

## PERMIT GVA0154

**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:**

Lafarge Canada Inc.  
(the "Permittee")

**To Authorize:**

the discharge of air contaminants to the air from  
a portland cement manufacturing plant

**Located at:**

7611 No. 9 Road, Richmond, BC V6W 1H4

**Effective Period:**

The terms and conditions set out in the Permit apply to the existing or planned works as of  
June 20, 2019 and this permit will expire on March 31, 2028.

All previous versions of this Permit are invalid.

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Issued: December 10, 1992  
Amended: June 20, 2019

  
R.H. (Ray) Robb, P. Eng.  
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 006:** Raw material and clinker handling circuit at the storage hall (59-AIF-18) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 390 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:

Baghouse (59-DCB-18) and related appurtenances together with good operating practices.

**EMISSION SOURCE 008:** Venting of "B" cement silos (82-AIF-14) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 235 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:


Baghouse (82-DCB-14) and related appurtenances together with good operating practices.

**EMISSION SOURCE 011:** Bulk cement truck loading "B" silo west scale (82-AIF-10) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 75 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:

Baghouse (82-DCB-10) and related appurtenances together with good operating practices.

**EMISSION SOURCE 015: Storage Hall discharging through a Building Opening(s).**

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from the natural ventilation of the raw material and clinker storage hall**

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

WORKS AND PROCEDURES:

Natural ventilation via openings at the east and west ends of the building. Good operating practices.

**EMISSION SOURCE 016: Barge unloading operations discharging through a Transfer Point(s).**

MAXIMUM EMISSION FLOW RATE: **255 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:

Baghouse and related appurtenances together with good operating practices.

**EMISSION SOURCE 017: Barge loading operations discharging through a Transfer Point(s).**

MAXIMUM EMISSION FLOW RATE: **340 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:

Baghouse and related appurtenances together with good operating practices.

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**EMISSION SOURCE 018:** Bulk cement truck loading "B" silo east scale (82-AIF-11) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 75 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:  
Baghouse (82-DCB-11) and related appurtenances together with good operating practices.

**EMISSION SOURCE 019:** Recirculation pump for "B" cement silos (82-AIF-13) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 55 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:  
Baghouse (82-DCB-13) and related appurtenances together with good operating practices.

**EMISSION SOURCE 020:** CM-1 and CM-2 mill cement fringe bin (63-AIF-06) discharging through a Baghouse Exhaust(s).


MAXIMUM EMISSION FLOW RATE: 120 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:  
Baghouse (63-DCB-06) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 021:** Shop 59 - Off-spec clinker feeder (59-AIF-16) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 44 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:

Baghouse (59-DCB-16) and related appurtenances together with good operating practices.

**EMISSION SOURCE 022:** Shop 59 - Clinker and Pre-grinder (CKP) mill delivery feeders (66-AIF-03) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 360 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:

Baghouse (66-DCB-03) and related appurtenances together with good operating practices.

**EMISSION SOURCE 024:** Shop 59 - Clinker feed dedusting (59-AIF-13) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 44 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:

Baghouse (59-DCB-13) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 027:** "B" silos - north screw conveyor & bucket elevator (82-AIF-01) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **100** 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:  
Baghouse (82-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 028:** "B" silos - south screw conveyor & bucket elevator (82-AIF-02) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **100** 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:  
Baghouse (82-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 029:** "B" silos - north truck loading bin (82-AIF-04) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **60** 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:  
Baghouse (82-DCB-04) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 030:** "B" silos - south truck loading bin (82-AIF-05) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 60 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:

Baghouse (82-DCB-05) and related appurtenances together with good operating practices.

**EMISSION SOURCE 031:** "B" silos - rail car loading spout (82-AIF-09) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 60 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:

Baghouse (82-DCB-09) and related appurtenances together with good operating practices.

**EMISSION SOURCE 034:** Mill building vacuum system discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 75 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:

Baghouse and related appurtenances together with good operating practices.

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**EMISSION SOURCE 035:** Cement kiln, preheater, precalciner, coal mill, raw mill, clinker cooler, homogenization silo extract (57-AIF-01 & 53-AIF-01) discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **6200** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

**MAXIMUM EMISSION QUANTITY:**

1. 30 t/y Hydrogen Chloride
2. 2640 t/y Nitrogen Oxides Expressed as Nitrogen Dioxide.
3. 550 t/y Sulphur Oxides expressed as Sulphur Dioxide.

**MAXIMUM EMISSION QUALITY:**

1. 50 mg/m<sup>3</sup> Hydrogen Chloride
2. 1200 mg/m<sup>3</sup> Nitrogen Oxides expressed as Nitrogen Dioxide calculated as an hourly operating average.
3. 0.1 ng/m<sup>3</sup> Polychlorinated dibenzo-p-dioxins and Polychlorinated dibenzofurans - toxic equivalency factor applied.
4. 450 mg/m<sup>3</sup> Sulphur Oxides expressed as Sulphur Dioxide calculated as an hourly operating average.
5. 70 mg/m<sup>3</sup> Total Hydrocarbon (as Methane)
6. 1.5 mg/m<sup>3</sup> Trace Metals:Class I (Pb, Sb, Cu, Mn, V, Zn) - the concentration prescribed applies as the sum of the concentrations of the individual metals in that Class.
7. 0.5 mg/m<sup>3</sup> Trace Metals:Class II (As, Cr, Co, Ni, Se, Te) - the concentration prescribed applies as the sum of the concentrations of the individual metals in that Class.
8. 0.15 mg/m<sup>3</sup> Trace Metals:Class III (Tl, Cd, Hg) - the concentration prescribed applies as the sum of the concentrations of the individual metals in that Class.
9. 25 mg/m<sup>3</sup> Particulate Matter
10. 10% Opacity.

