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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

PERMIT GVA0034

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:

Produits Kruger Inc. Kruger Products Inc.
doing business as Kruger Products Inc.
(the "Permittee")

To Authorize:

the discharge of air contaminants to the air from
A PAPER PRODUCTS MANUFACTURING MILL

Located at:

1625 5th Avenue, New Westminster, BC V3L 4Z9

Effective Period:

The terms and conditions set out in the Permit apply to the existing or planned works as of February 10, 2023 and this Permit will expire on March 31, 2032.

All previous versions of this Permit are invalid.

Issued: November 30, 1992
Amended: February 10, 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: **Gasifier and No. 2 boiler discharging through a ESP Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **1585** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **62** GJ/h

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Particulate Matter
2. 5% Opacity

WORKS AND PROCEDURES:
Nexterra wood gasifier, syngas oxidizer (with natural gas supplemental fuel) operated at a minimum temperature of 1000 degrees Celsius with a retention time greater than 1 second, economizer, boiler, 3 stage dry electrostatic precipitator (DESP), continuous O_2 combustion process monitor and related appurtenances, using good operating procedures.

The authorized fuel for the wood gasifier is uncontaminated wood waste with a chloride content of less than 0.1%, dry basis that has been recovered from the construction and demolition industry or other fuel sources approved by the District Director (supplemented when required with natural gas).

The permittee must continuously monitor and record baseline operating parameters for the DESP. The minimum operating parameters to be monitored must include inlet temperature, DESP outlet temperature, transformer voltage and total power/amperage.

The above "maximum emission quality" and "works and procedures" criteria are exempted from start ups and shut downs of the gasifier and boiler subject to the following conditions:

1. Section 2 Sub-section C applies at all times.
2. Start-up, with the exception of refractory re-bricking, must not exceed 1 hour in duration.
3. Shut down must not exceed 1 hour in duration.

Oxygen Correction:

The emission quality and flow rate are corrected to 8% Oxygen.

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District Director

Permit GVA0034

Stack Information: Height: 24.2 m; Diameter: 1.14 m; Exit Temperature: 200 °C; Circular and vertical discharge.

EMISSION SOURCE 02: **No. 5 boiler discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **408** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **56** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity (10% Opacity during fuel oil firing)

WORKS AND PROCEDURES:
Firing of the boiler with natural gas (fuel oil alternate) with a low NOx burner in conjunction with an economizer, using good operating procedures. Alternate fuel oil firing, with a maximum sulphur content of 15 mg/kg, is authorized to a maximum 1500 hrs/yr.

Stack Information: Height: 13.6 m; Diameter: 0.91 m; Exit Temperature: 160 °C; Circular and vertical discharge.

EMISSION SOURCE 03: **No. 1 boiler discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **200** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **54.65** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity (10% Opacity during fuel oil firing)

WORKS AND PROCEDURES:
Firing of the boiler with natural gas (fuel oil alternate) in conjunction with an economizer, using good operating procedures. Alternate fuel oil firing, with a maximum sulphur content of 15 mg/kg, is authorized to a maximum 1500 hrs/yr.

Stack Information: Height: 17.1 m; Diameter: 0.91 m; Exit Temperature: 175 °C; Circular and vertical discharge.

EMISSION SOURCE 04: Paper winding operation No. 238 and 251, and 246 discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **850** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Three Kleissler Vibratube baghouses and related appurtenances together with good operating practices.

Stack Information: Height: 6.4 m; Effective Diameter: 0.91 m; Exit Temperature: ambient; Non-circular and horizontal discharge.

EMISSION SOURCE 07: No. 3 paper machine Yankee dryer hood discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **1080** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **12.66** GJ/h

MAXIMUM EMISSION QUALITY:
1. 10% Opacity

WORKS AND PROCEDURES:
Firing of the dryer with natural gas (fuel oil alternate) in conjunction with an economizer, using good operating procedures. Alternate fuel oil firing, with a maximum sulphur content of 15 mg/kg, is authorized to a maximum 1500 hrs/yr.

Stack Information: Height: 18.2 m; Effective Diameter: 1.54 m; Exit Temperature: 175 °C; Non-circular and vertical discharge.

