Environmental
Appeal Board

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Decision Nos. 2016-EMA-134(a) and 2017-EMA-006(a)

ENVIRONMENTAL APPEAL BOARD

IN THE MATTER OF APPEALS BY WEST COAST REDUCTION LTD. OF A DECISION MADE UNDER THE PROVISIONS OF THE GREATER VANCOUVER REGIONAL DISTRICT *AIR QUALITY MANAGEMENT BYLAW NO. 1082, 2008* (THE "BYLAW") AND THE *ENVIRONMENTAL MANAGEMENT ACT*, S.B.C. 2003, c. 53 (THE "EMA") BY THE DISTRICT DIRECTOR, R.H. ROBB (THE "DISTRICT DIRECTOR") WITH RESPECT TO THE AMENDMENT OF PERMIT (GVA0141)

BETWEEN

WEST COAST REDUCTION LTD.

APPELLANT

AND:

DISTRICT DIRECTOR, R.H. ROBB

RESPONDENT

AND:

VANCOUVER COASTAL HEALTH

PARTICIPANT

CONSENT ORDER

ON THE APPLICATION of the Appellant, West Coast Reduction Ltd., and the Respondent, R.H. (Ray) Robb, District Director, and on hearing Gary A. Letcher and Andrea C. Akelaitis, counsel for the Appellant, West Coast Reduction Ltd., and David A. Garner and Scott Harcus, counsel for the Respondent, R.H. (Ray) Robb, District Director;

WHEREAS the Appellant, West Coast Reduction Ltd, has filed its appeals to the Environmental Appeal Board (the "Board") against the Respondent, District Director, with respect to the amendment of Permit GVA0141 (the "Permit");

AND WHEREAS the Appellant and the Respondent agree that a Consent Order on the terms that follow will dispose of the Appeals.

ORDER

THEREFORE, pursuant to Section 16(1) of the *Administrative Tribunals Act* and Section 103(c) of the *Environmental Management Act*, the Environmental Appeal Board, with the consent of the

Appellant and the Respondent, orders that the Permit is hereby further amended in the form and words as set out in Schedule "A" to this Order.

THE APPELLANT AND RESPONDENT APPROVE THE FORM OF THIS ORDER AND CONSENT TO THE ORDER NOTED ABOVE:

Dated as of the 5th day of June, 2017

"Robert Wickett"

_____
Robert Wickett
Panel Chair, Environmental Appeal Board

"Monica Danon-Schaffer"

_____
Monica Danon-Schaffer
Panel Member, Environmental Appeal Board

"Kent Jingfors"

_____
Kent Jingfors
Panel Member, Environmental Appeal Board

APPROVED AND CONSENTED TO:

"Gary A. Letcher"

_____
Gary A. Letcher
Counsel for the Appellant, West Coast Reduction Ltd.

APPROVED AND CONSENTED TO:

"David A. Garner"

_____
David A. Garner
Counsel for the District Director, R.H. Robb

SCHEDULE "A"

PERMIT GVA0141

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:

West Coast Reduction Ltd.

(the "Permittee")

To Authorize:

the discharge of air contaminants to the air from

A Rendering Plant

Located at:

105 North Commercial Drive, Vancouver, BC V5L 4V7

Effective Period:

The terms and conditions set out in the Permit apply to the existing or planned works as of March 21, 2017 and this permit will expire on June 5, 2021.

All previous versions of this Permit are hereby rescinded and rendered null and void.

Issued: December 08, 1992
Amended: June 5, 2017

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 02: One 189 HP Babcock and Wilcox Boiler (No. 3) discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **96** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **5000** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **22.5** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity.

WORKS AND PROCEDURES:
The firing of the process boilers with natural gas using good combustion practices and operating procedures. Standby fuel is authorized subject to conditions in Section 2.G.5.

EMISSION SOURCE 04: Dupps process room air, feather and blood process room air, mill room air and conveyor system air discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **2000** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **7563** h/y

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

WORKS AND PROCEDURES:

A single-stage packed tower scrubber system using sodium hypochlorite or chlorine dioxide as the scrubbing agent.

