REPORT

WESTERN FOREST PRODUCTS INC.
DUKE POINT SAWMILL

NANAIMO, BC

TECHNICAL ASSESSMENT REPORT
RWDI # 2405727
August 16, 2024

SUBMITTED TO

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Director, Environment
Western Forest Products Inc.
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SUBMITTED BY

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EXECUTIVE SUMMARY

RWDI AIR Inc. was retained by Western Forest Products Inc. to prepare their waste discharge application under the Environmental Management Act for Duke Point Sawmill located in Nanaimo, BC. The facility is planning to add a new kiln which will have emissions of total particulate matter (TPM), oxides of nitrogen (NO_X) and carbon monoxide (CO). The contents of the report follow the requirements outlined in the Application Instruction Document (AID) and Information Requirements Table (IRT) provided by the Ministry dated April 3, 2024, and included in Appendix A. The final column of the IRT has been populated, specifying where each piece of information has been included in this application.

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1 PROJECT DESCRIPTION

1.1 Description of Project and Changes

The Duke Point Sawmill (the facility) is a saw and papermill located at 500 Duke Point Highway, Nanaimo, BC, V9X 1H5. The facility operates under permit #8003 under the provisions of the Environmental Management Act. The facility creates a wide variety of wood products, e.g. decking, fencing, siding, paneling, moulding, etc. for interior, exterior, structural, and industrial construction projects.

Source of emissions to air onsite include the following, as listed on their permit:

- Planermill Shavings Cyclone and Baghouse
- Sawmill Trimmer/Planer Shavings Transfer Baghouse
- Planermill Chip Blower Cyclone
- Sawmill Headrig Cyclone
- Metal Filings Room Cyclone
- Planermill End Seal Paint Spray Booth No. 1
- Planermill Paint Spray Booth No. 2
- Chemical Spray Booth
- Miscellaneous sources: General Shop 1 (Filing & Grinding), Welding, Babbit Pots, General Shop 2 (Filing & Grinding), Tanks and Dip Tank

The facility is planning to add a continuous wood drying kiln to their site with construction starting in Q2 2025 and operations to begin in Q4 2025. The new kiln will burn natural gas and the created heat will be used to dry wood after it is processed in the sawmill and before the Planermill, and the combustion of natural gas will create emissions to air of oxides of nitrogen (NO_x), total particulate matter (TPM) and carbon monoxide (CO). The kiln will have a capacity of 70 million board feet per year (or mmfbm/year) and anticipated fuel use of 25 million BTU per hour (or MMBTU/hr) of natural gas. The kiln is also proposed to have a 7.5 mmBTU/hr condensate burner. The predicted emissions from the kiln are shown in Table 1.

Table 1: New Source Kiln #1 Emissions in Grams/Second

Source	TPM	NO_x	CO
Kiln #1	0.03	0.40	0.34

Note: Emissions are calculated using emission factors from US EPA AP-42 Chapter 1.4: Natural Gas Combustion

1.2 Permitting History

Air discharge has been authorized at the site since May 11, 1989, under authorization PA-8003. The permit has been amended four times, in 2007, 2016, 2017, and 2022. In 2016, the authorization was amended to include new authorized works such as a Baghouse and Miscellaneous Sources and update the site plan. In 2017, the permit was amended to include a kiln (kiln was never built). This amendment also expanded general requirements, including the operation of the Baghouse and a Fugitive Dust Control Plan. The permit was then amended in 2022 with a removal of the proposed kiln, an update to the miscellaneous sources, Fugitive Dust Management Plan guidance, Chemical Management requirements for the spray booth and dip tank, and also added annual and non-compliance reporting.

1.3 Location Map

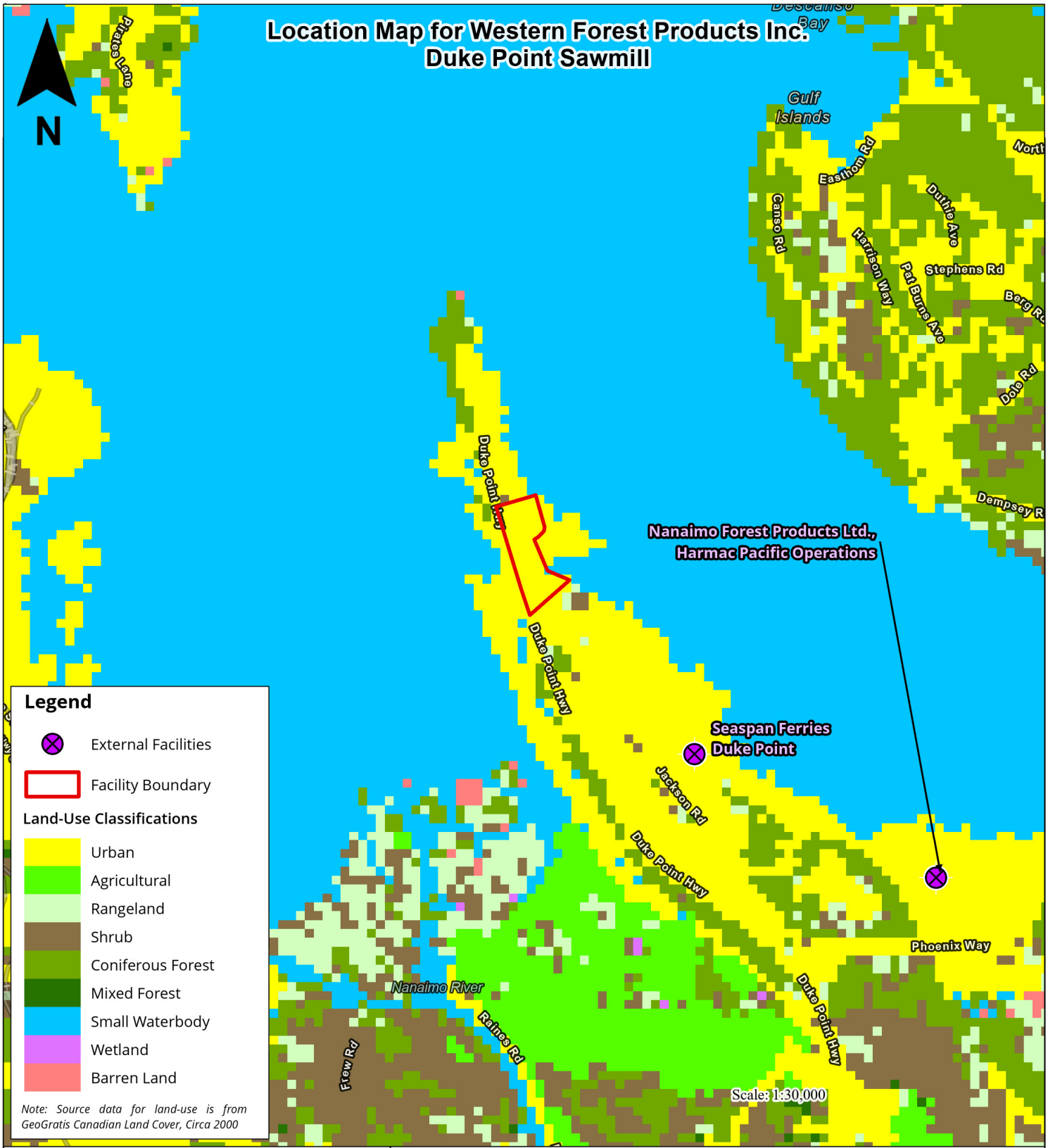
Figure 1 shows a map of the facility and surrounding areas, showing land use categories and nearby industrial facilities.