EMISSION SOURCE 08: No. 3 paper machine reel section discharging through a Baghouse Exhaust(s).

MAXIMUM EMISSION FLOW RATE: **760** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Baghouse and related appurtenances together with good operating practices.

Stack Information: Height: 13.9 m; Effective Diameter: 1.45 m; Exit Temperature: Ambient; non-circular and horizontal discharge.

EMISSION SOURCE 10: **No. 3 paper machines discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **3511** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 10 mg/m³ Particulate Matter

WORKS AND PROCEDURES:
Four stacks and good operating practices.

The discharge flow rate restriction is the sum of all fan exhaust flow rates. The discharge of a single 1.175 m diameter ventilation fan (PM 3 Roof Exhaust Fan) must not exceed 538 m^3/min. The discharge of a single 1.175 m diameter ventilation fan (Krofta Roof Vent Fan) must not exceed 708 m^3/min. The discharge of two 1.524 m diameter ventilation fans must not exceed 1133 m^3/min.

The specified maximum emission quality applies to each individual stack.

Stack information: Height: 2 fans at 14.3 m and 2 fans at 13.9 m; Effective Diameter: 2 fans at 1.18 m and 2 fans at 1.52 m; Exit Temperature: Ambient; 2 fans with a non-circular and vertical discharge, 2 fans with a circular and vertical discharge.

EMISSION SOURCE 12: **3 vacuum pumps and a dry end pulper on the No. 4 paper discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **960** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 25.2 m; Diameter: 0.91 m; Exit Temperature: 35 °C; Circular and vertical discharge.

EMISSION SOURCE 13: **No. 4 boiler discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **360** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **64.57** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity (10% Opacity during fuel oil firing)

WORKS AND PROCEDURES:
Firing of the boiler with natural gas (fuel oil alternate) in conjunction with an economizer, using good operating procedures. Alternate fuel oil firing, with a maximum sulphur content of 15 mg/kg, is authorized to a maximum 1500 hrs/yr.

Stack Information: Height: 20.7 m; Effective Diameter: 1.07 m; Exit Temperature: 155 °C; Non-circular and vertical discharge.

EMISSION SOURCE 14: **No. 4 paper machine Yankee dryer hood discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **540** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **33.76** GJ/h

MAXIMUM EMISSION QUALITY:
1. 10% Opacity

WORKS AND PROCEDURES:
Firing of the dryer with natural gas (fuel oil alternate) in conjunction with an economizer, using good operating procedures. Alternate fuel oil firing, with a maximum sulphur content of 15 mg/kg, is authorized to a maximum 1500 hrs/yr.

Issued: November 30, 1992
Amended: February 10, 2023

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

Permit GVA0034

Stack Information: Height: 24.5 m; Effective Diameter: 1.22 m; Exit Temperature: 131 °C; Non-circular and vertical discharge.

EMISSION SOURCE 15: **No. 4 paper machine & converting operation discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **8324** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

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

WORKS AND PROCEDURES:
Nine stacks and good operating practices.

The discharge flow rate restriction is the sum of all fan exhaust flow rates. The discharge of a single 1.37 m diameter ventilation fan must not exceed 737 m^3/min. The discharge of a single 1.22 m diameter ventilation fan must not exceed 1048 m^3/min.

The specified maximum emission quality applies to each individual stack.

Stack Information: Height: 2 fans at 11.1 m, 7 fans at 24.5 m; Effective Diameter: 2 fans at 1.37 m, 7 fans at 1.22 m; Exit Temperature: 2 fans at Ambient, 7 fans at 30 °C; All fan exhaust discharge points are circular and vertical.

EMISSION SOURCE 17: **Wet end mist control discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **1410** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Mist eliminator and related appurtenances together with good operating practices.

Stack Information: Height: 25.2 m; Diameter: 1.43 m; Exit Temperature: Ambient; Circular and vertical discharge.

EMISSION SOURCE 18: **Welding, 2 slitter grinders and a blade grinder discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **368** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **832** h/y

MAXIMUM EMISSION QUALITY:
1. 10% Opacity

WORKS AND PROCEDURES:
Three stacks and good operating practices.