By March 15, 2018:
The Permittee shall increase the scrubber blowdown rate by 50% and increase the scrubber recirculation rate by 25% and provide evidence of having done so.

Issued: December 08, 1992
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R.H. (Ray) Robb, P. Eng.
District Director

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All rooms and transfer lines associated with this source must be under negative pressure with all air to be collected and directed to the scrubber system at all times. All vents associated with rooms and transfer lines shall be one-way vents so as to allow air into the room or line but not out.

From May 1 to October 31 inclusive, the scrubber shall be operated continuously for 24 hours per day and 7 days a week except during scrubber maintenance. From May 1 to October 31 inclusive planned scrubber maintenance shall occur only during non-operational times. For the remainder of the year, the scrubbers shall be operated at all times when materials are being processed.

By December 31, 2016 the Permittee shall install pressure differential gauges to monitor continuously and record weekly the room-to- atmosphere differential pressure in all rooms associated with this source.

By December 31, 2016 the Permittee shall monitor continuously and record the temperature of the scrubber exhaust in a manner approved by the District Director.

The Permittee shall continuously monitor and record scrubber operating parameters as approved by the District Director. These records shall be kept available for inspection by Metro Vancouver staff for a minimum period of three years.
- Stack height above ground level = 29.2 m
- Minimum stack exit temperature = ambient temperature

Until May 30, 2018
- Internal stack diameter at stack top = 1.8 m

By May 31, 2018:
The internal stack diameter at stack top shall be reduced and a fan installed such that the minimum stack exit velocity is increased by a factor of two and provide evidence that this increase has been achieved.

EMISSION SOURCE 05: Thirty-two tallow and canola oil storage tanks discharging through a Vent(s).

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

MAXIMUM EMISSION QUALITY:

WORKS AND PROCEDURES:
Good operating procedures.

EMISSION SOURCE 07: Tallow refinery room air and conveying system air discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **1650** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **7563** h/y

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

WORKS AND PROCEDURES:
One packed tower scrubber utilizing sodium hypochlorite as the scrubbing agent.

All rooms and transfer lines associated with this source must be under negative pressure with all air to be collected and directed to the scrubber system at all times. All vents associated with rooms shall be one way vents so as to allow air into the room but not out.

From May 1 to October 31 inclusive, the scrubber shall be operated continuously for 24 hours per day and 7 days a week except during scrubber maintenance. From May 1 to October 31 inclusive planned scrubber maintenance shall occur only during non-operational times. For the remainder of the year, the scrubbers shall be operated at all times when materials are being processed.

By December 31, 2016 the Permittee shall install pressure differential gauges to monitor and record weekly the room-to-atmosphere differential pressure in all rooms associated with this source.

By December 31, 2016 the Permittee shall monitor continuously and record the temperature of the scrubber exhaust in a manner approved by the District Director.
The Permittee shall continuously monitor and record scrubber operating parameters as approved by the District Director. These records shall be kept available for inspection by Metro Vancouver staff for

a minimum period of three years.

- Stack height above ground level = 12.5 m
- Internal stack diameter at stack top = 1.6 m
- Minimum stack exit temperature = ambient temperature

EMISSION SOURCE 08: Stord Bartz process room air, wastewater treatment room air, raw materials receiving room air, fish receiving tank air and conveying system air discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **1020** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **7563** h/y

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

WORKS AND PROCEDURES:
A three stage, in series, packed tower scrubber system using sulphuric acid agent in the first stage and, sodium hypochlorite, sodium hydroxide, or chlorine dioxide as the scrubbing agents in the second and third stages.

All rooms and transfer lines associated with this source must be under negative pressure with all air to be collected and directed to the scrubber system at all times. All vents associated with rooms and transfer lines shall be one way vents so as to allow air into the room or line but not out.

From May 1 to October 31 inclusive, the scrubber shall be operated continuously for 24 hours per day and 7 days a week except during scrubber maintenance. From May 1 to October 31 inclusive planned scrubber maintenance shall occur only during non-operational times. For the remainder of the year, the scrubbers shall be operated at all times when materials are being processed.

By December 31, 2016 the Permittee shall install pressure differential gauges to monitor continuously and record weekly the room-to-atmosphere differential pressure in all rooms associated with this source.

