

## PERMIT GVA0333

**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:**

Canadian Autoparts Toyota Inc.  
(the "Permittee")

**To Authorize:**

the discharge of air contaminants to the air from  
ALUMINUM WHEEL MANUFACTURING PLANT

**Located at:**

7233 Progress Way, Delta, BC V4G 1E7

**Effective Period:**

The terms and conditions set out in the Permit apply to the existing or planned works as of  
March 15, 2018 and this permit will expire on April 30, 2028.

All previous versions of this Permit are invalid.

---

Issued: November 14, 1992  
Amended: March 15, 2018

  
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 10: Aluminum melting furnace #2 and 2 ladle pre-heaters discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **325** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **6.4** GJ/h  
MAXIMUM FUEL USE: **30354.5** GJ/y

MAXIMUM EMISSION QUALITY:

1. 50 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

WORKS AND PROCEDURES:

Firing of the melting furnace with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures. No aluminum chips shall be processed at this source.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:


Height: 15.0 m  
Diameter: 0.63 m  
Minimum Exit Temperature (°C): 250

**EMISSION SOURCE 17: Powder booth exhaust (PB#2) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **240** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **1.4** GJ/h  
MAXIMUM FUEL USE: **4505.9** GJ/y

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Firing of the make-up air heater with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures.

A water wash spray booth and related appurtenances together with good operating practices.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information:**

Height: 14.0m

Diameter: 0.75m

Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 19: ML1-6 shotblast units 1,2,3 (CDC001) discharging through a Baghouse Exhaust(s).**

**MAXIMUM EMISSION FLOW RATE: 150 m<sup>3</sup>/min**

**MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y**

**MAXIMUM EMISSION QUALITY:**

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

**WORKS AND PROCEDURES:**

A baghouse and related appurtenances together with good operating practices.

**Stack Information:**

Height: 5.0 m


Diameter: 0.5 m

Minimum Exit Temperature (°C): ambient

---

Issued: November 14, 1992

Amended: March 15, 2018

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

Permit GVA0333

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

**EMISSION SOURCE 24: Aluminum melting furnace #3 and two ladle pre-heaters discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **200** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **7.8** GJ/h  
MAXIMUM FUEL USE: **30354.5** GJ/y

MAXIMUM EMISSION QUALITY:

1. 50 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.

WORKS AND PROCEDURES:

Firing of the melting furnace with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures. No aluminum chips shall be processed at this source.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 15.0 m  
Diameter: 0.63 m  
Minimum Exit Temperature (°C): 250

**EMISSION SOURCE 25: Die coat shot blast operation discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **60** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

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

WORKS AND PROCEDURES:

A baghouse and related appurtenances together with good operating practices.

Stack Information:

Height: 3.0 m  
Diameter: 0.7 m  
Minimum Exit Temperature (°C): ambient

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**EMISSION SOURCE 26: Paint mixing room (PB#1, 2, & 3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **211** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

Good operating practices.

Stack Information:

Height: 12.0 m  
Diameter: 1.0 m  
Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 28: PB#2 Powder Bake oven (COL021) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **290** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Electrically heated oven together with good operating practices.

Stack Information:

Height: 17.0 m  
Diameter: 0.4 m  
Minimum Exit Temperature (°C): 200

**EMISSION SOURCE 39: ML 7-8 shot blast units #7 and #8 discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **180** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**MAXIMUM EMISSION QUALITY:**

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

**WORKS AND PROCEDURES:**

A baghouse and related appurtenances together with good operating practices.

**Stack Information:**

Height: 1.0 m

Diameter: 0.45 m

Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 41: PB#2 parts washer discharging through a Stack(s).**

**MAXIMUM EMISSION FLOW RATE: 26 m<sup>3</sup>/min**

**MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Good operating practices.

**Stack Information:**

Height: 14.0 m

Diameter: 0.75 m

Minimum Exit Temperature (°C): 100

**EMISSION SOURCE 42: Aluminum melting furnace #4 and two ladle pre-heaters discharging through a Stack(s).**

**MAXIMUM EMISSION FLOW RATE: 230 m<sup>3</sup>/min**

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


**MAXIMUM PRIMARY BURNER INPUT FIRING RATE: 10.4 GJ/h**

**MAXIMUM FUEL USE: 43979.3 GJ/y**

---

Issued: November 14, 1992

Amended: March 15, 2018

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

Permit GVA0333

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

MAXIMUM EMISSION QUALITY:

