminant (i.e., $PM_{2.5}$ and PM_{10}) • comparison of results to Metro Vancouver ambient objectives, including frequency of exceedances, for all averaging periods • maximum, minimum, 1-minute average, and 1-hour average values for each meteorological parameter for each quarter • 1-hour maximum, minimum, mean, 98th percentile and 99th percentile value for each pollutant for each month • % calms (i.e., less than stall speed of anemometer) • % data completeness for each parameter for each calendar quarter (i.e., four completeness values in a report submitted annually) • exceedance(s) reporting and cause assessment	
08, 09a, 09b, 09c, 10, 11, 12, 13, 14, 15, 16	March 31, 2026	On or before March 31 for each subsequent year.	Submit a written report providing details of the total number of hours and days operated in the preceding calendar year.	Operating Period
Facility	May 30, 2026	On or before May 30 for each subsequent year.	Submit for review, comment, and acceptance by Metro Vancouver staff, a report completed in accordance with an approved Fugitive Dust Mitigation Action Plan. The report must include a summary of:	Fugitive Dust Mitigation Action Report

Issued: November 30, 1992
Amended: April 11, 2025

Kathy Preston, PhD, PEng
District Director

Permit GVA0153

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			- results of measures and actions taken to reduce emissions - complaints received and follow-up actions taken - changes in procedures and/or equipment - recommendations for on-going improvement - requested changes to the approved Fugitive Dust Mitigation Action Plan	
Facility	July 31, 2026	N/A	Submit for review, comment, and written approval by the District Director a report, summarizing ambient air quality and meteorological monitoring station documentation in accordance with the most recent version of the Alberta Air Monitoring Directive, Chapter 3, Section 4.0, "Site Documentation". This report must be submitted after the establishment of the ambient air quality and meteorological monitoring station(s). The report must also include, for review by Metro Vancouver staff, sample data and a summary of the data logger program. The Permittee must provide in advance, an updated report for review, comment, and written approval by the District Director if the Permittee wishes to relocate or otherwise modify a station.	Ambient Air Quality and Meteorological Monitoring Station Documentation Report
Facility	March 31, 2027	On or before March 31 for each subsequent year.	Submit a written report, in accordance with the approved Outline for Ambient Air Quality and Meteorological Monitoring Data Report, summarizing $PM_{2.5}$ and PM_{10} concentrations and wind speed and wind direction measurements	Ambient Air Quality and Meteorological Monitoring Station Report

Issued: November 30, 1992
Amended: April 11, 2025

Kathy Preston, PhD, PEng
District Director

Permit GVA0153

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/TITLE
			from the approved ambient air quality and meteorological monitoring station(s) for the previous calendar year. Monitoring must be conducted in accordance with the Ambient Air Quality and Meteorological Monitoring Plan approved in writing by the District Director. Until such time as the ambient air quality and meteorological monitoring station(s) are established, this report can consist of a progress report on establishing the station(s).	
09a, 09b, 09c, 10, 11, 12, 13, 14, 15, 16	March 31, 2027	On or before March 31 for each subsequent year.	Submit a written report summarizing the frequency and results of all inspections and maintenance performed on the Dust Collectors. The report must also include any actions, taken or proposed, to solve identified problems with the Dust Collectors.	Dust Collector
03, 04, 06, 07	March 31, 2027	N/A	Submit for review, comment, and written approval by the District Director a report completed in accordance with an approved Fugitive Coal Dust Emissions Control Technology Assessment Scope of Work. The report must be prepared by a Qualified Professional* and must include information on the feasibility, approximate cost, and effectiveness of methods and control systems. The methodology used to assess and rank technologies must be clearly described.	Fugitive Coal Dust Emissions Control Technology Assessment Report

Issued: November 30, 1992
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Kathy Preston, PhD, PEng
District Director

Permit GVA0153

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09a, 09b, 09c, 10, 11, 12, 13, 14, 15, 16	March 31, 2027	N/A	Submit a written plan, including proposed methodologies, for review and acceptance by Metro Vancouver staff prior to commencing sampling as required under this permit.	Stack Test Plan
Facility	November 30, 2036	N/A	Submit for review, comment, and written approval by the District Director, a scope of work, prepared by a Qualified Professional*, for assessing control technologies that will update the 2027 Fugitive Coal Dust Emissions Control Technology Assessment Report, and will include a review of potash control technologies, to reduce emissions from the facility. The scope of work must include all coal, coke products, and potash handling processes. The scope of work must include an outline or annotated table of contents for the Emission Control Technology Review Report and must also include methodologies that will be used to: - identify potential control technologies - assess effectiveness - quantify emission reductions - identify environmental and community impacts - quantify capital and operating costs - assess the feasibility of implementation - rank the potential control technologies	Emission Control Technology Review Scope of Work

Issued: November 30, 1992
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Permit GVA0153

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			The use of combined technologies for optimal air contaminant removal efficiency must also be explored as a means for continuous improvement.	
Facility	March 31, 2037	N/A	Submit for review, comment, and written approval by the District Director a report completed in accordance with the approved Emission Control Technology Review Scope of Work. The report must be prepared by a Qualified Professional* and must include information on the feasibility, approximate cost, and effectiveness of methods and control systems. The methodology used to assess and rank technologies must be clearly described.	Emission Control Technology Review Report
Facility	October 31, 2037	N/A	Submit for review, comment, and written approval by the District Director a dispersion modelling plan, developed by a Qualified Professional*, using the most recent version of the British Columbia Air Quality Dispersion Modelling Guideline and the most recent version of the Metro Vancouver dispersion modelling plan template. The plan must include a minimum of two modelled scenarios: authorized emission levels, and emission levels achievable by implementation of the preferred technologies as per the Emission Control Technology Review Report.	Dispersion Modelling Plan
Facility	July 31, 2038	N/A	Submit for review and comment by Metro Vancouver staff a draft report that includes results of a dispersion modelling assessment of the potential cumulative impacts of air contaminant emissions from the facility. Modelling	Draft Dispersion Modelling Report