1.4 Qualified Professional

The following qualified professional has contributed to this application.

- Jeff Lundgren, M.Sc., Technical Director at RWDI: reviewed the technical assessment report and acted as advisor to Western Forest Products Inc. on this application.

See Appendix B for their signed Conflict of Interest and Declaration of Competency forms.



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2 ENVIRONMENTAL SETTING – METEOROLOGY

As per the IRT (Appendix A), information on meteorology is not required for this application.

3 AIR DISCHARGES AND TREATMENT

3.1 Pollution Control Works

The kiln will be heated by a 25MMBTU/hr direct-fired natural gas burner, which is expected to operate at 15MMBtu/hr. Heat from the combustion chamber is circulated through ducts and a plenum into the kiln enclosure via a large fan. The kiln drying section will have 12 square vents approximately 30 inch x 30 inch throughout the roof of the drying chamber to allow for steam to escape. The vent opening is controlled by humidity and temperature inside the kiln. Each end of the kiln will have a vapour extraction fan to force vapour out of the end of the non-heated conditioning chambers. The vapour extraction fans are 20,000 cubic feet per minute (cfm), 32 feet diameter, and approximately 35 feet off the ground. The species to be dried may include a mix of coastal species including Hemlock, Douglas Fir, Western Red Cedar, Yellow Cedar, and Balsam. The condensate system is described in section 6.3 below.

3.2 Emission Inventory

The emission inventory for existing sources and the one new source Kiln #1 is provided in Table 2. Currently locations A and B are being considered for the new continuous kiln. In addition to the existing sources listed in Table 2, the facility permit also lists the following sources: Planermill End Seal Paint Spray Booth No. 1, Planermill End Seal Paint Spray Booth No. 2, Chemical Spray Booth, and Miscellaneous Sources. These sources are expected to have negligible emissions of the contaminants of concern related to the new equipment, and thus have not been included in the table.

Table 2: Emissions Inventory for Sources at Western Forest Products Inc. Duke Point Sawmill

Source		Maximum discharge rate (g/s)			Maximum discharge concentration (mg/m^3)			Maximum flow rate [3]	Operating duration	Discharge location	
#	Name	TPM	NO_X	CO	TPM	NO_X	CO	(m^3/s)	(hours/year)	Latitude	Longitude
1	Planer Shavings Cyclone and Baghouse [1]	0.67	0	0	20	0	0	33.50	6240	49.1543˚N	123.8887˚W
2	Sawmill Trimmer/Planer Shavings Transfer Baghouse [1]	0.2	0	0	15	0	0	13.33	6240	49.1554˚N	123.8880˚W
3	Planermill Chip Blower Cyclone [1]	1.6	0	0	115	0	0	13.91	6240	49.1540˚N	123.8896˚W
4	Sawmill Headrig Cyclone [1]	1.61	0	0	115	0	0	14.00	6240	49.1550˚N	123.8879˚W
5	Metal Filings Room Cyclone [2]	1.61	0	0	115	0	0	14.00	6240	49.1546˚N	123.8882˚W
6	Kiln #1 [4]	0.03	0.40	0.34	9	117	98	3.43	8400	Location A: 49.1516˚N Location B: 49.1508˚N	Kiln Location A: 123.8883˚W Kiln Location B: 123.8879˚W

Notes:

n/a: not applicable

1. Maximum discharge rates and concentrations of TPM and operating durations for source # 1,2, 3 and 4 are from the facility's permit #8003.
2. Parameters for source #5 are assumed to be the same as for source #4.
3. Maximum flow rates for sources #1 to 5 are calculated based on the maximum discharge rates and concentrations.
4. Kiln #1 is the only new source. Maximum discharge rates for Kiln #1 are calculated using emission factors from US EPA AP-42 Chapter 1.4: Natural gas combustion, using a heat input of 32.5 MMBTU/hour. Maximum flow rate for Kiln #1 is estimated based on the natural gas heat input, calculating the molar input flow rate and using stoichiometric calculations to estimate the exhaust using the chemical composition of natural gas, assuming an exhaust temperature of 85˚C. Maximum discharge concentrations for Kiln #1 are based on maximum discharge rates and flow rate.
5. In addition to the sources listed in the table, the facility has paint and chemical spray booths and miscellaneous emission sources for which emissions of TPM, NO_X and CO are assumed to be negligible.

3.3 Point Source Parameters

Source discharge parameters for existing sources and the one new source Kiln #1 is provided in Table 3. Currently locations A and B are being considered for the new continuous kiln. The corresponding elevations for both locations have been included in the table.

Table 3: Source Discharge Parameters for Emission Sources at Western Forest Products Inc. Duke Point Sawmill

Source		Stack height	Stack top inside diameter	Elevation above sea level	Stack gas exit velocity	Stack gas discharge temperature
#	Name	(m)	(m)	(m)	(m/s)	(˚C)
1	Planer Shavings Cyclone and Baghouse	15.2	2.0	3.8	10.6	20
2	Sawmill Trimmer/Planer Shavings Transfer Baghouse	20.7	1.0	3.9	17.6	20
3	Planermill Chip Blower Cyclone	14.0	0.7	3.7	35.0	20
4	Sawmill Headrig Cyclone	19.5	1.4	4.0	9.5	20
5	Metal Filings Room Cyclone	21.9	1.4	4.0	9.5	20
6	Kiln #1	7.5	0.6	Kiln Location A: 3.9 Kiln Location B: 4.5	12.1	85

Notes:

1. Stack velocities are calculated based on the stack flow rates from Table 1, and stack areas.
2. Kiln #1 is the only new source. The exhaust from the main burner and the condensate burner are assumed to exhaust from the same stack. Stack height and diameter are best estimates at this time.
3. In addition to the sources listed in the table, the facility has paint and chemical spray booths and miscellaneous emission sources.

3.4 Assessment of Best Practices

Please see Appendix C, which includes an assessment of continuous kilns being the best lumber drying practice from an air emissions perspective.