**WORKS AND PROCEDURES:**

One 92 meter high, 3.33 meter inside diameter stack, two baghouses (57-DCB-01 & 53-DCB-01) and related appurtenances together with good operating practices.

**A. STANDARD CONDITIONS:**


The authorized maximum emissions described above are corrected to 11% oxygen and dry standard conditions of 20 degrees Celsius and 101.325 kPa, with the exception of opacity.

**B. CEMS:**

Emissions of NO<sub>x</sub>, SO<sub>x</sub>, opacity, carbon monoxide, oxygen, total hydrocarbons, and flow shall be monitored by the Continuous Emission Monitoring System (CEMS) at a representative and accessible location on the kiln system exhaust. The CEMS shall be installed, certified and operated in accordance with a Quality Assurance / Quality Control (QA/QC) plan approved by the District Director.

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**C. AUTHORIZED FUELS, ALTERNATE FUELS AND WASTE-BASED RAW MATERIALS:**

The kiln and precalciners shall be fired primarily with coal or natural gas using good combustion practices and operating procedures. The kiln and precalciners may also be fired using authorized alternative fuels which have successfully followed the approval process described below. A summary of all currently authorized alternate fuels, including maximum authorized substitution rates as percent of total heat value and current supplier, shall be maintained by the permittee and submitted to Metro Vancouver annually as per the requirements contained in Section 3.B.

The raw mill shall be fed primarily with limestone, silica, aluminates, and ferric mineral materials using good operating procedures. The raw mill may also be fed authorized waste-based raw materials which have successfully followed the approval process described below. A summary of all currently authorized alternate waste-based raw materials, including maximum authorized feed rates and current supplier, shall be maintained by the permittee and submitted to Metro Vancouver annually as per the requirements contained in Section 3.B.

**C.1 - Authorization for new waste-based raw materials or alternate fuels:**

Waste-based raw materials and alternate fuels on-site storage and/or usage are authorized based upon the following criteria:

1. A minimum of 15 working days prior to usage of a new specific waste-based raw material or alternate fuel, the District Director must receive written notification identifying the proposed material. A report must accompany this notification which shall contain the following:

(a) Documentation establishing the proposed waste-based raw material or alternate fuel is not classified as "Hazardous Waste" as defined in the Environmental Management Act, Hazardous Waste Regulation.

(b) Records detailing analyses and written descriptions, and photographic and/or video evidence (as available) establishing the composition, source and quality of the proposed waste-based raw material or alternate fuel. The analyses shall include, but not be limited to, quantitative trace metal composition and chloride content of the proposed waste-based raw material or alternate fuel.


(c) Proposed feed rate of the waste-based raw material shall be expressed as a percentage of the total raw material feed to the rotary kiln. The proposed feed rate of the alternate fuel shall be expressed as a percentage of the total heat value to the rotary kiln and calciners.

2. Conduct a demonstration trial utilizing the proposed waste-based raw material or alternate fuel at the maximum proposed feed rate.

The Permittee shall provide the Metro Vancouver Environmental Regulation & Enforcement Division with a minimum of five (5) working days advance notice before any of the trial emission testing specified is carried out using Metro Vancouver's 24-hour number (604-436-6777) and/or

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regulationenforcement@metrovancover.org.

The demonstration trial must meet the following requirements:

(a) Site storage and handling of the waste-based raw material or alternate fuel shall be conducted in such a manner so as to effectively control fugitive emissions.

(b) Maximum duration of 96 hours. Records detailing waste-based raw material or alternate fuel usage times and dates shall be maintained and made available for inspection by Metro Vancouver staff.

(c) Records detailing feed rates, quantity and quality of all waste-based raw materials and all fuel sources utilized during the demonstration trial shall be maintained and made available for inspection by Metro Vancouver staff for a period of two (2) years.

(d) Emission sampling, by CEMS or in-stack methods as appropriate, shall be conducted to determine the concentration of sulphur oxides, nitrogen oxides, particulate matter, hydrogen chloride, total hydrocarbon (expressed as methane) and trace metals in the emission including antimony, arsenic, cadmium, chromium, cobalt, copper, manganese, mercury, nickel, lead, selenium, tellurium, thallium, vanadium and zinc. The District Director may require that additional contaminants than those listed above be monitored during the demonstration trial.

All field data and calculations collected for the testing conducted must be submitted to the District Director. These submissions shall include the production rate and feed rates for all fuel sources and waste-based raw materials utilized at the time of testing. The results of emission sampling shall be submitted to the District Director a minimum of five business days prior to the routine usage of the proposed waste-based raw material or alternate fuel.

(e) For the duration of the demonstration trial all authorized Maximum Emission Quantity and Quality criteria and Works & Procedures shall be in effect.


3. New waste-based raw materials or alternate fuels that have met the requirements above and demonstrated compliance with all terms and conditions of this permit are authorized for use.

**C.2 - Increasing the authorized usage rate of a previously authorized waste-based raw material or alternate fuel:**

The Permittee may request to increase the amount of a previously authorized waste-based raw material or alternate fuel to a percentage of total feed rate or total heat value greater than currently authorized only for the purpose of emission testing to demonstrate compliance with the Maximum Emission Quality criteria specified for Emission Source 35. A request to increase the amount of material or fuel must be made in writing to the District Director a minimum of 10 business days prior to the planned usage date. Upon demonstrating compliance, the maximum feed rate for that specific

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waste-based raw material or alternate fuel may be increased to the percentage of total fuel demand or material substitution percentage at which compliance has been demonstrated.

### **C.3 - Use of equivalent-constituents alternate fuels and waste-based raw materials:**

Usage of alternate fuels and waste-based raw materials composed of equivalent constituents (based on analytical and physical characteristics) but sourced from a different supplier than originally authorized and deemed not to be hazardous waste may be substituted at the same substitution rate previously authorized, subject to prior approval by the District Director. Trial run emission testing is not required. Requests for approval require the following supporting documentation submission to the District Director at least 10 business days prior to the planned usage date. Usage of the material is not authorized without approval from the District Director:

(a) Documentation establishing the proposed waste-based raw material or alternate fuel is not classified as "Hazardous Waste" as defined in the Environmental Management Act, Hazardous Waste Regulation (eg. material safety data sheet).

