metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

PERMIT GVA0010

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:

Chemtrade Electrochem Inc.
(the "Permittee")

To Authorize:

the discharge of air contaminants to the air from
a Chlor-alkali manufacturing plant

Located at:

100 Amherst Avenue, North Vancouver, BC V7H 1S4

Effective Period:

The terms and conditions set out in the Permit apply to the existing or planned works as of October 25, 2023 and this Permit will expire on January 31, 2026.

All previous versions of this Permit are invalid.

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., 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 01: **Welding area (maintenance building) discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **90** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **2496** h/y

MAXIMUM EMISSION QUALITY:
1. 30 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Good operating practices.

EMISSION SOURCE 04: **Chlorine processing disposal and sodium hypochlorite storage tanks discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **The authorized maximum rate of discharge is that resulting from vapour venting during chlorine system maintenance or natural draft from storage tanks**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine

WORKS AND PROCEDURES:
Consisting of three tanks that are used for the following services:

- sodium hypochlorite storage;
- surge tank for vent downs of chlorine system equipment during maintenance; or
- stand-by tank for sodium hypochlorite storage.

When a tank is used for vent downs of chlorine, the purge line inlet must be below the sodium hypochlorite solution level.

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

EMISSION SOURCE 09: Le Carbone Lorraine hydrochloric acid plant (center plant) discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **5** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Primary packed tower water scrubber, a secondary water spray scrubber operating in series and related appurtenances together with good operating practices.

The Permittee must monitor and record the scrubber operating parameters for water flow and temperature in a manner approved by the District Director. These records must be kept and made available for inspection by Metro Vancouver staff.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

On start-up and during the first hour of operation of the hydrochloric acid plant, the Permittee must not allow the concentration of chlorine to exceed 22.5 mg/m^3 (one hour average).

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.15
Exit Temperature (^{0}C): 50

EMISSION SOURCE 10: Le Carbone Lorraine hydrochloric acid plant (east plant) discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **5** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Primary packed tower water scrubber, a secondary water spray scrubber operating in series and related appurtenances together with good operating practices.

The Permittee must monitor and record the scrubber operating parameters for water flow and temperature in a manner approved by the District Director. These records must be kept and made available for inspection by Metro Vancouver staff.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

On start-up and during the first hour of operation of the hydrochloric acid plant, the Permittee must not allow the concentration of chlorine to exceed 22.5 mg/m^3 (one hour average).

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.15
Exit Temperature (^oC): 50

EMISSION SOURCE 11A: Centre Acid Plant Surge Tank discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling of surge tank, tanker trucks and HCl storage tanks**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Surge tank (EN09) equipped with packed tower water scrubber operating at >99% efficiency, with related appurtenances together with good operating practices:

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.10
Exit Temperature (^{o}C): 20

EMISSION SOURCE 11B: **East Acid Plant Surge Tank discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling of surge tank**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Surge tank (EN10) equipped with packed tower water scrubber operating at >99% efficiency, with related appurtenances together with good operating practices.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.10
Exit Temperature (^{o}C): 20

EMISSION SOURCE 11C: #1 Acid Plant Transfer Tank discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **0.05** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Packed tower water scrubber operating at >99% efficiency, with related appurtenances together with good operating practices.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.05
Exit Temperature (^{0}C): 20

EMISSION SOURCE 11D: #2 Acid Plant Transfer Tank discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **0.05** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Packed tower water scrubber operating at >99% efficiency, with related appurtenances together with good operating practices.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.05
Exit Temperature (^{o}C): 20

EMISSION SOURCE 11E: **#3 Acid Plant Transfer Tank discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **0.05** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Packed tower water scrubber operating at >99% efficiency, with related appurtenances together with good operating practices.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 20
Internal diameter at stack top (m): 0.05
Exit Temperature (^{o}C): 20

EMISSION SOURCE 11F: **Hydrochloric Acid Railcar Loading discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling of rail cars**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Equipped with primary water ejector venturi scrubbers in series with secondary packed tower water scrubbers operating at >99% efficiency.

The duplicated packed tower water scrubbers also control emissions for the HCl storage tank vents and can be utilized independently or in parallel.

Stack Information:
Height above ground (m): 15
Internal diameter at stack top (m): 0.20
Exit Temperature (°C): 15

EMISSION SOURCE 11G: Hydrochloric Acid Railcar Cleaning Station discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling rail cars and HCl storage tanks**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

WORKS AND PROCEDURES:
Equipped with primary water ejector venturi scrubbers in series with secondary packed tower water scrubbers operating at >99% efficiency.