3.5 Emissions Offsets

There are no emissions offsets associated with the current permit. As this constitutes a minor amendment there are no plans to pursue offsets for the additional kiln source.

3.6 Process Flow Diagrams for Waste Streams

A process flow diagram for the facility is included in Appendix D.

3.7 Detailed Site Plan

Figure 2 shows a detailed site plan including the locations for the main point source discharges. Currently locations A and B are being considered for the new continuous kiln based on the results of other permitting considerations. The single kiln will be sited in one of the two proposed locations. The final location will be clarified as soon as possible.

4 IMPACT ASSESSMENT

4.1 Impacts And Risks

Currently the Duke Point Sawmill is not a major contributor to regional air quality, does not have significant impact on local air quality, and the immediate vicinity is sparsely populated so there is little risk for human exposure. Nanaimo Forest Products Ltd. Harmac Pacific Operations Pulpmill and the BC Ferries Duke Point Terminal are the only major emissions sources in the nearby surroundings. Western Forest and the Ferry terminal are isolated on the already heavily industrialized Duke Point peninsula, and it is over 3km distant to the Harmac Mill, so emissions from Western each have time and distance space to disperse before any potential interaction with emission from Harmac. The impacts to air quality and risk of sources at the facility contributing to any additional air quality exceedances in the area are expected to be low.

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5 MONITORING PLANS

5.1 Discharge Monitoring Plan

The facility's current permit doesn't require source testing, and the facility doesn't currently conduct source testing. Because this is a minor amendment to the existing permit, the requirement for source testing isn't anticipated to change.

6 MANAGEMENT PLANS

6.1 Maintenance Start-Up and Shutdown Plan

The facility's current permit doesn't require a maintenance start-up and shutdown plan, and the kiln emission profile is such that there is no significant change. Unlike, for example, a waste-to-energy incinerator that requires time to reach full temperature in the combustion chamber, or a gas plant that may have to flare excess gas during a shutdown, there is little or no change in emissions when either starting or stopping the kiln. Therefore, no specific plan for either is required.

6.2 Air Episode Management Plan

The facility's current permit doesn't require an air episode management plan, and the facility doesn't currently have one. Since the facility sources are relatively minor sources of emissions and there is only one other large industrial source nearby, the contribution of the facility to cumulative impacts during air quality episodes in the region is expected to be negligible. As a result, it's not anticipated that an air episode management plan will be required.

6.3 Fugitive Dust Management Plan

The facility's fugitive dust management plan is attached in Appendix E.

6.4 Treatment Residuals Management Plan

Kiln condensate will be collected by gravity in drains and sumps and pumped to a large boil off tank and evaporated. The kiln is proposed to come with a 7.5 MMBtu/hr condensate burner, but will be designed to be operated at 2.5 MMBtu/hr.

Other potential kiln condensate treatment methods which may be considered in the future include discharging to the local sanitary sewer system, or to the existing on-site stormwater collection and treatment pond.

7 STATEMENT OF LIMITATION

This report entitled "Technical Assessment Report for Western Forest Products Inc. Duke Point Sawmill" was prepared by RWDI AIR Inc. ("RWDI") for Western Forest Products Inc. ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

8 REFERENCES

United States Environmental Protection Agency (U.S. EPA), 1998. AP 42, Fifth Edition, Volume 1 Chapter 1: External Combustion Sources. Website: https://www.epa.gov/sites/default/files/2020-09/documents/1.4_natural_gas_combustion.pdf

APPENDIX A

March 13, 2024

Authorization Number: 8003
Tracking Number: 424113

VIA EMAIL:

Western Forest Products Inc.
Suite 800, 1055 West Georgia St
PO Box 11122
Vancouver, BC
V6E 3P3

Dear Applicant:

Re: Confirmation of *Environmental Management Act* Waste Discharge Application Requirements

This letter is to provide written confirmation of the information that is required for your application to be considered complete and ready for Ministry of Environment and Climate Change Strategy (ENV) consideration. This is your Application Instruction Document (AID). Form's, guidance and documentation on preparing the your final application package are available on the ministry's Change a waste discharge authorization website.

Technical Requirements

Attached you will find the final Information Requirements Table (IRT) which defines the technical aspects that should be included in your final application. The following documents must be submitted in your Final Application. Please refer to the attached IRT for the required content of these documents and follow guidance and templates where possible.

Final Application Requirements

- Final Application Form for an Authorization Amendment – EPD-EMA-05.2
- Final Discharge Factors Form – EPD-EMA-03.2
- Qualified Professional(s) Declaration of Competency and Conflict of Interest Disclosure statement(s) (see below)
- Technical assessment report addressing the required information outlined in the attached IRT
    - The ministry has a Guidance on Applications for Permits – Technical Assessment document, however, this document pre-dates the ministry's current structured application processes and procedures, including the use of the AID and IRT.
    - The required content of technical assessment report is as specified in the attached IRT. It is recommended that the headings in the technical report align with those in the IRT.
- Fugitive Dust Management Plan – developed in accordance with the ministry's Fugitive Dust Management Plan Guidance.

Public Notification and Agency Referral Requirements

The Public Notification Regulation (PNR) specifies the public notification requirements for applications to amend waste discharge authorizations; it divides applications into either minor or significant amendments depending on the purpose, scale and potential impacts of the requested change(s).

The ministry has assessed that the proposed changes, if approved, would result in an increase of less than 10% which classifies it as a minor amendment. As such, in accordance with Schedule A of the PNR, there are no public notification requirements for this application.

It is requested that Western Forest Products Inc. post the application and the technical assessment report on the corporate website.

Qualified Professional Declaration Forms

To ensure professional accountability, the ministry requires that persons fulfilling legal requirements as qualified professionals (QP's) under ministry legislation must submit signed Declarations of Competency and signed Conflict of Interest Disclosure Statements. Completed declaration forms should be included in your Final Application package. Each QP must provide declarations for the portion of the application for which they are responsible. Copies of the forms, and additional information, are available on the ministry's Professional Accountability Website.

Next Steps

Now that the Preliminary Application Phase is complete, it is up to you, the Applicant, to prepare your final application package for submission in accordance with this Application Instruction Document (AID). The final application package must be submitted to: PermitAdministration.VictoriaEPD@gov.bc.ca, or via mail/courier to the addresses on the final application form.

At this time your application has been assessed as a medium complexity file. Please note that the complexity category may change after your Final Application has been received.

If you have any questions, please contact Peter Lawrie at Peter.Lawrie@gov.bc.ca or 250-459-9517 and include your application tracking number (424113).