EMISSION SOURCE 19: **Roll grinder discharging through a Cyclone Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **63** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **832** h/y

MAXIMUM EMISSION QUALITY:
1. 50 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Cyclone and related appurtenances together with good operating practices.

Stack Information: Height: 25.2 m; Effective Diameter: 1.43 m; Exit Temperature: Ambient; Non-circular and vertical downward discharge with a raincap.

EMISSION SOURCE 20: **2 wet strength resin tanks discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **That resulting from vapour venting during filling, working and breathing**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

WORKS AND PROCEDURES:
Wall vent and good operating practices.

Maximum Monthly Throughput: 6,200 litres/month

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District Director

Permit GVA0034

EMISSION SOURCE 25: **Broke cooker (#2 Cooker) Roof Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **850** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Roof exhaust and good operating practices.

Stack Information: Height: 14.6 m; Diameter: 0.76 m; Exit Temperature: 35 °C; Circular and vertical downward discharge.

EMISSION SOURCE 27: **Wet strength resin tank discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **That resulting from vapour venting during filling, working and breathing**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:

WORKS AND PROCEDURES:
Tank vent and good operating practices.

Maximum Monthly Throughput: 7,200 litres/month

EMISSION SOURCE 28: **3-ply paper rewinder discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **1133** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **4400** h/y

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

WORKS AND PROCEDURES:
Donaldson DLMC 4-8-15 baghouse and related appurtenances together with good operating practices.

Stack Information: Height: 14.3 m; Effective Diameter: 0.68 m; Exit Temperature: Ambient; Non-circular and horizontal discharge.

EMISSION SOURCE 29: **Division E Paper Converting Plant discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **626** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Baghouse and related appurtenances together with good operating practices.

Stack information: Height: 2 m; Effective Diameter: 1.14 m; Exit Temperature: Ambient; Rectangular and downwards discharge.

EMISSION SOURCE 30: **272 Paper Converting Machine discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **963** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Baghouse and related appurtenances together with good operating practices.

Stack information: Height: 9.1 m; Effective Diameter: 1.19 m; Exit Temperature: Ambient; Rectangular and horizontal discharge.

EMISSION SOURCE 31: **No. 3 paper machine Uhle box vacuum pump exhaust discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **85** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

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Permit GVA0034

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Particulate Matter

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 14.6 m; Diameter: 0.41 m; Exit Temperature: 35 °C; circular and vertical discharge.

EMISSION SOURCE 32: **No. 3 paper machine suction pressure vacuum pump exhaust discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **250** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m³ Particulate Matter

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 14.6 m; Diameter: 0.41 m; Exit Temperature: 35 °C; circular and vertical down discharge.

EMISSION SOURCE 33: **Converting unit 276 discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **1133** m³/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 15 mg/m³ Particulate Matter

WORKS AND PROCEDURES:
Donaldson DLMC 4-8-15 baghouse and related appurtenances together with good operating practices.

Stack Information: Height: 9.1 m; Effective Diameter: 1.19 m; Exit Temperature: Ambient; Non-circular and horizontal discharge.

EMISSION SOURCE 34: **No. 1 process tank discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **192** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 12.2 m; Diameter: 0.61 m; Exit Temperature: 40 °C; Circular and vertical discharge.

EMISSION SOURCE 35: **Unit 277 dust system discharging through a Baghouse Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **1133** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **4380** h/y

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

WORKS AND PROCEDURES:
Donaldson DLMC 4-8-12 baghouse and related appurtenances together with good operating practices.

Stack Information: Height: 14.6 m; Effective Diameter: 0.69 m; Exit Temperature: Ambient; Non-circular and horizontal discharge.

EMISSION SOURCE 36: **No. 3 paper machine breast roll vacuum discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **116** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter

WORKS AND PROCEDURES:
Good operating practices.

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District Director

Permit GVA0034

Stack Information: Height: 14.3 m; Diameter: 0.30 m; Exit Temperature: 35 °C; circular and vertical discharge.