The duplicated packed tower water scrubbers also control emissions for the HCl storage tank vents and can be utilized independently or in parallel.

Stack Information:
Height above ground (m): 10
Internal diameter at stack top (m): 0.10
Exit Temperature (°C): 20

EMISSION SOURCE 11H: Hydrochloric Acid Truck Loading discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling of tanker trucks and HCl storage tanks**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Hydrogen Chloride

WORKS AND PROCEDURES:
Equipped with primary water ejector venturi scrubbers in series with secondary packed tower water

scrubbers operating at >99% efficiency.

The duplicated packed tower water scrubbers also control emissions for the HCl storage tank vents and can be utilized independently or in parallel.

Stack Information:
Height above ground (m): 8
Internal diameter at stack top (m): 0.15
Exit Temperature (°C): 20

EMISSION SOURCE 11I: Hydrochloric Acid Storage Tanks discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from vapour venting during filling of HCl storage tanks**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Hydrogen Chloride

WORKS AND PROCEDURES:
Equipped with primary water ejector venturi scrubbers in series with secondary packed tower water scrubbers operating at >99% efficiency.

The duplicated packed tower water scrubbers also control emissions for the HCl storage tank vents and can be utilized independently or in parallel.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident

Stack Information:
Height above ground (m): 8
Internal diameter at stack top (m): 0.15
Exit Temperature (°C): 15

EMISSION SOURCE 12: #1 Acid Plant - Mersen Hydrochloric Acid Plant discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **15** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. ~~15 mg/m³ Chlorine~~
2. 20 mg/m³ Hydrogen Chloride

WORKS AND PROCEDURES:
Primary packed tower water scrubber and a secondary Fabricated Plastics (TT18-16.5) water or caustic spray scrubber operating in series and related appurtenances together with good operating practices.

The Permittee must monitor and record the scrubber operating parameters for water flow and temperature in a manner approved by the District Director. These records must be kept and made available for inspection by Metro Vancouver staff.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 26
Internal diameter at stack top (m): 0.25
Exit Temperature (°C): 50

EMISSION SOURCE 13: #3 Boiler - Victory hydrogen and natural gas fired boiler discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **500** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **95** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity

WORKS AND PROCEDURES:
The firing of the boiler with hydrogen and natural gas using flue gas recirculation together with good combustion practices and operating procedures.

Oxygen Correction:

The emission quality and flow are corrected to 3% Oxygen.

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

Stack Information:
Height above ground (m): 18.2
Internal diameter at stack top (m): 0.91
Exit Temperature (^{o}C): 257

EMISSION SOURCE 14: **Emission Control System (ECS) discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **70** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 10% Opacity

WORKS AND PROCEDURES:
Two C.P.F. Dualam Inc. fume scrubbers (50 cm, PVC lined FRP packed towers in series as a primary and secondary tower configuration) using 18% (w/v) caustic solution and related appurtenances together with good operating practices.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 26
Internal diameter at stack top (m): 0.25
Exit Temperature (^{o}C): 50

EMISSION SOURCE 15: **#2 Acid Plant - Mersen hydrochloric acid plant Model# U5800-22 discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **15** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Primary packed tower water scrubber and a secondary Fabricated Plastics (TT18-16.5) water or caustic spray scrubber operating in series and related appurtenances together with good operating practices.

The Permittee must monitor and record the scrubber operating parameters for water flow and temperature in a manner approved by the District Director. These records must be kept and made available for inspection by Metro Vancouver staff.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Stack Information:
Height above ground (m): 26
Internal diameter at stack top (m): 0.25
Exit Temperature (^{o}C): 50

EMISSION SOURCE 16: #3 Acid Plant - Mersen hydrochloric acid plant Model#U5800-22 discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **15** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Chlorine
2. 20 mg/m^3 Hydrogen Chloride

WORKS AND PROCEDURES:
Primary packed tower water scrubber and a secondary Fabricated Plastics (TT18-16.5) water or caustic spray scrubber operating in series and related appurtenances together with good operating practices.

The Permittee must monitor and record the scrubber operating parameters for water flow and temperature in a manner approved by the District Director. These records must be kept and made available for inspection by Metro Vancouver staff.

In the event that chlorine is released directly to the atmosphere, in addition to the requirements in Section 2.E of this permit, a written report of each incident including the duration, the cause of the chlorine release, quantity of chlorine released and the remedial action taken, must be submitted within 5 working days of the incident.