Yours truly,

Peter Lawrie, P.Ag.
Section Head, Wood Products and Bioenergy
Industrial Waste Authorizations

Enclosures:

- Information Requirements Table

Profiles of Indigenous Peoples (PIP): Consultation Areas

Conflicting Features:

Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Organization Type	BAND
Contact Organization	Stz'uminus First Nation
Contact Address	12611A Trans Canada Hwy
Contact City	Ladysmith
Contact Province	BC
Contact Postal Code	V9G 1M5
Contact Phone Number	2502457155
Contact Fax Number	2502453012
Contact Email	referrals@coastsalishdevcorp.com

Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Contact Name	Lake Cowichan First Nation
Contact Title	Chief and Council
Contact Organization	Ts'uubaa-asatx First Nation
Contact Address	P.O. Box 159 313B Deer Road
Contact City	Lake Cowichan
Contact Province	BC
Contact Postal Code	V0R 2G0
Contact Phone Number	2507493301
Contact Fax Number	2507494286
Contact Email	natalie.anderson@cowichantribes.com

Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Contact Name	Lyackson First Nation
Contact Title	Chief and Council
Contact Organization	Lyackson First Nation
Contact Address	8017 Chemainus Road
Contact City	Chemainus
Contact Province	BC
Contact Postal Code	V0R 1K5
Contact Phone Number	18885925766
Contact Fax Number	2502465049
Contact Email	referrals@lyackson.bc.ca

Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Organization Type	BAND
Contact Name	Penelakut Tribe
Contact Title	Chief and Council
Contact Organization	Penelakut Tribe
Contact Address	11330 Clam Bay Road North
Contact City	Penelakut Island
Contact Province	BC
Contact Postal Code	V0R 5K0
Contact Phone Number	2502462321
Contact Fax Number	2502462725
Contact Email	robert@penelakut.ca

Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Contact Name	Halalt First Nation
Contact Title	Chief and Council
Contact Organization	Halalt First Nation
Contact Address	7973 Chemainus Road
Contact City	Chemainus
Contact Province	BC

Contact Postal Code	V0R 1K5
Contact Phone Number	2502464736
Contact Fax Number	2502462330
Contact Email	manager@halalt.org

Consultation Area Label	1,240
Consultation Area Name	Hul'qumi'num Nations - Marine Territory
Contact Name	Champagne and Aishihik Referrals Cowichan Tribes
Contact Title	Referrals
Contact Organization	Cowichan Tribes
Contact Address	5760 Allenby Road
Contact City	Duncan
Contact Province	British Columbia
Contact Postal Code	V9L 5J1
Contact Phone Number	2507483196
Contact Fax Number	2507481233
Contact Email	natalie.anderson@cowichantribes.com

Consultation Area Name	Snuneymuxw First Nation
Contact Name	Snuneymuxw First Nation
Contact Title	Chief and Council
Contact Organization	Snuneymuxw First Nation
Contact Address	668 Centre Street
Contact City	Nanaimo
Contact Province	BC
Contact Postal Code	V9R 4Z4
Contact Phone Number	2507402300
Contact Fax Number	2507533492
Contact Email	taraw@snuneymuxw.ca

Ministry of Environment and Climate Change Strategy

Information Requirements Table for Air Emissions

Application Tracking Number: 424113
Authorization Number: 8003
Western Forest Products Inc. Modernization-Duke Pt.]

Applicant Summary	
Application Tracking #	**424113**
Authorization #	**8003**
Applicant / Facility Name:	**Western Forest Products Inc. Value Added Division**

Ministry of Environment	
Prepared by:	**Peter Lawrie**
Title:	**Section Head**
Date:	**2024-04-03**

The *Information Requirements Table (IRT) for Air Emissions* is a tool used by Ministry of Environment and Climate Change Strategy (ENV) staff to document specific guidance and instructions given to an applicant pursuing authorization to discharge under the *Environmental Management Act*.

Note: this document was developed to capture all the items and complexities concerning air emissions. Accordingly, for any given application, not all the items will apply and not all required items will warrant detailed discussion of methods and other concerns.

As part of the Preliminary Application Phase, ENV will discuss with the applicant the items listed in this table to determine what will be required in support of their final application. A tick mark in the “Required” box of the “Requirements” Column in the table indicates an information item to be included into the application package as agreed to by both parties or as directed by ENV. Should it be determined that specific methods will be used to derive this information, this will be specified with a tick mark in the “Methods” box and specific details in the Comments column. In cases where complex impact assessments are to be undertaken, agreement on the methods used will be required. For simple methods, the methods used could be discussed with the applicant in a meeting and noted in the “Comments” column as agreed to in the table. For more complex methods, the applicant may be required to submit a “Methods Package” by an agreed date for ENV review, comment and acceptance. Once methods are accepted by ENV they should be either described in the “Comments” column and/or a reference made to the document describing the Methods Package.

If an IRT is required, the Final IRT will form part of an Application Instruction Document (AID) which documents application submission requirements for the applicant. The AID is issued by the Director after a preliminary application meeting has occurred. The AID will also include specific instructions related to the signoff of Qualified Professionals for Declaration of Competency and Conflict of interest.

When submitting the final application, please ensure the IRT is also submitted with the “Location” Column filled out to identify where each of the required items is located in the final application for all information requirements identified.

The ENV will be screening and assessing this application against this table and it is expected that the applicant does the same prior to any preliminary meetings and/or prior to any final submissions. The Ministry will be screening the final received application against the requirements noted in the Final AID to ensure it is complete before resources are dedicated to a full, detailed review.

Ministry of Environment and Climate Change Strategy

Information Requirements Table for Air Emissions

Application Tracking Number: 424113
Authorization Number: 8003
Western Forest Products Inc. Modernization-Duke Pt.]

Information	Requirements	Comments	Location in Final Application
1 PROJECT DESCRIPTION			
1.1 Describe the project including the proposed facilities and processes, an existing facility overview and describe the products Provide a summary of the proposed changes. E.g. Upgrading existing primary wood manufacturing facility to eliminate stud mill and add additional drying capacity. Describe the project as it relates to changes in waste discharges. (a) a description of the waste in general terms based on the origin or nature of the operation that produced it; (b) the characteristics of the waste in specific terms including the content of potential pollution causing substances expressed in metric scientific units; (c) the volume of material to be discharged, emitted or stored during a specific time period; (d) changes in discharge works (additions and removals); and (d) proposed implementation phases and dates.	Required ☒		Technical Assessment Report (TR), Section 1.1
1.2 Describe the project permitting history and list related reports It is noted that the previous amendment resulted in a decrease in emissions. Provide a brief summary of changes.	Required ☒		TR, Section 1.2
1.3 Provide a location map of the facility and surrounding areas and include scale. Identify the project location including site and surrounding land uses and other industrial facilities in the area	Required ☒	Facility location of GPS coordinates must be in decimal degrees and to the fourth decimal place. Ministry template: https://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/guides/forms/epd-ema-08_location_map_form.pdf	TR, Section 1.3 and Figure 1
1.4 List of Qualified Professionals and signed Conflict of Interest & Declaration of Competency	Required ☒	Must have a combination of suitable education, training, experience acceptable to the Director and both forms signed	TR, Section 1.4 and Appendix B

Ministry of Environment and Climate Change Strategy

Information Requirements Table for Air Emissions

Application Tracking Number: 424113
Authorization Number: 8003
Western Forest Products Inc. Modernization-Duke Pt.]