(b) Records detailing analyses and written descriptions, and photographic and/or video evidence (as available) comparing the composition (as percentages), source and quality of the proposed waste-based raw material or alternate fuel to that which is currently authorized for use. The analyses shall contain, but not be limited to, quantitative trace metal composition and chloride content of the proposed waste-based raw material or alternate fuel.

(c) Proposed feed rate of the waste-based raw material shall be expressed as a percentage of the total raw material feed to the rotary kiln. The proposed feed rate of the alternate fuel shall be expressed as a percentage of the total heat value to the rotary kiln and calciners.

### **D. Other Requirements:**

A record is to be maintained detailing the types of fuel used, the hourly firing rates and the hourly raw feed rate. This record shall be maintained in computer files or other suitable format approved by the District Director and be made available for inspection by Metro Vancouver staff, for a minimum period of three years.

The Permittee shall immediately report to the District Director any unscheduled or emergency bypass of control works for the rotary cement kiln (EN35) using Metro Vancouver's 24-hour number (604-436-6777) and/or [regulationenforcement@metrovanancouver.org](mailto:regulationenforcement@metrovanancouver.org).


### **F. Sulphur Content of Fuels**

The Permit holder will comply with Section 3.6 of the British Columbia Environmental Management Act Sulphur Content of Fuel Regulation, B.C. Reg 67/89, as amended, or other requirements authorized by the British Columbia Ministry of Environment.

The Permit holder shall monitor the shale sulphur content, or other measures as required by the

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District Director, to achieve low sulphur emissions. Records shall be maintained and be made available for inspection by Metro Vancouver staff, for a minimum period of three years.

### **G. Additional SO<sub>2</sub> Clause**

The District Director may establish further conditions to reduce SO<sub>2</sub> emissions to achieve emerging ambient SO<sub>2</sub> air quality objectives or as otherwise determined to be advisable for the protection of the environment. The findings of the Sulphur Oxides Action Plan (as referenced in Section 3.B of this permit) will be taken into consideration in establishing any further conditions.

### **EMISSION SOURCE 036: Coal bin (36-AIF-11) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **85** 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:

Baghouse (36-DCB-11) and related appurtenances together with good operating practices.

### **EMISSION SOURCE 037: Raw Mill - Raw mix feed bin (36-AIF-04) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **115** 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:

Baghouse (36-DCB-04) and related appurtenances together with good operating practices.

### **EMISSION SOURCE 038: Homogenization silo (37-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **90** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

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

WORKS AND PROCEDURES:

Baghouse (37-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 040: CM-3 mill vent (63-AIF-03) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 900 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:

Baghouse (63-DCB-03) and related appurtenances together with good operating practices.

**EMISSION SOURCE 042: CM-3 gypsum bin (63-AIF-01) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 60 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:

Baghouse (63-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 043: CM-3 limestone bin (63-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 60 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.

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**WORKS AND PROCEDURES:**

Baghouse (63-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 044: CM-3 mill separator (63-AF-04) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **3100** 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:**

Baghouse (63-DCB-04) and related appurtenances together with good operating practices.

**EMISSION SOURCE 045: CM-3 fringe bin (63-AIF-06) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **120** 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:**

Baghouse (63-DCB-06) and related appurtenances together with good operating practices.

**EMISSION SOURCE 046: CM-3 belt transfer point (63-AIF-08) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **60** 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:**

Baghouse (63-DCB-08) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 048:** CM-3 FK pump hopper to separator (63-AIF-07) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **70** 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:

Baghouse (63-DCB-07) and related appurtenances together with good operating practices.

**EMISSION SOURCE 049:** Raw mix preparation limestone bin (36-AIF-01) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **170** 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:

Baghouse (36-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 050:** Raw mix limestone/additive transfer point (36-AIF-02) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **115** 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:

Baghouse (36-DCB-02) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 051:** Raw mix limestone/additive transfer point (36-AIF-03) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 115 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:  
Baghouse (36-DCB-03) and related appurtenances together with good operating practices.

**EMISSION SOURCE 052:** Off-spec clinker bin (59-AIF-01) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 120 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:  
Baghouse (59-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 053:** Clinker silo-top (59-AIF-02) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 90 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:  
Baghouse (59-DCB-02) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 054: Clinker conveyor (59-AIF-03) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **90** 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:

Baghouse (59-DCB-03) and related appurtenances together with good operating practices.

**EMISSION SOURCE 055: Clinker silo - west extraction (59-AIF-04) discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **105** 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:

Three baghouses (59-DCB-04, 59-DCB-05, 59-DCB-06) and related appurtenances together with good operating practices.

**EMISSION SOURCE 056: Clinker silo - east extraction (59-AIF-07) discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **105** 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:

Three baghouses (59-DCB-07, 59-DCB-08, 59-DCB-09) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 057:** Clinker conveyor - transfer point 59-COB-1/3 (59-AIF-11) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 90 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:  
Baghouse (59-DCB-11) and related appurtenances together with good operating practices.

**EMISSION SOURCE 058:** Clinker conveyor - transfer point 59-COB-2/3 (59-AIF-12) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 90 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:  
Baghouse (59-DCB-12) and related appurtenances together with good operating practices.

**EMISSION SOURCE 060:** Clinker storage hopper (59-AIF-15) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 120 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:  
Baghouse (59-DCB-15) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 061:** Clinker bucket elevator (59-EBC-1) and miscellaneous equipment discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 90 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:  
Baghouse (59-DCB-17) and related appurtenances together with good operating practices.