By December 31, 2016 the Permittee shall monitor continuously and record the temperature of the scrubber exhaust in a manner approved by the District Director.

The Permittee shall continuously monitor and record scrubber operating parameters as approved by the District Director. These records shall be kept available for inspection by Metro Vancouver staff for a minimum period of three years.

- Stack Height above ground level= 41.0 m
- Internal Stack Diameter at stack top= 2.4 m
- Minimum Stack exit temperature = ambient temperature

EMISSION SOURCE 10: No. 1 and No. 2 process boilers discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **792** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **4000** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **133** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity.

WORKS AND PROCEDURES:
The firing of the process boilers with natural gas using good combustion practices and operating procedures. Standby fuel is authorized subject to conditions in Section 2.G.5.

EMISSION SOURCE 12: Nine meal storage silos discharging through a Vent(s).

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

MAXIMUM EMISSION QUALITY:
1. 20% Opacity.

WORKS AND PROCEDURES:

Good operating procedures.

EMISSION SOURCE 13: **Meal truck loading station truck containers.**

MAXIMUM EMISSION FLOW RATE: **The rate of discharge is that resulting from meal truck filling and displacement air from the truck container.**
MAXIMUM ANNUAL OPERATING HOURS: **8760** h/y

MAXIMUM EMISSION QUALITY:
1. 20% Opacity.

WORKS AND PROCEDURES:
Good operating procedures.

EMISSION SOURCE 14: **Stord Bartz process equipment, Dupps process equipment, feather and blood process equipment, tallow refinery process equipment, discharging through a Stack(s).**

MAXIMUM EMISSION FLOW RATE: **585** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **6800** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **32.7** GJ/h

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Particulate Matter
2. 5% Opacity.
3. Carbon Monoxide - as determined by the District Director

WORKS AND PROCEDURES:
Natural gas fired thermal oxidizer and heat recovery boiler and related appurtenances, together with good operating practices. Standby fuel is authorized subject to conditions in Section 2.G.5.

All high intensity odours from rendering processes must be ducted to this oxidizer or the oxidizer described in Emission Source 16.

The thermal oxidizer shall be operated at a minimum combustion chamber operating temperature of 850°C and this temperature is to be continuously monitored and recorded in a conveniently visible location.

In addition to temperature, the Permittee shall continuously monitor and record the concentration of carbon monoxide (CO) in the discharge. The Permittee shall calibrate these temperature and carbon

monoxide measurement systems at the discretion of, and in a manner acceptable to, the District Director.

Stack height above ground level = 13.4 m
Internal stack diameter at stack top = 0.8 m
Minimum stack exit temperature when high intensity process air is directed to this source = 180°C

EMISSION SOURCE 15: No. 5 process boiler discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **87** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **6000** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **20** GJ/h

MAXIMUM EMISSION QUALITY:
1. 5% Opacity.

WORKS AND PROCEDURES:
The firing of the process boilers with natural gas using good combustion practices and operating procedures. Standby fuel is authorized subject to conditions in Section 2.G.5.

EMISSION SOURCE 16: Stord Bartz process equipment, Dupps process equipment, feather and blood process equipment, tallow refinery process equipment, discharging through a Stack(s).

MAXIMUM EMISSION FLOW RATE: **585** m^3/min
MAXIMUM ANNUAL OPERATING HOURS: **6800** h/y
MAXIMUM PRIMARY BURNER INPUT FIRING RATE: **42** GJ/h

MAXIMUM EMISSION QUALITY:
1. 15 mg/m^3 Particulate Matter
2. 5% Opacity.
3. Carbon Monoxide - as determined by the District Director

WORKS AND PROCEDURES:
Natural gas fired thermal oxidizer and heat recovery boiler and related appurtenances, together with good operating practices. Standby fuel is authorized subject to conditions in Section 2.G.5.

All high intensity odours from rendering processes must be ducted to this oxidizer or the oxidizer described in Emission Source 14.

The thermal oxidizer shall be operated at a minimum combustion chamber operating temperature of 850°C and this temperature is to be continuously monitored and recorded in a conveniently visible location.