Information	Requirements	Comments	Location in Final Application
2 ENVIRONMENTAL SETTING – METEOROLOGY			
2.1 Provide a detailed map showing the location of all site-specific and regional meteorological stations in relation to project facilities	Required ☐		
2.2 Baseline meteorological study	Required ☐		
3 AIR DISCHARGES AND TREATMENT			
3.1 Provide a description of pollution control works and treatment efficiencies based on manufacturer specifications for pollution control works or an engineering assessment. Include a description of the venting systems of the kilns and the heating sources. Provide an breakdown of the species and approximate proportion to be processed.	Required ☒		TR, Section 3.1
3.2 Provide an emissions inventory that includes for each contaminant and source (point and non-point sources) • % change (if an amendment) • Maximum and average discharge rate (g/s) and concentration (mg/m3) for each contaminant • Maximum and average flow rate • Operating durations (i.e. hours per day, days per year) and frequency • Discharge location in decimal degrees, to the fourth decimal place • Clarify methods used to determine emissions summary	Required ☒		TR, Section 3.2 and Table 1
3.3 For each point-source discharge provide: • Stack height (m) • Stack top inside diameter (m) • Elevation of stack base (m above sea level) • Stack gas exit velocity (m/s) • Stack gas discharge temperature	Required ☒		TR, Section 3.3 and Table 2
3.4 Best Achievable Technology Assessment by QP and/or assessment of Best Practices Best Achievable Technology Steps (gov.bc.ca)	Required ☒	Prepared by a QP	TR, Section 3.4 and Appendix C
3.5 Describe emissions offsets (if applicable)	Required ☒		TR, Section 3.5
3.6 Provide process flow diagrams for waste streams	Required ☒		TR, Section 3.6 and Appendix D

Ministry of Environment and Climate Change Strategy

Information Requirements Table for Air Emissions

Application Tracking Number: 424113
Authorization Number: 8003
Western Forest Products Inc. Modernization-Duke Pt.]

Information	Requirements	Comments	Location in Final Application
3.7 Detailed site plan that includes locations and coordinates (as appropriate) for each point and non-point discharge Coordinates must be in decimal degrees and to the fourth decimal place	Required ☒	Prepared by a QP https://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/guides/forms/epd-ema-09_site_plan_form.pdf	TR, Section 3.7 and Figure 2
4 IMPACT ASSESSMENT			
4.1 Provide a plain language summary of the impacts and risks based on technical assessment	Required ☒		TR, Section 4.1
4.2 Baseline meteorological and air quality monitoring report	Required ☐		
4.3 Provide a summary of previous stack tests which may include a Continuous Emissions Monitoring Systems (CEMS) data summary and interpretation	Required ☐	(For existing facilities) Provide data summary in digital format.	
4.4 Dispersion modelling plan and report (dispersion modeling plan must be approved by an ENV Air Quality Meteorologist) Prepared by a QP	Required ☐	Prepared by a QP http://www.bcairquality.ca/assessment/dispersion-modelling.html	
5 MONITORING PLANS			
5.1 Provide a discharge monitoring (point source) plan for all proposed emissions	Required ☒		TR, Section 5.1
5.2 Provide a Baseline Ambient Monitoring (pre-permitting) plan (may include existing stations, if applicable)	Required ☐		
5.3 Provide a Ambient Monitoring (post-permitting) plan	Required ☐		
5.4 Continuous Emissions Monitoring, /Process Monitoring Systems (i.e. pressure drop in baghouses, opacity monitoring etc.)	Required ☐		
6 MANAGEMENT PLANS			
6.1 Maintenance Start-up and Shutdown Plan • Outline procedures to reduce air emissions during start-up and shutdown periods	Required ☒		TR, Section 6.1
6.2 Air Episode Management Plan • Outline procedures to reduce air emissions during air quality advisories	Required ☒		TR, Section 6.2
6.3 Fugitive Dust Management Plan • Specify facility areas with high risk of fugitive dust generation • Facility inspection and monitoring schedule • Fugitive dust mitigation measures and documentation • Record keeping and data submission requirements	Required ☐	Optional unless significant changes are intended to the previously received plan.	TR, Section 6.3 and Appendix E

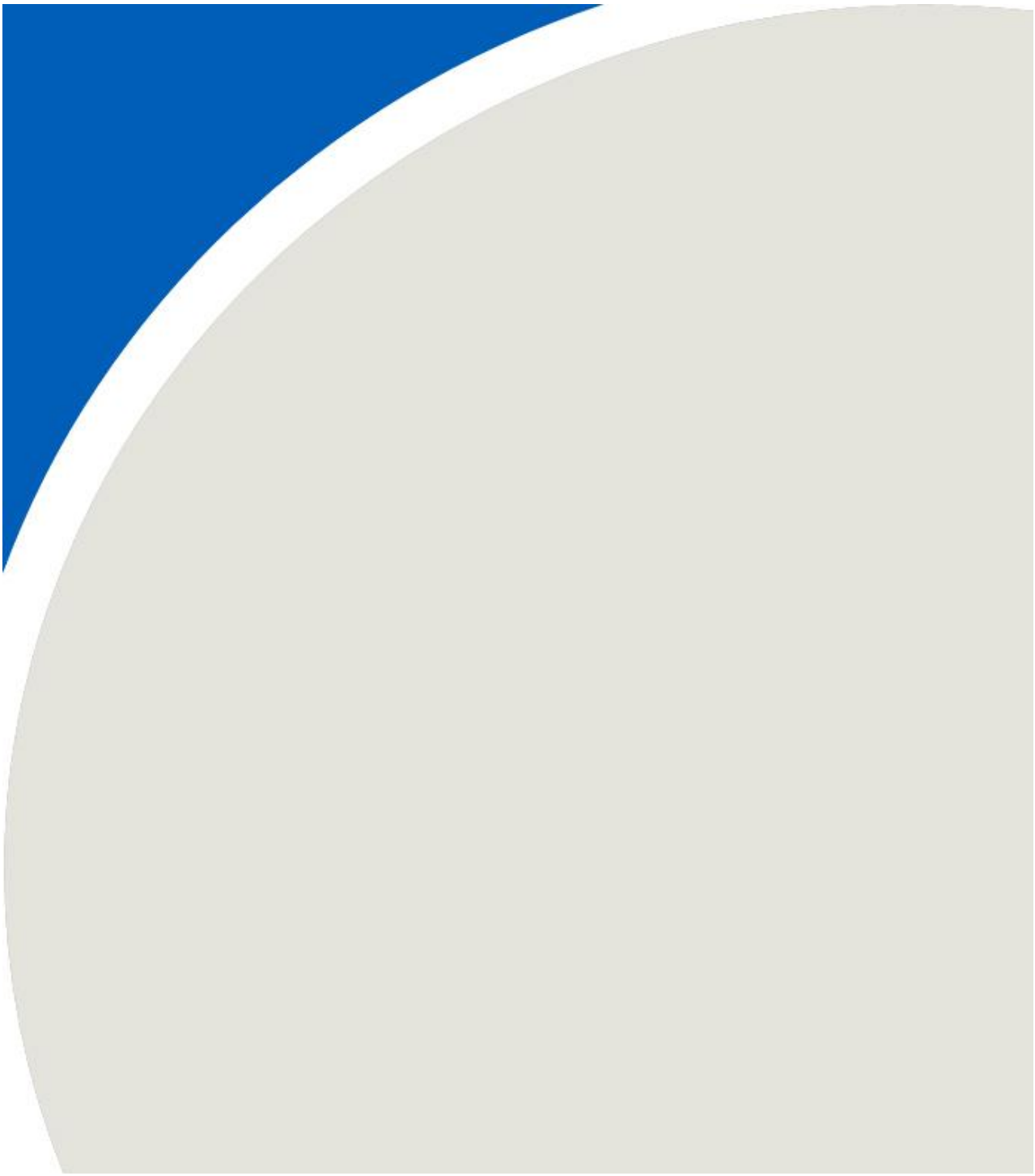
Ministry of Environment and Climate Change Strategy