EMISSION SOURCE 37: **Paint shop exhaust fan discharging through a Fan Exhaust(s).**

MAXIMUM EMISSION FLOW RATE: **368** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **365** h/y

MAXIMUM EMISSION QUALITY:
1. 20 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 3.0 m; Effective Diameter: 0.68 m; Exit Temperature: Ambient; Non-circular and horizontal discharge with a raincap.

EMISSION SOURCE 38: **Unit 277 machine shop exhaust discharging through a Vent(s).**

MAXIMUM EMISSION FLOW RATE: **28** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **365** h/y

MAXIMUM EMISSION QUALITY:
1. 50 mg/m^3 Particulate Matter
2. 10% Opacity

WORKS AND PROCEDURES:
Good operating practices.

Stack Information: Height: 9.1 m; Diameter: 0.25 m; Exit Temperature: Ambient; circular and vertical discharge.

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.

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District Director

Permit GVA0034

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 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_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)" 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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Permit GVA0034

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.

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE/ TITLE
01	March 31, 2023	On or before March 31 for each subsequent year.	Submit a written report detailing the measured discharge rate and concentration of particulate matter in the emissions.	Particulate Matter	EPA Test Method 5	Particulate Matter Report Stack
04, 08, 10, 12, 15, 17, 19, 28, 29, 30, 31, 32, 33, 35, 36, 34, 38, 25	July 31, 2023	Every 3 years, on or before July 31 every third year.	Submit a written report detailing the measured discharge rate and concentration of particulate matter in the emissions. Sampling must be conducted on a minimum of two representative sources per sampling period. Sampling must be completed in accordance with an approved Stack Test Sampling Plan.	Particulate Matter	Those approved by the District Director	Particulate Matter Test Report Stack
01	October 31, 2027	Every 5 years, on or before October 31 every fifth year.	Submit a written report detailing: a. The measured discharge rate and concentration of Sulphur Oxides (as SO_2) in the emissions. b. The measured discharge rate and concentration of Nitric Oxide (NO), Nitrogen Dioxide (NO_2), and Nitrogen Oxides (as NO_2) in the emissions. c. The measured discharge rate and concentration of Total Volatile Organic Compounds (as CH4) in the emissions. d. The measured discharge rate and concentration of Carbon Monoxide in the emissions. Test results must be corrected to 11% Oxygen.	Carbon Monoxide, Nitrogen Oxides, Sulphur Oxides, Total Volatile Organic Compounds	EPA Test Method 6C, EPA Test Method 7E, EPA Test Method 10, EPA Test Method 25A	SOx, NOx, TVOC and CO Report Stack

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Permit GVA0034

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
04, 08, 28, 29, 30, 33, 35	March 31, 2023	On or before March 31 for each subsequent year.	Written report summarizing frequency and results of all inspections and maintenance carried out on the baghouses. The report must also include all actions, taken or proposed, to solve identified problems.	Baghouse
Facility	March 31, 2023	On or before March 31 for each subsequent year.	Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.	Materials and Products
Facility	March 31, 2023	On or before March 31 for each subsequent year.	Written report detailing the types and amounts of fuel burned in the preceding calendar year, including fuel oil if applicable.	Fuel Use
Facility	March 31, 2023	On or before March 31 for each subsequent year.	Written report detailing the types, amounts and end use of materials containing volatile organic compounds used in the preceding calendar year	VOC and VOC Containing Materials Use Report Solvent Use
Facility	March 31, 2023	On or before March 31 for each subsequent year.	Written report providing details of the total number of hours and days operated during the preceding calendar year. Detailed records are to be maintained in a written bound log or other format approved in writing by the District Director.	Operating Period