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/TITLE
			must be conducted by a Qualified Professional* in accordance with the most recent dispersion model plan approved by the District Director and the most recent version of the British Columbia Air Quality Dispersion Modelling Guideline. All modelling files must be made available to Metro Vancouver upon request.	
Facility	November 30, 2038	N/A	Submit for written approval by the District Director a final report that includes results of a dispersion modelling assessment of the potential cumulative impacts of air contaminant emissions from the facility. Modelling must be conducted by a Qualified Professional*, in accordance with the most recent dispersion model plan approved by the District Director and the most recent version of the British Columbia Air Quality Dispersion Modelling Guideline. The final report must address all comments from Metro Vancouver staff on the draft dispersion modelling report. All final modelling files must be made available to Metro Vancouver upon request.	Final Dispersion Modelling Report

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Permit GVA0153

*Qualified Professional means an individual who:

a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and
b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.

The most recent version of the "Qualified Professional Declaration of Competency" and "Qualified Professional Conflict of Interest Disclosure Statement" forms, available on the Metro Vancouver website in the Forms Package for Air Permit Applications, must be submitted to Metro Vancouver no later than the plan due date.

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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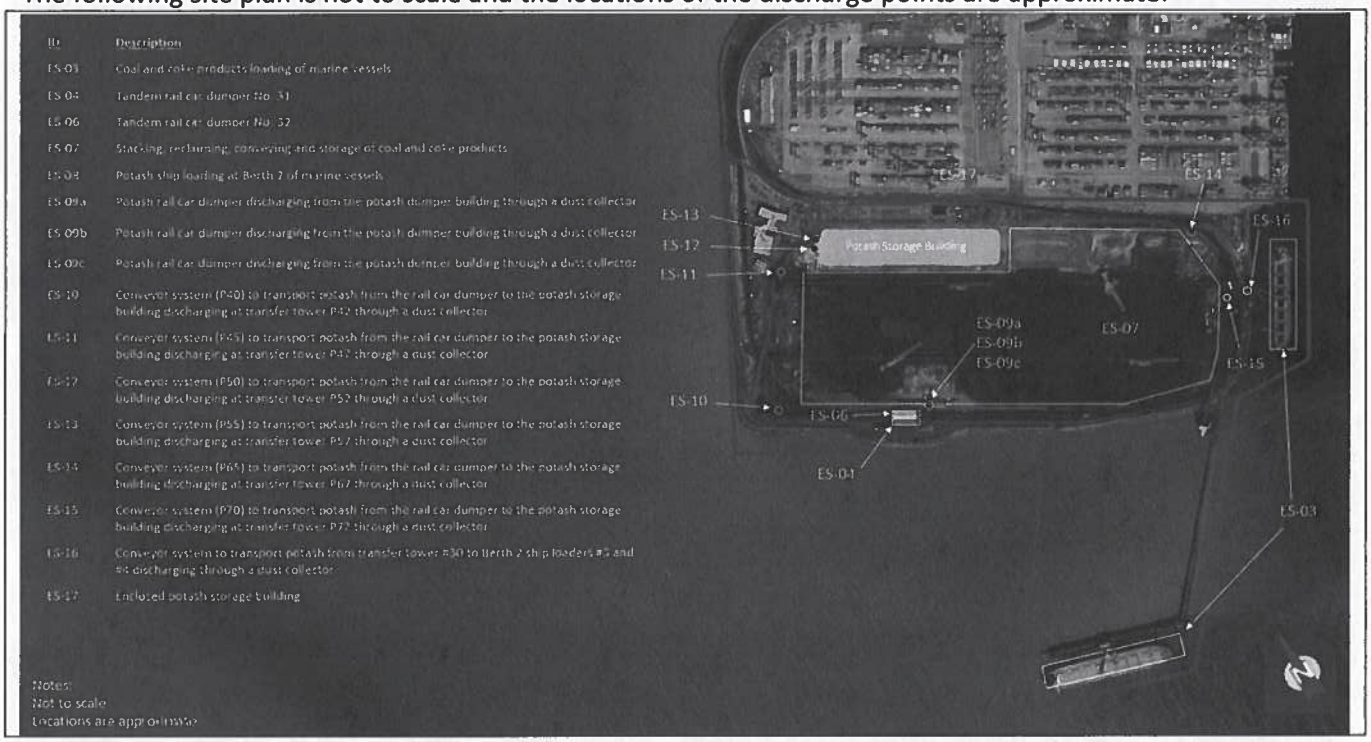
Permit GVA0153

SECTION 4 – SITE PLAN

LEGAL DESCRIPTION OF DISCHARGE SITE: **Certain lands and waterlot areas totalling some 982,569 square metres, more or less, comprising of: Parcel "A"(land) of some 551,471 square metres, more or less; Parcel "B"(waterlot) of some 209,485 square metres, more or less; Parcel "C" (waterlot) of some 167,606 square metres, more or less; Parcel "D" (waterlot) of some 44,385 square metres, more or less; and Parcel "E" (waterlot) of some 9,622 square metres, more or less, all over parts of Lot A, Plan LMP25402, except Portions in Plan BCP22579, Parcel A, Plan BCP12878, and District Lot 851, all of the Bed of the Strait of Georgia, Group 2, New Westminster District, Corporation of Delta, Province of British Columbia.**

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



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Permit GVA0153