Information Requirements Table for Air Emissions

Application Tracking Number: 424113
Authorization Number: 8003
Western Forest Products Inc. Modernization-Duke Pt.]

Information	Requirements	Comments	Location in Final Application
6.4 Treatment Residuals Management Plan Treatment method for kiln condensate	Required ☒		TR, Section 6.4
6.5 Odour Management Plan	Required ☐		

APPENDIX B



Ministry of Environment and Climate Change Strategy

Conflict of Interest Disclosure Statement

A qualified professional [1] providing services to either the Ministry of Environment and Climate Change Strategy ("ministry"), or to a regulated person for the purpose of obtaining an authorization from the ministry, or pursuant to a requirement imposed under the *Environmental Management Act,* the *Integrated Pest Management Act* or the *Park Act* has a real or perceived conflict of interest when the qualified professional, or their relatives, close associates or personal friends have a financial or other interest in the outcome of the work being performed.

A real or perceived conflict of interest occurs when a qualified professional has

a) an ownership interest in the regulated person's business;

b) an opportunity to influence a decision that leads to financial benefits from the regulated person or their business other than a standard fee for service (e.g. bonuses, stock options, other profit sharing arrangements);

c) a personal or professional interest in a specific outcome;

d) the promise of a long term or ongoing business relationship with the regulated person, that is contingent upon a specific outcome of work;

e) a spouse or other family member who will benefit from a specific outcome; or

f) any other interest that could be perceived as a threat to the independence or objectivity of the qualified professional in performing a duty or function.

Qualified professionals who work under ministry legislation must take care in the conduct of their work that potential conflicts of interest within their control are avoided or mitigated. Precise rules in conflict of interest are not possible and professionals must rely on guidance of their professional associations, their common sense, conscience and sense of personal integrity.

Declaration

I Jeff Lundgren, as a member of NA declare

Select one of the following:

☒ Absence from conflict of interest

Other than the standard fee I will receive for my professional services, I have no financial or other interest in the outcome of this Permit application.
I further declare that should a conflict of interest arise in the future during the course of this work, I will fully disclose the circumstances in writing and without delay to Peter Lawrie, erring on the side of caution.

☐ Real or perceived conflict of interest

Description and nature of conflict(s):

_____

_____

_____

I will maintain my objectivity, conducting my work in accordance with my Code of Ethics and standards of practice.

In addition, I will take the following steps to mitigate the real or perceived conflict(s) I have disclosed, to ensure the public interest remains paramount:

_____

_____

_____

Further, I acknowledge that this disclosure may be interpreted as a threat to my independence and will be considered by the statutory decision maker accordingly.

This conflict of interest disclosure statement is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Signature:

X Jeff Lundgren

Print name: Jeff Lundgren

Date: 07/23/2024

Witnessed by:

X _____

Print name: Matthew Sawycky

[1]*Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who*

a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and

b) *through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.*

BRITISH COLUMBIA | Ministry of Environment and Climate Change Strategy

Declaration of Competency

The Ministry of Environment and Climate Change Strategy relies on the work, advice, recommendations and in some cases decision making of qualified professionals[1], under government's professional reliance regime. With this comes an assumption that professionals who undertake work in relation to ministry legislation, regulations and codes of practice have the knowledge, experience and objectivity necessary to fulfill this role.

1. Name of Qualified Professional Jeff Lundgren

   Title Technical Director and Principal

2. Are you a registered member of a professional association in B.C.? ☐ Yes ☑ No

   Name of Association: _____ Registration # _____

3. Brief description of professional services:

   Emissions estimation and permitting support

This declaration of competency is collected under section 26(c) of the *Freedom of Information and Protection of Privacy Act* for the purposes of increasing government transparency and ensuring professional ethics and accountability. By signing and submitting this statement you consent to its publication and its disclosure outside of Canada. This consent is valid from the date submitted and cannot be revoked. If you have any questions about the collection, use or disclosure of your personal information please contact the Ministry of Environment and Climate Change Strategy Headquarters Office at 1-800-663-7867.

Declaration

I am a qualified professional with the knowledge, skills and experience to provide expert information, advice and/or recommendations in relation to the specific work described above.