In addition to temperature, the Permittee shall continuously monitor and record the concentration of carbon monoxide (CO) in the discharge. The Permittee shall calibrate these temperature and carbon monoxide measurement systems at the discretion of, and in a manner acceptable to, the District Director.

Stack height above ground level = 12.8 m
Internal stack diameter at stack top = 1.0 m
Minimum stack exit temperature when high intensity process air is directed to this source = 180°C

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 modification of authorized works, procedures or sources must be approved by the District Director in advance of operation. For certainty, this does not include routine maintenance or repair.

The discharge criteria described in Section 1 of this permit are applicable on the issued or last amended date of this permit unless specified otherwise. If a date different to the issued or last amended date is specified, the existing works, procedures and sources must be maintained in good operating condition and operated in a manner to minimize emissions.

B. NOTIFICATION OF MONITORING NON-COMPLIANCE

The District Director must be notified immediately of any emission monitoring results, whether from a continuous emissions monitor or periodic testing, which exceed the quantity or quality authorized in Section 1 of this permit. Notification shall be made to Metro Vancouver's 24-hour number: 604-436-6777, or to regulationenforcement@metrovancouver.org.

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.

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_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 provincial "Source Testing Code for the Visual Measurement 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 (June 1995, CCME-EPC-87E)" 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.

SECTION 3 – REPORTING REQUIREMENTS

A. MONITORING REQUIREMENTS AND REPORTING

Unless otherwise approved 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 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 shall be performed under operating conditions representative of the previous 90 calendar days of operation. All field data and calculations must be submitted with monitoring results and they shall be reported in the metric units which are used in this permit. These submissions shall include process data relevant to the operation of the source of the emissions and the performance of the emission control works.

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

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
04, 07, 08, 14, 16	September 30, 2016	Monthly, on or before the last day of each month for the months of June, July,	Submit a written report, including all consultant and laboratory reports, detailing the Odour Concentration and	Odour Concentration	CEN Test Method EN13725:2003	Monitoring - Other

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	PARAMETER(S)	TEST METHOD	REPORT TYPE
		August, September, and October.	Odour Discharge Rate in the emissions(s). Sample collection and analysis must be consistent with procedures specified in EN 13725:2003 "Air Quality - Determination of Odour Thresholds by Dynamic Dilution Olfactometry". Sampling shall be conducted from approved sampling points prior to discharge. Odour sampling shall be conducted as per the approved October 2013 sampling plan. Each sampling event shall be separated by at least 7 days. The due date for each sampling report is the end of the month following the sampling event. Unless requested by the District Director the monthly testing for ES14 and ES16 is waived.			

B. INFORMATION REPORTING REQUIREMENTS

The Permittee shall submit electronic reports containing the required information to the District Director by the dates specified below using a password enabled web based application provided by Metro Vancouver.

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
02, 04, 07, 08, 10, 14, 15, 16	March 31, 2017	On or before March 31 for each subsequent year.	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 written bound log or other format approved by the District Director and made available for inspection by Metro Vancouver staff for a minimum period of three years.	Operating Period
02, 10, 14, 15, 16	March 31, 2017	On or before March 31 for each subsequent year.	Submit a written report providing details of the types and amounts of fuel burned in the preceding calendar year.	Fuel Use
04, 07, 08	March 31, 2017	On or before March 31 for each subsequent year.	Submit a written report summarizing frequency and results of all inspections and maintenance carried out on the scrubbers. The report shall also include any actions, taken or proposed, to solve identified problems.	Scrubber
Facility	March 31, 2017	On or before March 31 for each subsequent year.	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
Facility	September 30, 2016	Monthly, on or before the last day of each month.	The Permittee shall continuously monitor and record wind speed and direction as well as ambient air temperature at the plant site. These parameters shall be measured at a location which has received prior approval by the District Director and which will produce data of a quality suitable for use in dispersion	Information - Other