**EMISSION SOURCE 062:** Solid fuel pump hopper (53-PUF-3) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 5 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:  
Baghouse (53-DCB-03) and related appurtenances together with good operating practices.

**EMISSION SOURCE 063:** Solid fuel pump hopper (53-PUF-4) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 5 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:  
Baghouse (53-DCB-04) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 064: Solid fuel pump hopper (53-PUF-5) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 5 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:

Baghouse (53-DCB-5) and related appurtenances together with good operating practices.

**EMISSION SOURCE 065: "C" Silo - top (83-AIF-01) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 225 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:

Baghouse (83-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 066: "C" Silo - cement extraction (83-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 145 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:

Baghouse (83-DCB-02) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 067: Cement belt conveyor transfer point (84-AIF-01) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **204** 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:

Baghouse (84-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 068: Cement/clinker barge loading (84-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **50** 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:

Baghouse (84-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 072: Limestone stockpile, storage, reclamation and handling discharging through a Storage Pile(s).**

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 DAILY THROUGHPUT OF LIMESTONE: **5,000** tonnes per day  
MAXIMUM ANNUAL THROUGHPUT OF LIMESTONE: **1,600,000** tonnes per year  
MAXIMUM STOCKPILE AREA: **13,000** square meters

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

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**METRO VANCOUVER REGIONAL DISTRICT AIR QUALITY MANAGEMENT PERMIT**

**WORKS AND PROCEDURES:**

Stockpile, storage, reclamation and handling area. Water spray system together with good operating practices.

The permittee shall report to the District Director any instances when fugitive dust control-works for the raw material storage piles are off-line due to mechanical failure, routine maintenance or incident. Reporting during normal seasonal downtime is not required.

**EMISSION SOURCE 073: Coal stockpile, storage, reclamation and handling discharging through a Storage Pile(s).**

**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 DAILY THROUGHPUT OF COAL: 600 tonnes per day**

**MAXIMUM ANNUAL THROUGHPUT OF COAL: 260,000 tonnes per year**

**MAXIMUM STOCKPILE AREA: 10,000 square meters**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.

**WORKS AND PROCEDURES:**

Stockpile, storage, reclamation and handling area. Good operating practices.

The permittee shall report to the District Director any instances when fugitive dust control-works for the coal storage piles are off-line due to mechanical failure, routine maintenance or incident. Reporting during normal seasonal downtime is not required.

**EMISSION SOURCE 077: Clinker cooler partial vent (58-AIF-30) discharging through a Baghouse Exhaust(s).**

**MAXIMUM EMISSION FLOW RATE: 1200 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:**

Baghouse (58-DCB-01) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 078:** Petroleum coke fines bin (53-AIF-08) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 70 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:

Baghouse (53-DCB-08) and related appurtenances together with good operating practices.

**EMISSION SOURCE 079:** "B" silo west scale-south spout (82-AIF-12) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 75 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:

Baghouse (82-DCB-12) and related appurtenances together with good operating practices.

**EMISSION SOURCE 080:** Pulverized coal bin ventilation (53-DCB-07) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 5 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:

Baghouse (53-DCB-07) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 081: "C" Silo airslide to barge loading (84-AIF-04) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **100** 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:

Baghouse (84-DCB-04) and related appurtenances together with good operating practices.

**EMISSION SOURCE 082: "D" cement silo-top (85-AIF-01) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **272** 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:

Baghouse (85-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 083: Ventilation of an airslide transfer point (85-AIF-02) associated with the loading system for the D silos discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **160** 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:

Baghouse (85-DCB-02) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 084:** Railcar unloading pit operations (86-AIF-01) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 42 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:

Baghouse (86-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 085:** "E" Silo - flyash silo top (86-AIF-02) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 280 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:

Baghouse (86-DCB-02) (Allied Blower, Serial #2137), 35 meter stack (with opening dimensions of 22 1/2" by 18 1/2") and related appurtenances together with good operating practices.

**EMISSION SOURCE 086:** "E" Silo - flyash truck loading (86-AIF-03) discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: 150 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:

Baghouse (86-DCB-03) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 087: Cement Mill #1 separator (61-AIF-01) discharging through a Baghouse Exhaust(s).**

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:

Baghouse (61-DCB-01) and related appurtenances together with good operating practices.

**EMISSION SOURCE 088: Cement Mill #1 mill vent (61-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **250** 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:

Baghouse (61-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 089: Cement Mill #2 separator (62-AIF-01) discharging through a Baghouse Exhaust(s).**

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:

Baghouse (62-DCB-01) and related appurtenances together with good operating practices.

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**EMISSION SOURCE 090: Cement Mill #2 mill vent (62-AIF-02) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **250 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:

Baghouse (62-DCB-02) and related appurtenances together with good operating practices.

**EMISSION SOURCE 091: Raw material surge pile discharging through a Storage Pile(s).**

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 DAILY THROUGHPUT OF MATERIALS: **500 tonnes per day**  
MAXIMUM ANNUAL THROUGHPUT OF MATERIALS: **150,000 tonnes per year**  
MAXIMUM STOCKPILE AREA: **5,500 square meters**

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Stockpile, storage, reclamation and handling area. Good operating practices including maintenance of adequate material moisture for dust suppression conducted in such a manner as to effectively control fugitive dust.

The permittee shall report to the District Director any instances when fugitive dust control-works for the raw material surge pile is off-line due to mechanical failure, routine maintenance or incident. Reporting during normal seasonal downtime is not required.

**EMISSION SOURCE 092: Kiln feed de-dusting system (51-AIF-01) discharging through a Baghouse Exhaust(s).**


MAXIMUM EMISSION FLOW RATE: **75 m<sup>3</sup>/min**  
MAXIMUM ANNUAL OPERATING HOURS: **8760 h/y**

MAXIMUM EMISSION QUALITY:

1. 20 mg/m<sup>3</sup> Particulate Matter

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2. 10% Opacity.