Signature: Witnessed by:

X Jeff Lundgren **X**

Print Name: Jeff Lundgren Print Name: Matthew Sawycky

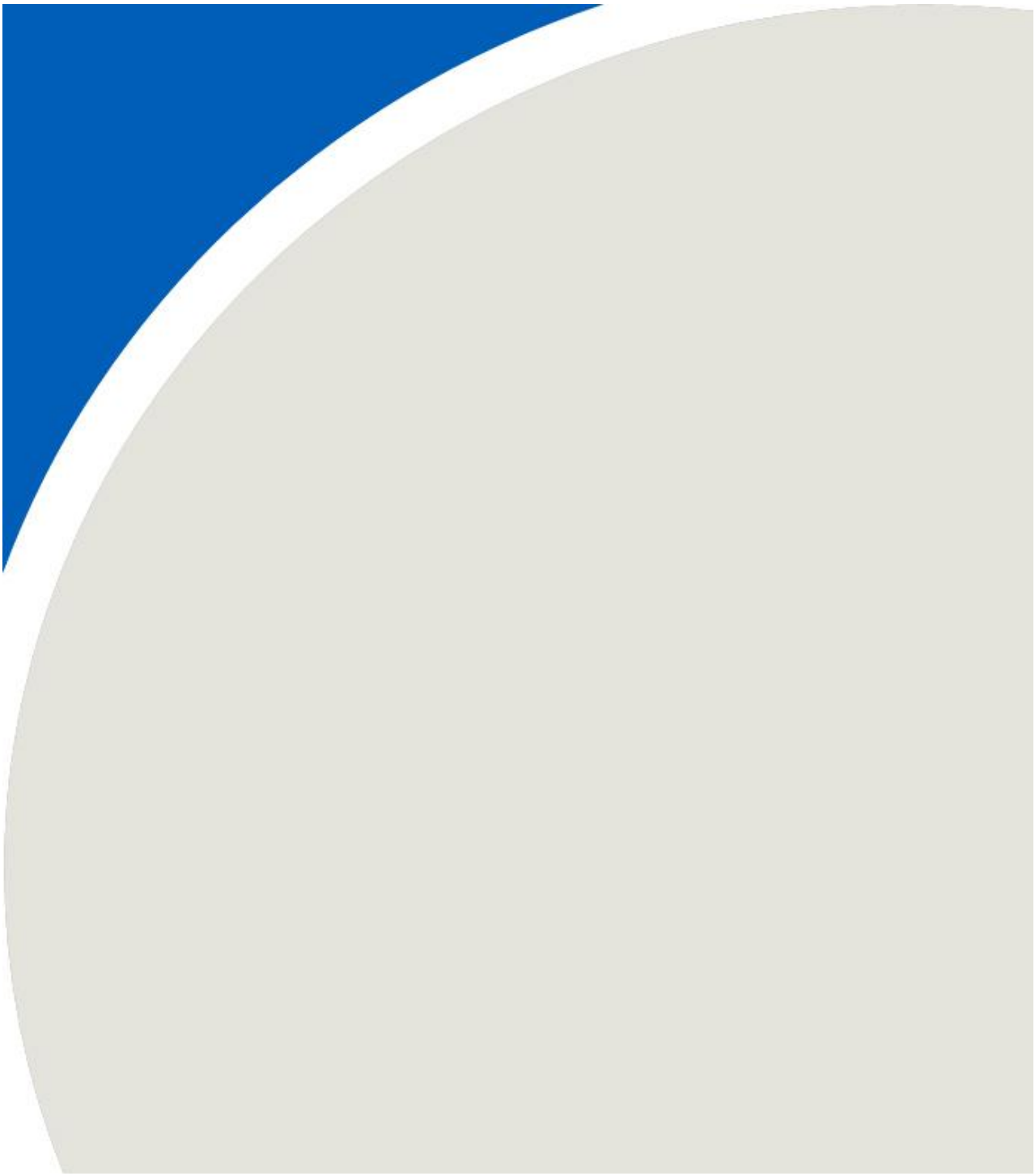
Date signed: 07/23/2024

[1] *Qualified Professional, in relation to a duty or function under ministry legislation, means an individual who*

a) is registered in British Columbia with a professional association, is acting under that organization's code of ethics, and is subject to disciplinary action by that association, and

b) *through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function.*

APPENDIX C



ASSESSMENT OF BEST PRACTICES FOR A CONTINUOUS LUMBER DRY KILN

To: Peter Lawrie, Section Head, Ministry of Environment and Climate Change Strategy

From: Jarrad Astren, P. Eng., Capital Projects Engineer

Date: July 25th, 2024

Re: Information Requirements Table for Air Emissions, Application Tracking Number 424113, Authorization Number 8003, Western Forest Products Inc., Duke Point Sawmill

Preface

This *Assessment of Best Practices* is not intended to satisfy a *Best Achievable Technology Assessment (BAT) by QP.*

Assessment of Best Practices

In the North American lumber industry there are two predominant types of lumber drying kilns used for drying boards in the sub-timber (< 6" thick) size class: batch kilns and continuous kilns. The operation of batch kilns involves loading a kiln full of lumber stacked on carts, closing doors at each end, and drying the lumber until the desired final moisture content is reached. Continuous kilns operate by carts of lumber being pushed through the kiln on two tracks in counterflow directions at frequent intervals (<=1hr) at a push rate required to reach the desired final moisture content. Continuous kilns achieve operational efficiencies due to the inherit lumber conditioning performance of the counterflow design. While other lumber drying kiln technologies exist, such as radio-frequency drying, they are not viable options for the application and scale of Western Forest Products' (WFP) business.

There are various heating mediums used in lumber drying kilns, but this assessment only considers direct-fired natural gas heated kilns and not indirect heating mediums such as thermal oil, water, or steam. This assessment assumes that the primary metric used to assess air emission best practices is the volume of lumber dried per unit of natural gas burned, which could be generally described as the energy efficiency of the kiln.

Kiln drying performance is highly variable based on a number of factors including: species of lumber being dried, lumber size, moisture content, ambient conditions such as temperature and humidity, and more. To describe WFP's assessment of lumber drying best practices real world examples from both 3 batch kilns and a continuous kiln drying a substantially similar product mix at the WFP Saltair Sawmill in Ladysmith, BC, which standardize the variable factors, is described.

	Lumber Dried per Year [MMFBM]	Length [ft]	Operating Hours per Year	Avg. Burner Output [MMBtu/hr]	**Annual Lumber Dried per Gas Usage [FBM/MMBtu]**	Annual Lumber Dried per Footprint Length [MFBM/ft]
Batch Kilns	47	1050	8082	27	**215.4**	44.8
Continuous Kilns	70	420	8400	21.7	**384.0**	166.7

Notes:

- The batch kilns volume of lumber dried is the 2023 actual, nominal count
- The continuous kiln volume of lumber dried is based on the design data, which we are on track to do YTD
- Burner output is assumed to be maximum nameplate, although either kiln may operate at lower outputs
- Operating hours per year is based on known uptime information

Additionally, there are no known options of industry proven technology for further energy recovery or efficiency improvement within the direct fired natural gas kiln heating medium known to WFP.