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

Stack Information:
Height above ground (m): 26
Internal diameter at stack top (m): 0.25
Exit Temperature (°C): 50

EMISSION SOURCE 17: **Salt handling on stock pile discharging through a Storage Pile(s).**

MAXIMUM EMISSION FLOW RATE:
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUANTITY:
1. 2.7 t/y Particulate Matter

MAXIMUM EMISSION QUALITY:
1. Particulate: Particulate restriction is based on a maximum annual salt throughput of 500,000 tonnes/year.

WORKS AND PROCEDURES:
Good operating practices.

EMISSION SOURCE 18: **Indeck/OT-60 Natural Gas Fired Backup Boiler discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **600** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **2208** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **82.2** GJ/h

MAXIMUM EMISSION QUALITY:
1. 10% Opacity

WORKS AND PROCEDURES:
A natural gas fired boiler for backup use with NO_x emissions reduction by flue gas recirculation system together with good operating practices. 15% of flue gases from the boiler exhaust duct into the main combustion chamber.

Oxygen Correction:

The emission quality and flow are corrected to 3% Oxygen.

Stack Information:
Height above ground (m): 9.8
Internal diameter at stack top (m): 0.94
Exit Temperature (°C): 600

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

SECTION 2 – GENERAL REQUIREMENTS AND CONDITIONS

A. 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.

B. 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.

C. NOTIFICATION OF MONITORING NON-COMPLIANCE

The District Director must be notified immediately of:

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

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

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;
2. Immediately notify the District Director of the emergency or condition and of contingency actions invoked or planned to mitigate adverse impacts and restore compliance. Notification must be made to Metro Vancouver's 24-hour number: 604-436-6777 or EREnotifications@metrovancouver.org; and
3. Take appropriate remedial action for the prevention or mitigation of pollution.

The District Director may specify contingency actions to be implemented to protect human health and the environment while 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

Unless otherwise specified, the following applies to this permit:

1. Gaseous volumes are corrected to standard conditions of 20 degrees Celsius (°C) and 101.325 kilo Pascals (kPa) with zero percent moisture.
2. Contaminant concentrations from the combustion of specific fuel types are corrected to the following Oxygen content, unless specified otherwise:
   - 3% O_2 for natural gas and fuel oil; or
   - 8% O_2 for wood fuel
3. Where compliance testing is required, each contaminant concentration limit in this permit will be assessed for compliance based on a valid test using test methods approved by the District Director.
4. Visual opacity measurements are made at the point of maximum density, nearest the discharge point and exclude the effect of condensed, uncombined water droplets. Compliance determinations are based on a six-minute average in accordance with the United States Environmental Protection Agency (US EPA) Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources. Continuous Emission Monitor System (CEMS) opacity compliance determinations are based on a one-hour average (taken from the top of each hour).
5. If authorized in Section 1 of this permit, standby fuel use is restricted to a maximum of 350 hours per year and to those periods during which the primary authorized fuel is not available. Fuel oil sulphur

content must not exceed 15 milligrams per kilogram (mg/kg) and emissions during fuel oil firing must not exceed 10% opacity.

6. Definitions in the Environmental Management Act and Air Quality Management Bylaw apply to terminology used in this permit.
7. Threshold Limit Values (TLV) refer to the Time Weighted Average (TWA) exposure limits for substances specified in the American Conference of Governmental Industrial Hygienists Threshold Limit Values handbook, current on the latest date that this permit issuance or amendment came into effect.
8. Sulphur Oxides (SO_x) are expressed as Sulphur Dioxide.
9. Nitrogen Oxides (NO_x) are expressed as Nitrogen Dioxide.
10. The Canadian Council of Ministers of the Environment (CCME) "Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks (PN1180)" must be adhered to for all applicable tanks unless otherwise stated in this permit.
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.

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

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

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

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
12, 09, 10, 15, 16	October 31, 2023	On or before October 31 for each subsequent year, ending January 31, 2026.	Submit a written report detailing the measured discharge rate and concentration of chlorine and hydrogen chloride.	Chlorine, Hydrogen Chloride	EPA Test Method 26	Stack
14	October 31, 2024	On or before October 31 for each subsequent year.	Submit a written report detailing the measured discharge rate and concentration of chlorine.	Chlorine	EPA Test Method 26	Stack