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

WORKS AND PROCEDURES:

Firing of the melting furnace and two ladle pre-heaters with low NO<sub>x</sub> burners with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures. No aluminum chips shall be processed at this source.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 15.0 m

Diameter: 0.9 m

Minimum Exit Temperature (°C): 250

**EMISSION SOURCE 43: Die pre-heat oven discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: 25 m<sup>3</sup>/min

MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y

MAXIMUM PRIMARY BURNER INPUT FIRING RATE: 2.1 GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Firing of the die pre-heat oven with low NO<sub>x</sub> burners with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 15.0 m


Diameter: 0.45 m

Minimum Exit Temperature (°C): 250

---

Issued: November 14, 1992

Amended: March 15, 2018

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

Permit GVA0333

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

**EMISSION SOURCE 47: Aluminum chip melting system #2 discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **471** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **3.7** GJ/h  
MAXIMUM AFTERBURNER INPUT FIRING RATE: **2.1** GJ/h

MAXIMUM EMISSION QUALITY:

1. 90 mg/m<sup>3</sup> Total Hydrocarbon (as Methane)
2. 20 mg/m<sup>3</sup> Particulate Matter
3. 10% Opacity.

WORKS AND PROCEDURES:

A natural gas fired chip melting furnace and an afterburner with propane as the secondary fuel, with the afterburner operating at a minimum temperature of 650° C followed by a high temperature fabric baghouse combined with good combustion and operating practices.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

The afterburner temperature shall be taken at a location which has received prior approval by the District Director and shall be continuously monitored and recorded in a conveniently visible location. The Permittee shall calibrate this temperature measurement system at the discretion of, and in a manner acceptable to, the District Director. 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 of three years.

Stack Information:

Height: 16.0 m  
Diameter: 0.63 m  
Minimum Exit Temperature (°C): 250

**EMISSION SOURCE 49: Spot repair booth and oven (PB #2) discharging through a Stack(s).**


MAXIMUM EMISSION FLOW RATE: **200** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333



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

2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Effective filters and related appurtenances together with good operating procedures.

**Stack Information (3 stacks):**

Heights: 15.0 m, 13.5m, 13.5m

Diameters: 0.65 m, 0.3 m, 0.22m

Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 51: Pre-treatment 5 oven exhaust discharging through a Stack(s).**

**MAXIMUM EMISSION FLOW RATE: 110 m<sup>3</sup>/min**

**MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y**

**MAXIMUM PRIMARY BURNER INPUT FIRING RATE: 3.17 GJ/h**

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Firing of the pretreatment oven with a low NO<sub>x</sub> burner and natural gas as the primary fuel and propane as the secondary fuel, combined with effective filters and related appurtenances together with good combustion and operating practices.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information:**

Height: 13.0 m

Diameter: 0.45 m

Minimum Exit Temperature (°C): 120

---

Issued: November 14, 1992

Amended: March 15, 2018

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

Permit GVA0333

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

**EMISSION SOURCE 52: Pre-treatment 3 oven exhaust discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **110** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **3.17** GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

Firing of the pretreatment oven with a low NO<sub>x</sub> burner and natural gas as the primary fuel and propane as the secondary fuel, combined with effective filters and related appurtenances together with good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 13.0 m  
Diameter: 0.4 m  
Minimum Exit Temperature (°C): 120

**EMISSION SOURCE 53: Powder booth exhaust (PB #3) discharging through a Stack(s).**


MAXIMUM EMISSION FLOW RATE: **22** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **0.44** GJ/h

MAXIMUM EMISSION QUALITY:

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.
3. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**WORKS AND PROCEDURES:**

Firing of the air humidifier heater with natural gas as the primary fuel and propane as the secondary fuel, combined with effective filters and related appurtenances together with good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information:**

Height: 13.5 m

Diameter: 0.2 m

Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 54: Powder booth oven exhaust (PB #3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: 110 m<sup>3</sup>/min

MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y

MAXIMUM PRIMARY BURNER INPUT FIRING RATE: 3.17 GJ/h

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Firing of the powder booth 3 oven with a low NO<sub>x</sub> burner with natural gas as the primary fuel and propane as the secondary fuel, combined with effective filters and related appurtenances together with good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information:**

Height: 13.5 m

Diameter: 0.2 m

Minimum Exit Temperature (°C): 200

---

Issued: November 14, 1992

Amended: March 15, 2018



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

Permit GVA0333

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

**EMISSION SOURCE 55: Paint booth inspection booth exhaust (PB #3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **109** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

1. 20 mg/m<sup>3</sup> Particulate Matter
2. 10% Opacity.
3. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

Water wash spray booth and related appurtenances together with good operating practices.