Issued: December 08, 1992
Amended: June 5, 2017

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District Director

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EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
			models. The Permittee shall calibrate this measurement system at the discretion of, and in a manner acceptable to, the District Director. Daily summaries of wind speed, wind direction and ambient temperature shall be emailed to Metro Vancouver offices on a weekly basis during the months of May, June, July, August and September. Data is to be submitted no later than the following Friday for the previous week. Data for the rest of the year must be submitted by the 15th of the month for the previous month's data. Data must also be kept on site in a format approved by the District Director, and be available for inspection on request of an officer.	
14, 16	March 31, 2017	On or before March 31 for each subsequent year.	Submit a written report summarizing the results of combustion operating temperature and carbon monoxide monitoring carried out during the previous calendar year. This report shall be presented in graphical format or other format approved by the District Director.	Information - Other
04, 07, 08, 14, 16	December 31, 2020	N/A	Written report of the results of a dispersion modelling assessment of odour units of maximum measured odour concentrations for the period May 31, 2018 to October 31, 2020. Modelling is to be conducted in accordance with the most recent version of the British Columbia Air Quality Dispersion Modelling Guideline. A dispersion model plan is to be developed using the most recent version of	Dispersion Model

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
			the Metro Vancouver dispersion model plan template and submitted to the District Director by June 30, 2020 for review, comment, revision and written approval. Modelling is to include elevated receptors on nearby buildings and sensitive receptors within the model domain such as schools, daycares, senior facilities, hospitals etc. Model results are to be presented on a satellite imagery basemap. Modelling is to be based on: i. Minimum exit temperatures for ES14 and ES16 and actual hourly exit temperatures for ES04, ES07 and ES08. ii. Minimum stack exit velocity for ES04 and actual stack exit velocities for ES07, ES08, ES14 and ES16. iii. Permitted flow rates.	
Facility	July 14, 2017	N/A	Written report of an assessment of the air tightness of the building envelope of the facility buildings and air tightness of related structures. The report is to be prepared by an independent qualified professional with experience in the assessment of leaky buildings. It should discuss any deficiencies in the structures that may lead to fugitive emissions due to openings (i.e. doors open or the result of poor sealing), wind entrainment, differential pressure gradients, thermal gradient differences, leaks from external conveyance devices (meal transfer lines, valves), and failure to maintain negative pressure	Information - Other

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
			at all points and at all times within the structures. The report should also include recommendations to address all deficiencies as well as recommendations for improving ongoing maintenance and repair. As part of the assessment, an inventory of all leaks and deficiencies shall be developed and appended to the report. A plan to conduct the assessment is to be submitted to the District Director by November 30, 2016 for comment, review and approval. The plan shall include a timeline to conduct the assessment in cooler weather and shall use the following techniques: a. Smoke test - testing shall be conducting in the cooler weather months and during a time when all fans can be shut down. b. Thermal imaging - testing shall be conducted in cooler weather and at normal production to assess other potential leaks and corroborate findings as determined via the smoke test.	
02, 04, 05, 07, 08, 10, 12, 13, 14, 15, 16, Facility	August 31, 2017		The Permitee shall develop a proposal for an odour management plan in collaboration with a qualified professional to be submitted for approval to the District Director and, upon approval, shall develop and submit the plan in accordance with the proposal within six months of approval.	Information - Other
04, 07, 08	January 31, 2017	Quarterly, on or before April 30, July 31, October 31 and January 31 of each	Written report of the minimum and maximum temperature readings of the scrubber exhausts recorded each day in the previous calendar quarter. Also to be included in the report are the concurrent ambient temperatures measured	Information - Other

EMISSION SOURCE	INITIAL DUE DATE	SUBSEQUENT DUE DATES	REQUIREMENT	REPORT TYPE
		year, ending January 31, 2018.	on site. This information is to be presented in a format acceptable to the District Director.	
				Information - Other
04, 08	September 30, 2017	N/A	A written report of all previous trial test information that involved chlorine dioxide on both the Dupps and Stord Bartz scrubbing systems. This report should include copies of any odour sampling reports as well as staff notes on dosing and observations.	Information - Other