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

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
14, 12, 09, 10, 11A, 15, 16, 11B, 11C, 11D, 11E, 11F, 11G, 11H, 11I	March 31, 2024	On or before March 31 for each subsequent year, ending January 31, 2026.	Submit a written report summarizing frequency and results of all inspections and maintenance carried out on the scrubber(s). The report must also include any actions, taken or proposed, to solve identified problems.	Scrubber
Facility	March 31, 2024	On or before March 31 for each subsequent year, ending January 31, 2026.	Submit a written report providing details of the types and amounts of fuel burned in the preceding calendar year.	Fuel Use
Facility	March 31, 2024	On or before March 31 for each subsequent year, ending January 31, 2026.	Submit a 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
01, 18	March 31, 2024	On or before March 31 for each subsequent year, ending January 31, 2026.	Submit a 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 format approved by the District Director.	Operating Period

Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

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: October 25, 2023

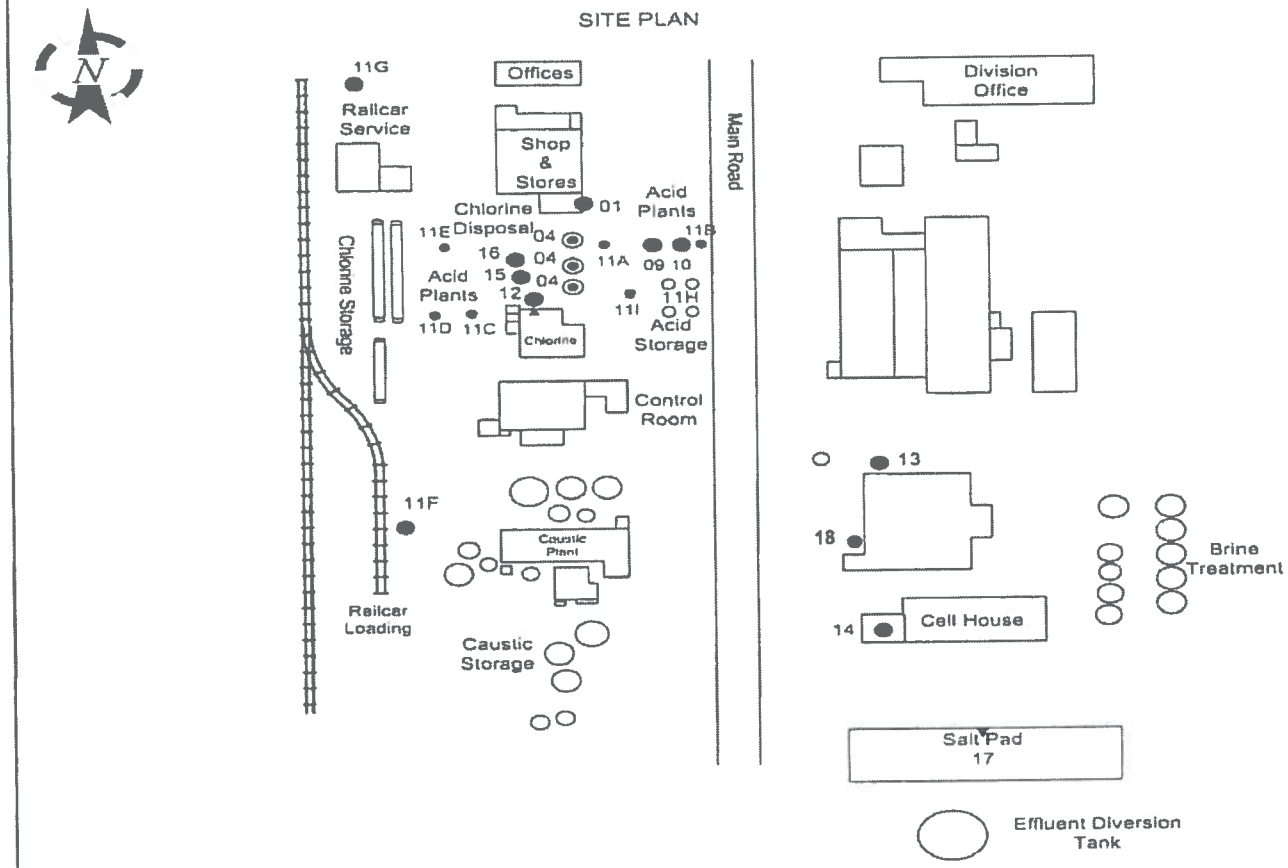
Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010

SECTION 4 – SITE PLAN

LEGAL DESCRIPTION OF DISCHARGE SITE: **Municipality of North Vancouver, Parcel Identifier: 007-253-265 Lot 5 Block H District Lots 193 and 611 Plan 17801**

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



Issued: November 14, 1992
Amended: October 25, 2023

Kathy Preston, Ph.D., P.Eng.
District Director

Permit GVA0010