Stack Information:

Height: 14.0 m  
Diameter: 0.45 m  
Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 56: Colour booth (PB #3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **735** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **2.91** GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Firing of the air humidifier with a low NO<sub>x</sub> burner with natural gas as the primary fuel and propane as the secondary fuel, combined with a downdraft water wash scrubber, electrostatic bell and HVLP applicators, and related appurtenances together with good combustion practices and operating procedures.


The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information (4 stacks):

Heights: 15.0 m, 15.0 m, 15.0 m, 13.0 m

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

Diameters: 0.6 m, 0.6 m, 0.45 m, 0.2 m  
Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 57: Colour oven exhaust (PB #3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **110** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **3.17** GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

Firing of the colour oven with a low NO<sub>x</sub> burner with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 13.5 m  
Diameter: 0.2 m  
Minimum Exit Temperature (°C): 200

**EMISSION SOURCE 58: Clear booth (PB #3) discharging through a Stack(s).**


MAXIMUM EMISSION FLOW RATE: **779** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **3.17** GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**WORKS AND PROCEDURES:**

Firing of the air humidifier with a low NO<sub>x</sub> burner with natural gas as the primary fuel and propane as the secondary fuel, combined with a downdraft water wash scrubber, electrostatic bell and HVLP applicators, and related appurtenances together using good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information (4 stacks):**

Heights: 15.0 m, 15.0 m, 15.0 m, 13.0 m

Diameters: 0.6 m, 0.6 m, 0.45 m, 0.2 m

Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 59: Clear oven exhaust (PB #3) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **110** m<sup>3</sup>/min

MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **3.17** GJ/h

**MAXIMUM EMISSION QUALITY:**

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

**WORKS AND PROCEDURES:**

Firing of the clear oven with a low NO<sub>x</sub> burner with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

**Stack Information:**

Height: 13.5 m

Diameter: 0.2 m

Minimum Exit Temperature (°C): 200

---

Issued: November 14, 1992

Amended: March 15, 2018



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

Permit GVA0333

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

**EMISSION SOURCE 60: T6-5 exhaust discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: 61 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 7488 h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: 7.35 GJ/h

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.
2. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

Firing of the solution furnace and aging oven with low NO<sub>x</sub> burners with natural gas as the primary fuel and propane as the secondary fuel using good combustion practices and operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information (2 stacks):

Heights: 15.0 m, 15.0 m  
Diameters: 0.4 m, 0.4 m  
Minimum Exit Temperature (°C): 250

**EMISSION SOURCE 61: ML 9-12 shot blast unit #10 (CDC015) discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: 312 m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: 6240 h/y

MAXIMUM EMISSION QUALITY:

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

WORKS AND PROCEDURES:


A baghouse and related appurtenances together with good operating practices.

Stack Information:

Height: 3.0 m  
Diameter: 0.75 m  
Minimum Exit Temperature (°C): ambient

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**EMISSION SOURCE 62: Paint booth (PB #2) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **872** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y  
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **4.2** GJ/h  
MAXIMUM FUEL USE: **13517.7** GJ/y

MAXIMUM EMISSION QUALITY:

1. 102 mg/m<sup>3</sup> Total Hydrocarbon (as Methane)
2. 10% Opacity.
3. Chemical Contaminants: The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.

WORKS AND PROCEDURES:

A biofilter and related appurtenances together with good operating procedures.

The quantity of natural gas burned shall be monitored and recorded using methods approved by the District Director. This record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.

Stack Information:

Height: 13.5 m  
Diameter: 0.9 m  
Minimum Exit Temperature (°C): ambient

**EMISSION SOURCE 64: Ejector pin cleaning (heated caustic cleaning bath) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **100** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

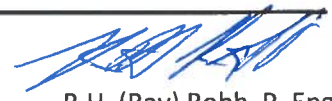
Over temperature limit switch with good operating practices.

Stack Information:

Height: 13.5 m  
Diameter: 0.15 m  
Minimum Exit Temperature (°C): 60

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333



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

**EMISSION SOURCE 65: Pre-treatment Line 5 process tank exhaust discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **280** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:

Over temperature limit switch with good operating practices.