**WORKS AND PROCEDURES:**

Baghouse (51-DCB-01) (Northern Blower Serial #A45512-5, Design #5691), 12 meter stack (with opening dimensions of 9 5/16" by 12 7/16") and related appurtenances together with good operating practices.

**EMISSION SOURCE 093: Barge unloading stockpile discharging through a Storage Pile(s).**

**MAXIMUM EMISSION FLOW RATE: The authorized rate of discharge is that resulting from barge unloading operations as well as stockpile wind erosion effects.**

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

**MAXIMUM DAILY THROUGHPUT OF MATERIALS: 6,000 tonnes per day**

**MAXIMUM ANNUAL THROUGHPUT OF MATERIALS: 250,000 tonnes per year**

**MAXIMUM STOCKPILE AREA: 4,500 square meters**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.

**WORKS AND PROCEDURES:**

Stockpile, storage, reclamation and handling area: Good operating practices, including moistening of the pile with water as necessary and reduction of material drop heights, so as to minimize fugitive dust.

The permittee shall report to the District Director any instances when fugitive dust control-works for the storage piles are off-line due to mechanical failure, routine maintenance or incident. Reporting during normal seasonal downtime is not required.

**EMISSION SOURCE 094: Storage Hall material stockpile discharging through a Storage Pile(s).**

**MAXIMUM EMISSION FLOW RATE: The authorized rate of discharge is that resulting from material handling activities as well as stockpile wind erosion effects.**

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

**MAXIMUM DAILY THROUGHPUT OF MATERIALS: 6,000 tonnes per day**

**MAXIMUM ANNUAL THROUGHPUT OF MATERIALS: 500,000 tonnes per year**

**MAXIMUM STOCKPILE AREA: 16,000 square meters**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.

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**WORKS AND PROCEDURES:**

Stockpile, storage, reclamation and handling area. Good operating practices, including moistening of the pile with water as necessary and reduction of material drop heights, so as to minimize fugitive dust.

The permittee shall report to the District Director any instances when fugitive dust control-works for the storage piles are off-line due to mechanical failure, routine maintenance or incident. Reporting during normal seasonal downtime is not required.

**EMISSION SOURCE 095: Petroleum coke transloading system discharging through truck unloading and railcar loading operations.**

**MAXIMUM EMISSION FLOW RATE: The authorized rate of discharge is that resulting from material truck unloading and railcar loading activities.**

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

Maximum daily throughput of materials: **1,000 tonnes per day**

Maximum annual throughput of materials: **365,000 tonnes per year**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.

**WORKS AND PROCEDURES:**

Petroleum coke unloading activities utilizing bottom-dump trucks, covered outside hopper and covered conveyor into fully-enclosed tent structure, equipped with dust curtains at conveyor entrance and exit points, for material storage conducted in such a manner as to effectively control fugitive dust.

Petroleum coke rail-car loading activities utilizing covered conveyor and reduced drop heights conducted in such a manner as to effectively control fugitive dust.

**EMISSION SOURCE 096: Alternate fuel storage hall weigh feeder #1 (55-AIF-01) discharging through a dust collector.**

**MAXIMUM EMISSION FLOW RATE: 30.8 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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Issued: December 10, 1992  
Amended: June 20, 2019



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**METRO VANCOUVER REGIONAL DISTRICT AIR QUALITY MANAGEMENT PERMIT**

**WORKS AND PROCEDURES:**

A Schenck Process dust collector (Style II) and related appurtenances together with good operating practices.

Lafarge Filter ID: 55-DCB-01

Stack Information: Height - 8.32 m; Diameter - 0.18 m; Exit Temperature (°C) - Ambient; non-circular and horizontal discharge.

**EMISSION SOURCE 097: Alternate fuel storage hall weigh feeder #2 (55-AIF-02) discharging through a dust collector.**

MAXIMUM EMISSION FLOW RATE: **30.8** 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.

**WORKS AND PROCEDURES:**

A Schenck Process dust collector (Style II) and related appurtenances together with good operating practices.

Lafarge Filter ID: 55-DCB-02

Stack Information: Height - 69.35 m; Diameter - 0.41 m; Exit Temperature (°C) - Ambient; non-circular and horizontal discharge.

**EMISSION SOURCE 098: Alternate fuel transfer (AF storage hall to calciner) enclosed tube conveyor (55-COB-01) - top (55-AIF-03) discharging through a dust collector.**

MAXIMUM EMISSION FLOW RATE: **56** 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.

**WORKS AND PROCEDURES:**

A Schenck Process dust collector (Style II) and related appurtenances together with good operating

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practices.

Lafarge Filter ID: 55-DCB-03

Stack Information: Height - 8.32 m; Diameter - 0.18 m; Exit Temperature (°C) - Ambient; non-circular and horizontal discharge.

**EMISSION SOURCE 099: Alternate fuel storage hall weigh feeder #3 (55-AIF-04) discharging through a dust collector.**

MAXIMUM EMISSION FLOW RATE: **12.6** 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.

WORKS AND PROCEDURES:

A Schenck Process dust collector (Style II) and related appurtenances together with good operating practices.

Lafarge Filter ID: 55-DCB-04

Stack Information: Height - 5.53 m; Diameter - 0.12 m; Exit Temperature (°C) - Ambient; non-circular and horizontal discharge.

**EMISSION SOURCE 100: Alternate fuel rotary feeder to conveyor discharging through a passive dust collector.**

MAXIMUM EMISSION FLOW RATE: **28** 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.

WORKS AND PROCEDURES:

A Schenck Process dust collector (Style III) operated in a passive-mode and related appurtenances together with good operating practices.

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Lafarge Filter ID: 55-DCB-05

Stack Information: Height - 26.36 m; Diameter - 0.64 m; Exit Temperature (°C) - Ambient; non-circular and vertical down.