Issued: November 30, 1992
Amended: February 10, 2023

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

Permit GVA0034

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/ TITLE
01	March 31, 2023	On or before March 31 for each subsequent year.	Written report providing details of the wood fuel burned in the preceding calendar year. The following must be included: fuel supplier, source of fuel (wood or alternatives approved by the District Director), moisture content, Chloride content (as NaCl) expressed as percent (dry basis), total metals, and minimum higher heat value (dry basis). Chloride Content Analysis: a. The Permittee must take a representative sample of the fuel at least once per calendar quarter, and b. Each sampling event must be separated by at least 30 days.	Wood Fuel Use Report
Facility	March 31, 2025	Every 2 years, on or before March 31 every second year.	The Permittee must submit a written report, for review by Metro Vancouver staff. The report must include a summary of measures and actions taken, changes in procedures and/or equipment, and recommendations for on-going improvement (considered as part of the normal business planning and budgeting process) over the previous two calendar years to minimize fugitive dust from the facility, as per the approved FDMAP. Any proposed changes to the FDMAP must be submitted at least 3 months prior to the report due date for review and written approval by the District Director.	Fugitive Dust Mitigation Action Report (FDMAR)
04, 08, 10, 12, 15, 17, 19, 28, 29, 30, 31, 32,	January 31, 2026	Every 3 years, on or before January 31 every third year.	Submit a written sampling plan, including proposed methodologies, for review and written approval by the District Director prior to commencing particulate matter stack testing as required under this permit. After December 31, 2023, if no changes to the previously approved plan are	Particulate Matter Stack Testing Plan

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Permit GVA0034

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/ TITLE
33, 35, 36, 34, 38, 25			proposed, written documentation must be provided prior to sampling stating testing will follow the previously approved plan.	
Facility	July 31, 2026	N/A	The Permittee must submit a plan to conduct a review of advancements in control technologies for the paper products manufacturing industry, including the Nexterra wood gasifier and Broke cooker, an assessment of whether the technologies installed at the Facility could be improved. The plan is to be submitted to the District Director for review and written approval. The plan must clearly identify the scope of the assessment and must include the methodologies that will be used to: a. Identify advancements in process and control technologies, b. Quantify potential emission reductions, c. Quantify capital and operating costs of implementation, d. Assess the current process and control technologies, and e. Develop recommendations. The plan must also include a draft table of contents for the Technology Assessment Report. A qualified professional with demonstrable experience in paper products manufacturing emission process and control technologies must prepare the plan. If it is proposed that internal staff prepare the plan and report, then the plan must propose an independent third-party peer reviewer and provide their credentials and experience.	Technology Assessment Plan

Issued: November 30, 1992
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District Director

Permit GVA0034

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/ TITLE
Facility	December 31, 2026	N/A	The Permittee must submit a written Technology Assessment report for review and written approval by the District Director. The scope of the report and methodologies used must conform to the approved Technology Assessment Plan. A qualified professional with demonstrable experience in paper products manufacturing control technologies must prepare the report. If internal staff prepare the report, then the report must be peer reviewed by an independent third party approved by the District Director. The report must include, for all emission sources, an assessment of whether the process and control technologies are or are still considered the best available. The report must also include recommendations for implementation of process and control technology improvements. If improvements are recommended, an implementation schedule must be provided.	Technology Assessment Report
Facility	December 31, 2027	N/A	A dispersion model plan to assess criteria air contaminant emissions from the facility and any emission control scenarios identified in the Technology Assessment Report using the current Metro Vancouver Dispersion Modelling Plan template as posted on Metro Vancouver website must be submitted to the District Director for written approval. The plan must include the dispersion modelling methodology for determining ambient concentrations of NO_2, SO_2, PM_{10}, and $PM_{2.5}$ under normal operating conditions and SO_2 ambient concentrations during fuel oil combustion.	Dispersion Modelling Plan
Facility	July 31, 2028	N/A	Written report of air dispersion modelling criteria air contaminant emissions from the facility to determine potential ambient impacts from the facility.	Dispersion Model Report

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

Permit GVA0034

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE/ TITLE
			Dispersion modelling scenarios to be assessed include current permitted emissions from the facility and any emission control scenarios identified in the Technology Assessment Report. The report must include for each scenario: a. Dispersion modelling results for ambient concentrations of NO_2, SO_2, PM_{10}, and $PM_{2.5}$ under normal operating conditions and SO_2 ambient concentrations during fuel oil combustion, b. Summary of maximum predicted concentrations of criteria air contaminants at sensitive receptors, c. Comparison to relevant ambient air quality criteria, d. Assessment of potential ambient impacts from the facility, and e. All model input and output files. The Dispersion Modelling Report must be submitted for review and written approval by the District Director. Dispersion modelling must be conducted in accordance with an approved Dispersion Modelling Plan.	