Stack Information:

Height: 17.5 m  
Diameter: 0.6 m  
Minimum Exit Temperature (°C): 40

**EMISSION SOURCE 66: Pre-treatment Line 3 process tank exhaust discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **280** m<sup>3</sup>/min  
MAXIMUM ANNUAL OPERATING HOURS: **6240** h/y

MAXIMUM EMISSION QUALITY:

1. 10% Opacity.

WORKS AND PROCEDURES:


Over temperature limit switch to prevent overheating along with good operating practices.

Stack Information:

Height: 17.5 m  
Diameter: 0.6 m  
Minimum Exit Temperature (°C): 40

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**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@metrovancover.org](mailto:regulationenforcement@metrovancover.org).

**C. POLLUTION NOT PERMITTED**

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

**D. BYPASSES**

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


**E. EMERGENCY PROCEDURES**

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

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

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

## METRO VANCOUVER REGIONAL DISTRICT AIR QUALITY MANAGEMENT PERMIT

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.

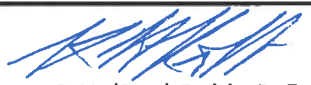
### **G. STANDARD CONDITIONS AND DEFINITIONS**

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.

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

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.

---

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

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

**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@metrovanouver.org](mailto:regulationenforcement@metrovanouver.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.

---

Issued: November 14, 1992  
Amended: March 15, 2018


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

Permit GVA0333

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

<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>
47	October 31, 2018	Every 3 years, on or before October 31 every third year.	Written report detailing the measured discharge rate and concentration of total hydrocarbons (expressed as methane) and particulate matter in the emissions	Total Hydrocarbon (as Methane), Particulate Matter	EPA Test Method 1, Metro Vancouver AQ02/02/1.00M, EPA Test Method 25A	Stack
62	October 31, 2018	On or before October 31 for each subsequent year.	Written report detailing the measured discharge rate and concentration of total hydrocarbons (expressed as methane) in the emissions and the total hydrocarbon removal efficiency.	Total Hydrocarbon (as Methane)	EPA Test Method 25A	Stack

Issued: November 14, 1992  
 Amended: March 15, 2018

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

Permit GVA0333


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

**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.

<b>EMISSION SOURCE</b>	<b>INITIAL DUE DATE</b>	<b>SUBSEQUENT DUE DATES</b>	<b>REQUIREMENT</b>	<b>REPORT TYPE</b>
62	March 31, 2018	On or before March 31 for each subsequent year.	<p>Written report on the biofilter described in Section 1 of the Permit detailing the inspection frequency, biofilter condition, actions taken or proposed to solve any problems detected, research and actions taken to improve biofilter removal efficiency, and any modifications to operating parameters and their effects on the biofilter.</p> <p>The biofilter media should be monitored continuously for bed temperature, system sump pH and conductivity and bed pressure drop, as prescribed by the Operations and Maintenance Manual, as updated from time to time. This continuous record is to be maintained and made available for inspection by Metro Vancouver staff for a minimum period of three years.</p>	Information - Other
Facility	March 31, 2018	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	March 31, 2018	On or before March 31 for each subsequent year.	Written report providing details of the types, amounts and end use of organic solvents and organic solvent-containing materials used in the preceding calendar year.	Solvent Use

Issued: November 14, 1992  
 Amended: March 15, 2018

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

Permit GVA0333

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

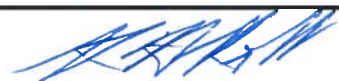
<b>EMISSION SOURCE</b>	<b>INITIAL DUE DATE</b>	<b>SUBSEQUENT DUE DATES</b>	<b>REQUIREMENT</b>	<b>REPORT TYPE</b>
10, 17, 24, 25, 39, 41, 42, 43, 47, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 64, 65, 66, 19	March 31, 2018	On or before March 31 for each subsequent year.	Written report providing details of the total number of hours and days operated within Metro Vancouver during the preceding calendar year. 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 of three years.	Operating Period
25, 39, 61, 47	March 31, 2018	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
10, 17, 24, 42, 43, 47, 51, 52, 53, 54, 56, 57, 58, 59, 60, 62	March 31, 2018	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