**EMISSION SOURCE 101:** Alternate fuel kiln feeder (55-AIF-06) discharging through a dust collector.

MAXIMUM EMISSION FLOW RATE: **28 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.

WORKS AND PROCEDURES:

A Schenck Process dust collector (Style II) and related appurtenances together with good operating practices.

Lafarge Filter ID: 55-DCB-06

Stack Information: Height - 18.84 m; Diameter - 0.10 m; Exit Temperature (°C) - Ambient; non-circular and horizontal discharge.

**EMISSION SOURCE 102:** Alternate fuels storage hall discharging through a Building Opening(s).

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from the natural ventilation of the alternate fuels storage building.**  
MAXIMUM ANNUAL OPERATING HOURS: **8760 h/y**

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Fully enclosed building equipped with two passive vents (east and west) and external doors that must be closed during alternate fuels material handling activities. The doors must only be open for the time required for one truck or other machinery to enter or exit the building.

The Permittee must take immediate action to reduce particulate matter emissions if an opacity exceedance or upset condition is observed, as per the approved Fugitive Dust Control Plan.

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Material storage must be conducted in such a manner as to effectively control fugitive dust.

Truck washes must be used for outbound trucks to minimize tracking out of fugitive dust.

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**SECTION 2 – GENERAL REQUIREMENTS AND CONDITIONS**

**A. AUTHORIZED WORKS, PROCEDURES AND 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 sources.

The District Director must be provided with reasonable notice of any changes to or replacement of authorized works, procedures or sources. Any changes to or replacement of authorized works, procedures or sources must be approved by the District Director in advance of operation. For certainty, this does not include routine maintenance or repair.

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 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@metrovancouver.org](mailto:regulationenforcement@metrovancouver.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
3. Take appropriate remedial action for the prevention or mitigation of pollution.

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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 works, procedures or sources or alterations to existing works, procedures or sources 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 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 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.
8. Sulphur Oxides (SO<sub>x</sub>) are expressed as Sulphur Dioxide.
9. Nitrogen Oxides (NO<sub>x</sub>) are expressed as Nitrogen Dioxide.

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10. The Canadian Council of Ministers of the Environment (CCME) "Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks (PN1180)" 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 in writing 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 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 [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
035	January 31, 2020	Every 4 years, on or before January 31 every fourth year.	Written report due detailing the measured discharge rate and concentration of polychlorinated	Polychlorinated dibenzo-p-dioxins and	EPS (Environment Canada) Test	Stack

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
			<p>dibenzo-p-dioxins and polychlorinated dibenzofurans in the emissions. This test survey will be comprised of one test run while the raw mill is not operating and two test runs with the raw mill operating.</p> <p>Any exceedances of the maximum emission quantity and/or quality restrictions outlined in Section 1 of this permit shall be reported immediately upon awareness by the permit holder to the District Director using Metro Vancouver's 24-hour number: 604-436-6777 and/or <a href="mailto:regulationenforcement@metrovancoouver.org">regulationenforcement@metrovancoouver.org</a>.</p>	Polychlorinated dibenzofurans	Method 1-RM-2	
035	July 31, 2019	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	Written report detailing the measured discharge rate and concentration of particulate matter, hydrogen chloride, and the following metals in the emissions: Lead, Antimony, Copper, Manganese, Vanadium, Zinc, Arsenic, Chromium, Cobalt, Nickel, Selenium, Thallium, Tellurium, Cadmium, and	Hydrogen Chloride, Particulate Matter, Trace Metals:Class I (Pb, Sb, Cu, Mn, V, Zn), Trace Metals:Class II	EPA Test Method 26, EPA Test Method 29	Stack

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
			<p>Mercury. Metal results shall be reported individually and in Class I, II, and III groupings.</p> <p>One hourly test per year (conducted during one quarterly test) is authorized to be conducted with the raw mill not in operation. This requirement cannot be carry-forward or deferred to subsequent years.</p> <p>Any exceedances of the maximum emission quantity and/or quality restrictions outlined in Section 1 of this permit shall be reported immediately upon awareness by the permit holder to the District Director using Metro Vancouver's 24-hour number: 604-436-6777 and/or regulationenforcement@metrovancoouver.org.</p>	(As, Cr, Co, Ni, Se, Te), Trace Metals:Class III (Tl, Cd, Hg)		
035	July 31, 2019	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	Written summary of each of the measured parameters as monitored by the Continuous Emission Monitoring System (CEMS) for the preceding	Nitrogen Oxides, Opacity, Carbon Monoxide, Oxygen, Total	EPA Test Method 3A, EPA Test Method 6C, EPA Test	CEM

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
			<p>calendar quarter. This summary shall include the minimum and maximum values obtained, the total hours operated, the number of hourly averages exceeding applicable permit limits, hourly data (submitted as an electronic file or other suitable format), monthly time weighted average, percentage system and analyzer availability, and raw mill operating status.</p> <p>Any exceedances of the maximum emission quantity and/or quality restrictions outlined in Section 1 of this permit shall be reported immediately upon awareness by the permit holder to the District Director using Metro Vancouver's 24-hour number: 604-436-6777 and/or <a href="mailto:regulationenforcement@metrovancove r.org">regulationenforcement@metrovancove r.org</a>.</p> <p>Additionally, a written report shall be submitted to the District Director within 5 working days (defined as Monday to Friday, statutory holidays excluded) of</p>	Hydrocarbon (as Methane), Sulphur Oxides	Method 7E, EPA Test Method 10, EPA Test Method 25A	