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 30, 1992
Amended: February 10, 2023

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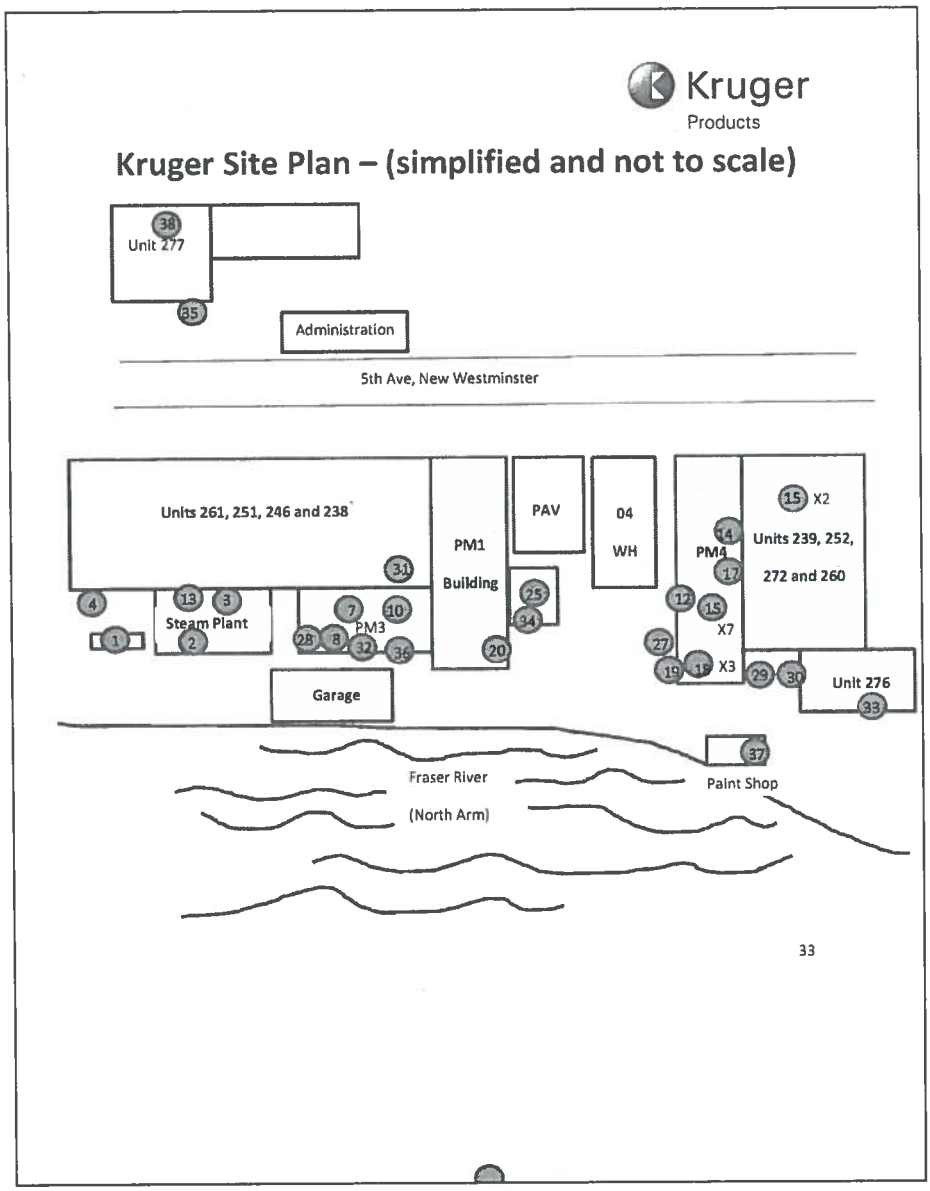
District Director

Permit GVA0034

SECTION 4 – SITE PLAN

LEGAL DESCRIPTION OF DISCHARGE SITE: **City of New Westminster, Parcel Identifier: 007-208-201, Lot Z, Suburban Block 9, Plan 74280**

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



Issued: November 30, 1992
Amended: February 10, 2023

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Permit GVA0034