**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.

Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333

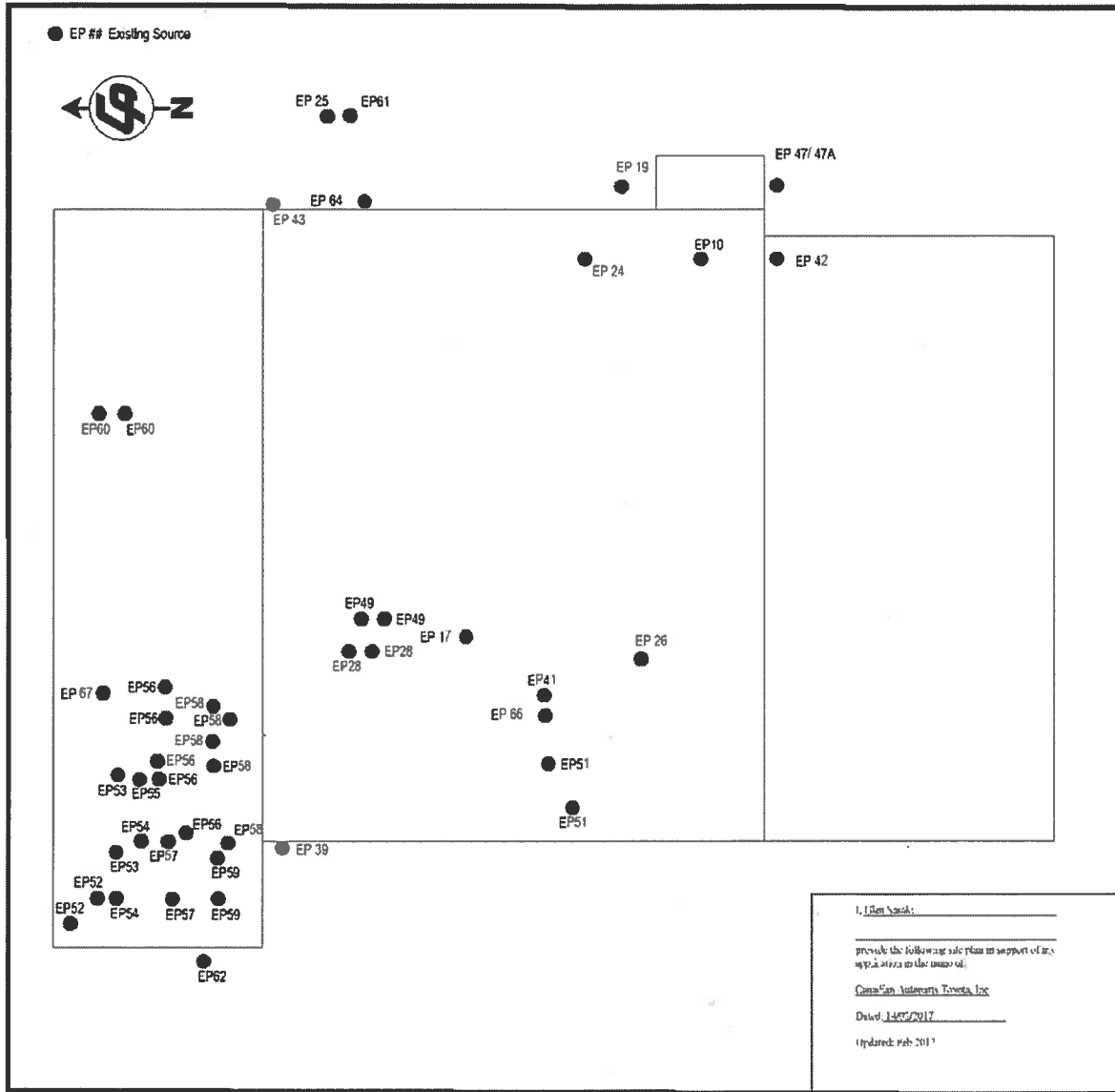


**METRO VANCOUVER REGIONAL DISTRICT AIR QUALITY MANAGEMENT PERMIT**


**SECTION 4 – SITE PLAN**

LEGAL DESCRIPTION OF DISCHARGE SITE: Parcel Identifier: 003-665-534, Lot 189, District Lots 128 and 129, Group 2 New Westminster District, Plan 65743 and Parcel Identifier 013-941-917, Lot A, District Lot 129, Group 2 New Westminster Land District, Plan 81663

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



Issued: November 14, 1992  
Amended: March 15, 2018

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

Permit GVA0333