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
			the exceedance. Submission via email is acceptable. The report shall include incident details and remedial actions taken or proposed.			
035	October 31, 2019	On or before October 31 for each subsequent year, ending October 31, 2020.	<p>A written report detailing the measured discharge rate and particulate matter size distribution for PM2.5 and PM10 in the emissions.</p> <p>Sampling shall be conducted while both the raw mill is operating and not operating and when waste-based raw materials are being utilized and when alternate fuel(s) are fired.</p>	Particulate Matter	Those approved by Metro Vancouver, EPA Test Method 201A	Stack
035	January 31, 2020	On or before January 31 for each subsequent year, ending January 31, 2021.	<p>A written report detailing the measured discharge rate of condensable particulate matter (CPM) in the emissions.</p> <p>Sampling shall be conducted while both the raw mill is operating and not operating and when waste-based raw materials are being utilized and when alternate fuel(s) are fired.</p>	Particulate Matter	Those approved by Metro Vancouver, EPA Test Method 202	Stack

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<b>EMISSION SOURCE</b>	<b>INITIAL DUE DATE</b>	<b>SUBSEQUENT DUE DATES</b>	<b>REQUIREMENT</b>	<b>PARAMETER(S)</b>	<b>TEST METHOD</b>	<b>REPORT TYPE</b>
096, 097, 099	September 30, 2019	Every 5 years, on or before September 30 every fifth year.	<b>Stack Test Report</b> Submit a written report detailing the measured discharge rate and concentration of particulate matter in the emissions.	Particulate Matter	Those approved by Metro Vancouver, EPA Test Method 5	Stack
098, 101	June 30, 2020	Every 5 years, on or before June 30 every fifth year.	<b>Stack Test Report</b> Submit a written report detailing the measured discharge rate and concentration of particulate matter in the emissions.	Particulate Matter	Those approved by Metro Vancouver, EPA Test Method 5	Stack

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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, 2020	On or before March 31 for each subsequent year.	Written report providing details of the types and amounts of principle products produced and principal raw materials used in the preceding calendar year.	Materials and Products
Facility	July 31, 2019	Every 6 months from the initial due date, on or before the last day of each 6-month period.	<b>Fuels Summary:</b> Written report detailing the types (including alternate fuels), amounts, firing rate, sulphur content, sources and transportation mode of fuels burned in the preceding six (6) months.	Information - Other
Facility	March 31, 2020	On or before March 31 for each subsequent year.	Written report indicating inspection frequency, bag condition, pressure drop monitoring equipment (i.e. magnahelic device), and the shell/housing and inlet/outlet ducting at the time of inspection.  The report shall also detail any action taken or proposed to solve any problems detected during the previous calendar year for the baghouses described in Section 1 of this permit.	Baghouse
Facility	July 31, 2019	Every 6 months from the initial due date, on or before the last day of each 6-month period.	<b>Waste-based Raw Materials Summary:</b> Written report detailing the types, amounts, sources and transportation mode of waste-based raw materials utilized in the preceding six (6) months.	Information - Other

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
Facility	March 31, 2020	On or before March 31 for each subsequent year.	Written report providing details of the types and amounts of fuel burned in the preceding calendar year.	Fuel Use
006, 008, 011, 015, 016, 017, 018, 019, 020, 021, 022, 024, 027, 028, 029, 030, 031, 034, 036, 037, 038, 040, 042, 043, 044, 045, 046, 048, 049, 050, 051, 052, 053, 054, 055, 056, 057, 058, 060, 061, 062, 063, 064, 065, 066, 067, 068, 072, 073, 077, 078, 079, 080, 081, 035, 082, 083, 084, 085, 086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 100, 101, 096, 097, 098, 099, 102	March 31, 2020	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 and made available for inspection by Metro Vancouver staff for a minimum period of three years.	Operating Period
Facility	March 31, 2020	On or before March 31 for each subsequent year.	<b>Alternative Fuels and Waste-based Raw Materials Summary:</b> Submit a written summary of the currently authorized alternative fuels and waste-based raw materials utilized by the facility. The summary shall include the currently authorized feed rate (as a percentage of total raw material feed	Information - Other

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			to the kiln or as a percentage of total heat value to the kiln and calciners) and most recent supplier (if applicable) for each fuel or material.	
035	March 31, 2020	On or before March 31 for each subsequent year.	<b>Bypass of Control Works Report:</b> Written report of the preceding calendar year indicating the frequency, duration, and cause of bypass of control works for the rotary kiln (EN35). This report shall include any identified problems related to such bypass periods and the means by which they have been rectified.	Information - Other
035	July 31, 2019	Quarterly, on or before April 30, July 31, October 31 and January 31 of each year.	<b>CEMS Performance Summary:</b> Written report for the preceding calendar quarter detailing the results of the CEMS performance in accordance with the most current approved Quality Assurance/Quality Control protocol.	Information - Other
035	May 31, 2020	On or before May 31 for each subsequent year.	<b>CEMS External Audit:</b> Written report prepared by a fully independent qualified auditor for the preceding 12-month period from January 1 to December 31 which shall include, but is not limited to:  1. Review of the CEMS operation and other associated records and reports to determine if the procedures and protocols in the most currently approved Quality Assurance/Quality Control (QA/QC) manual are being followed;  2. Note any changes in the CEMS and/or procedures since the last yearly evaluation and ensure that these have been included in the QA/QC manual;	Information - Other

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
			3. Include any recommendations for improvements to the CEMS QA/QC procedures and protocols.	
035	August 31, 2019	On or before August 31 for each subsequent year.	<b>Nitrogen Oxides Operating Trends Report:</b> A written report summarizing monthly trends in nitrogen oxide (NOx) emissions at the facility and actions taken, or proposed, since the previous update relating to the management of NOx emissions from the kiln and associated sources. The report shall include, but is not limited to, any updates on personnel training activities conducted by Lafarge relating to the management of kiln NOx emissions.	Information - Other
Facility	August 31, 2019	On or before August 31 for each subsequent year.	<b>Fugitive Dust Control Plan (FDCP):</b> The permit holder shall submit a FDCP for submission to, and approval by, the District Director. The Plan shall identify potential facility fugitive particulate matter sources and include measures and proposed actions to control and mitigate fugitive dust emissions (from material handling equipment and operations, non-point sources and area sources) and their potential impacts on the environment and the surrounding community.  Yearly updates to the plan shall be submitted and include an annual review of the measures and actions employed in the previous 12-months. The annual review shall also include a summary of the number, nature and management of any dust complaints received in the past year, changes in procedures and/or equipment, and recommendations for on-going improvement (considered as part of the normal business planning and budgeting process).	Information - Other

