

# PERMIT GVA0167

## 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:

Lehigh Hanson Materials Limited (the "Permittee")

## To Authorize:

the discharge of air contaminants to the air from A Hot Mix Asphalt Plant

#### Located at:

1700, 1739 & 1750 Pipeline Road, Coquitlam, BC V3E 3P6

# Effective Period:

The terms and conditions set out in the Permit apply to the existing or planned works as of December 01, 2021 and this Permit will expire on December 01, 2031.

All previous versions of this Permit are invalid.

Issued:November 23, 1992Amended:December 01, 2021

Preston, Ph.D., P.Eng.

Assistant 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 01: Asphalt pavement plant discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **850** m<sup>3</sup>/min MAXIMUM ANNUAL OPERATING HOURS: **4992** h/y MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **89.7** GJ/h

#### MAXIMUM EMISSION QUALITY:

- 1. 200 mg/m<sup>3</sup> Carbon Monoxide Corrected to 16% O<sub>2</sub> in addition to Section 2 requirements
- 2. 60 mg/m<sup>3</sup> Organics Corrected to 16% O<sub>2</sub> in addition to Section 2 requirements
- 3. 90 mg/m<sup>3</sup> Particulate Matter
- 4. 10% Opacity

## WORKS AND PROCEDURES:

Baghouse and related appurtenances together with the maintenance of the conveying, ducting and handling system as required such that all contaminants are conveyed under partial vacuum to the control equipment. The asphalt drum shall be fired with natural gas or standby fuel (see Section 2, part G) using good combustion practices and operating procedures.

The maximum authorized production rate for the works shall be determined from the production rate during the most recent valid in-compliance stack test. The rate during the test will establish a rate equivalent to 80% of the maximum authorized production rate. The maximum authorized percentage of recycled asphalt pavement utilized shall be equivalent to the rate used during the most recent valid in-compliance stack test.

The authorized production rate and percentage of recycled asphalt pavement added may be exceeded for the purposes of compliance testing and/or for the purposes of establishing a new authorized rate, pursuant to the terms and conditions above and in Section 3 of this Permit. If the maximum plant production rate or maximum percentage of recycled asphalt mix is exceeded during periods when stack monitoring is not being performed, stack monitoring must be repeated as per the requirements in Section 3.

Not to exceed 175 hours per year of standby fuel utilization. The number of hours per year may be exceeded only if supply constraints occur beyond the control of the facility operator and supporting documentation is submitted to the District Director.

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**EMISSION SOURCE 04**: Asphalt storage tanks discharging through a Vent(s).

MAXIMUM EMISSION FLOW RATE: The authorized maximum rate of discharge is that resulting from vapour venting during tank filling and breathing. MAXIMUM ANNUAL OPERATING HOURS: 8760 h/y

MAXIMUM EMISSION QUALITY: 1. 5% Opacity

WORKS AND PROCEDURES: Tank vents. Good operating practices.

EMISSION SOURCE 05: Rock crushing operation discharging from crusher, screens and transfer points.

MAXIMUM EMISSION FLOW RATE: The authorized maximum rate of discharge is that resulting from crushing operations MAXIMUM ANNUAL OPERATING HOURS: 4992 h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity

WORKS AND PROCEDURES: Crusher, screens, and transfer points. Good operating practices.

**EMISSION SOURCE 06**: Hot asphalt storage silos discharging through a Vent(s).

MAXIMUM EMISSION FLOW RATE: The authorized maximum rate of discharge is that resulting from venting during silo filling and standing losses MAXIMUM ANNUAL OPERATING HOURS: 4992 h/y

MAXIMUM EMISSION QUALITY: 1. 10% Opacity

WORKS AND PROCEDURES: Silo vents. Good operating practices.

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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, must be employed during all operating periods of the related sources. The Permittee must 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 must be made to Metro Vancouver's 24-hour number: 604-436-6777, or to regulationenforcement@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 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 must:

- 1. Comply with all applicable statutory requirements;
- 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; 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 must 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

<u>Unless otherwise specified</u>, 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 onehour 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 175 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

Any natural gas-fired heating, ventilation or air conditioning system for buildings and any internal combustion engine located at the discharge site must 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 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 regulationenforcement@metrovancouver.org).

Unless otherwise specified, sampling must 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 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.

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EMISSION	INITIAL	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT
SOURCE 01	DUE DATE August 31, 2022	On or before August 31 for each subsequent year and as required.	Written report detailing the measured discharge rate and emission concentrations (mg/m <sup>3</sup> ) for particulate matter, organics (one-hour average, "organics" means total gaseous organic vapours consisting primarily of alkanes, alkenes or arenes {aromatic hydrocarbons} or any combination of them) and carbon monoxide. The following additional information must be collected: (a) Amount of recycled asphalt pavement (RAP) used as a percentage of total hot mix asphalt production; (b) Temperature of the final hot mix asphalt product leaving the plant.	Carbon Monoxide, Organics, Particulate Matter	EPA Test Method 10, EPA Test Method 25A, Metro Vancouver AQ02/02/1.00M	TYPE/ TITLE Stack
			operating at 80% or more of the authorized maximum plant production rate and maximum percentage of recycled asphalt pavement as determined by procedures in Section 1. Repeated monitoring conducted as a result of			
			exceedances of the maximum authorized production rate, as required in Section 1, must be completed within 30 days of the exceedance of the production rate and the results must be submitted to the District Director within 30 days of the repeated test. Organics measurement is based on a 1 hour average.			

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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
01	March 31, 2022	On or before March 31 for each subsequent year.	Written report summarizing frequency and results of all inspections and maintenance carried out on the baghouse(s). The report shall also include any actions, taken or proposed, to solve identified problems.	Baghouse
01	March 31, 2022	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
01	March 31, 2022	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
Facility	March 31, 2022	On or before March 31 for each subsequent year.	Written report detailing the organic storage tank capacity, the material stored and the annual throughput for each tank for the preceding calendar year.	Materials Throughput Report Information - Other
Facility	March 31, 2022	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

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### C. AMENDED OR ADDITIONAL REQUIREMENTS

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

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

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# **SECTION 4 – SITE PLAN**

LEGAL DESCRIPTION OF DISCHARGE SITE: The land from which the air contaminants are discharged is described as:

Municipality of Coquitlam

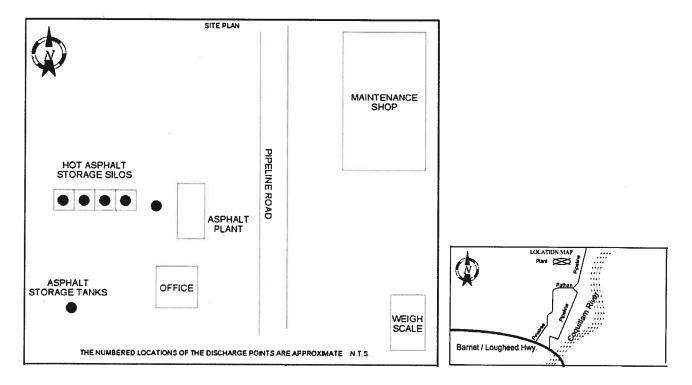
Parcel identifier 002-629-861 Lot "E" Section 24 Township 39 New Westminster District Plan 17202

Municipality of Coquitlam Lot 2 of Legal Subdivisions 13 and 14 of Section 24 Township 39 Plan 37005 New Westminster District

Municipality of Coquitlam

Parcel Identifier 002-160-960 Lot "A" Except: Parcel "D" (Explanatory Plan 13609), Section 24 Township 39 New Westminster District Plan 12986

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



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