C. AMENDED OR ADDITIONAL REQUIREMENTS

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

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

Issued: December 08, 1992
Amended: June 5, 2017

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District Director

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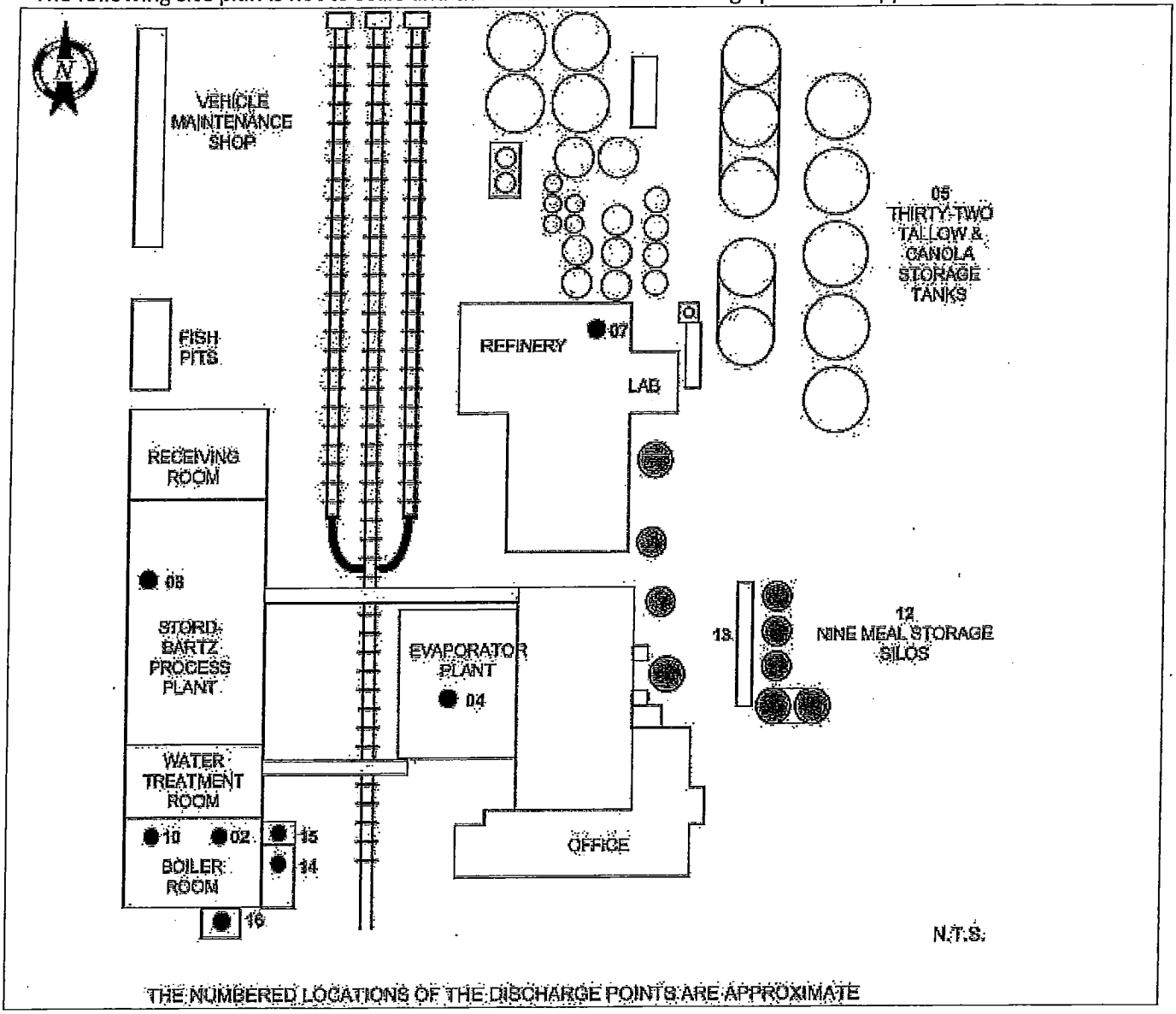
SECTION 4 – SITE PLAN

LEGAL DESCRIPTION OF DISCHARGE SITE: **105 COMMERCIAL Block C & D, District Lot 183 New Westminster Land District, Portion BED OF BURRARD INLET, LID 1-01-00161 to 1-01-00166 and 1-01-00251 LEASE V-4099(06) & V-4368(02) OR PCL D OF THE BED OF BURRARD INLET & OF BLK 21 IN C&D NHB LBF#:VPAV4099**

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



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