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<b>EMISSION SOURCE</b>	<b>INITIAL DUE DATE</b>	<b>SUBSEQUENT DUE DATES</b>	<b>REQUIREMENT</b>	<b>REPORT TYPE</b>
035	March 31, 2020	On or before March 31 for each subsequent year.	The permit holder shall submit a report summarizing total emissions of NOx, SOx, and HCl (in tonnes) for the previous calendar year. Calculation methodology shall be included with the report and be based on reported kiln operating hours and CEMS data for discharge flow rate, NOx and SO2 hourly average concentrations and quarterly stack test data for HCl.	Information - Other


**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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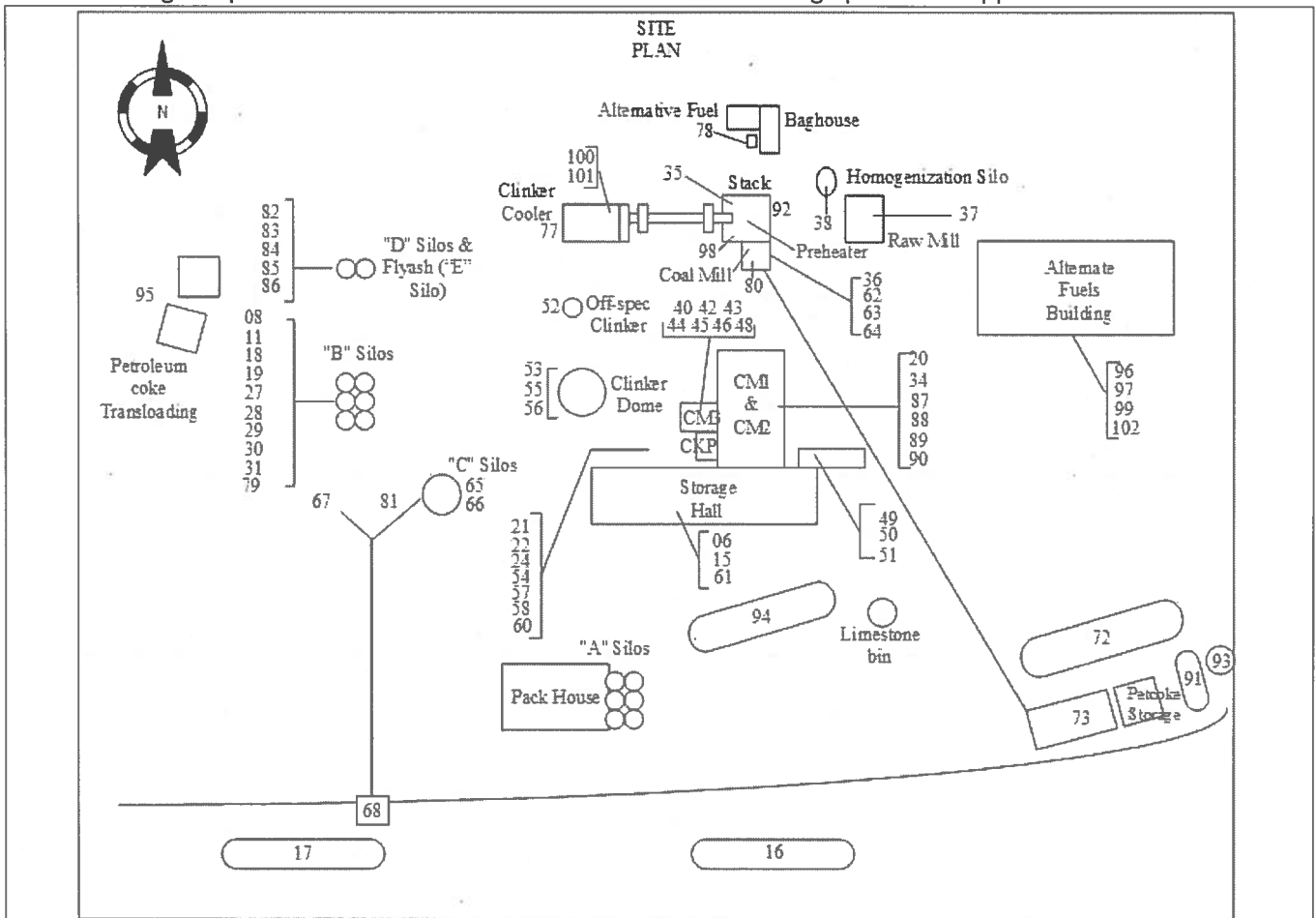
**SECTION 4 – SITE PLAN**

LEGAL DESCRIPTION OF DISCHARGE SITE: City of Richmond Parcel Identifier 023-150-769, Parcel A (Lot 20 of Plan 27693 and Lot 10 of Plan 25842), Sections 17 and 20 Block 4 North Range 4 West New Westminster District Plan LMP24356.

City of Richmond Parcel Identifier 003-799-590, Parcel "C" (Reference Plan 34797) Sections 16 and 17 Block 4 North Range 4 West New Westminster District.

City of Richmond Parcel Identifier 003-864-766; Lot 23 except: Firstly: Parcel "D" (Reference Plan 34797) Secondly: Parcel "E" (Reference Plan 45212) Thirdly: Parcel "F" (Reference Plan 45212), Section 16 Block 4 North Range 4 New Westminster District Plan 30257.

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



Issued: December 10, 1992  
 Amended: June 20, 2019

*[Signature]*  
 R.H. (Ray) Robb, P. Eng.  
 District Director

Permit GVA0154