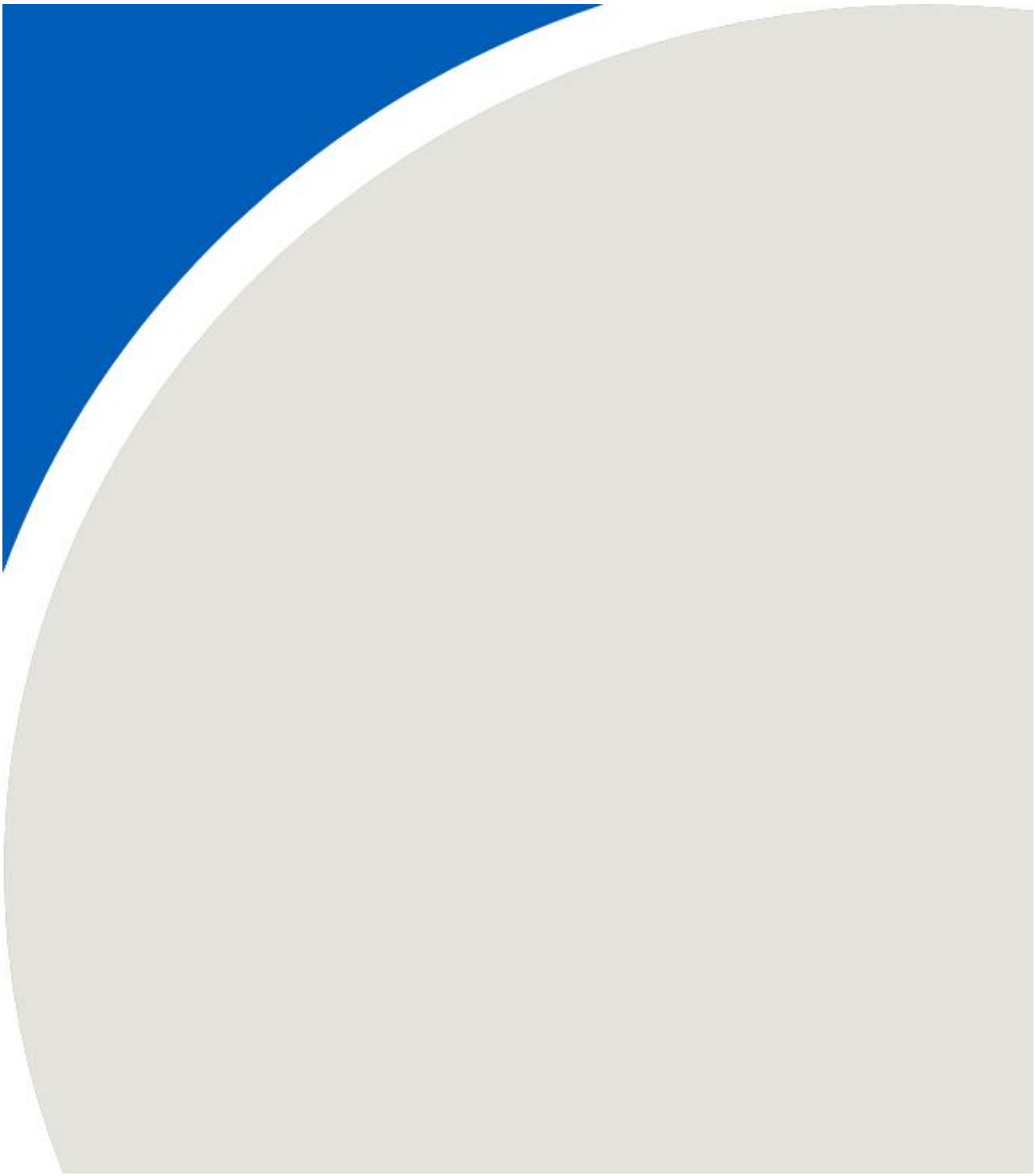
Conclusion

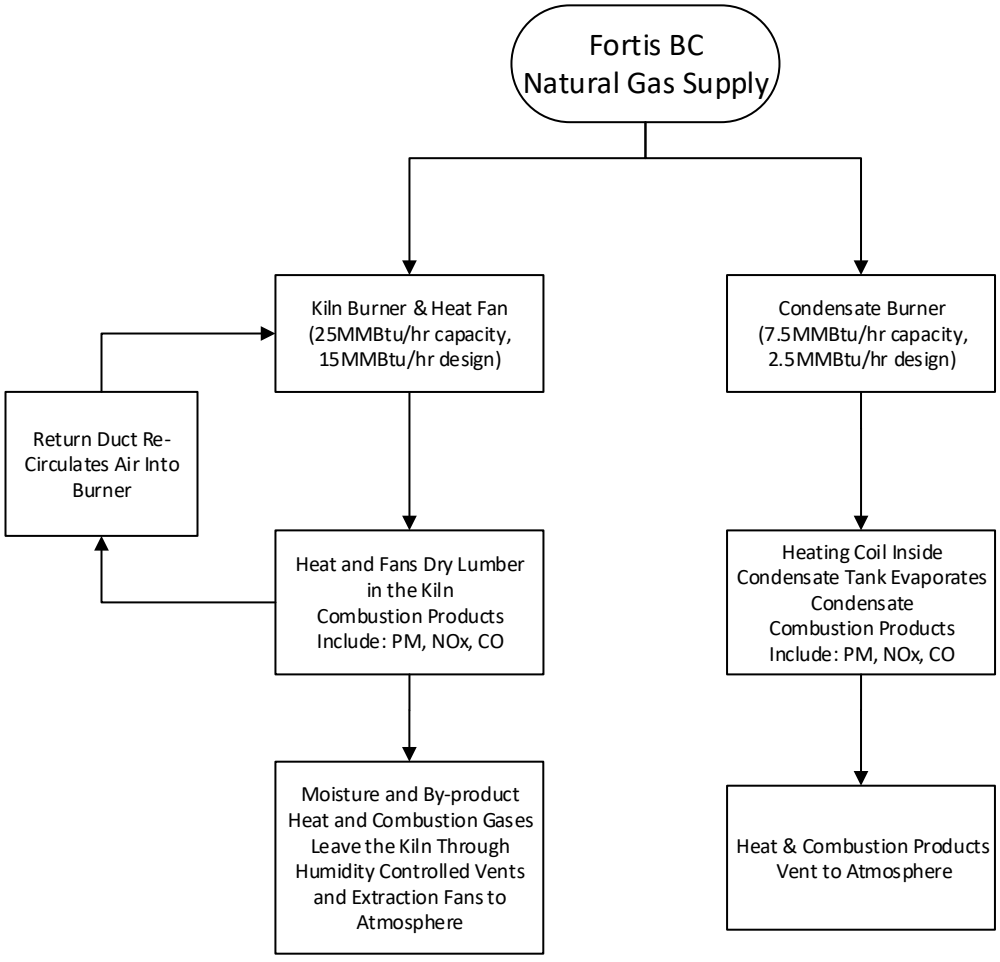
Based on empirical samples from the WFP Saltair sawmill, which supports expectations based on manufacturer design bases, the continuous kiln is ~78% more efficient than the batch kilns on a lumber/energy density basis. Therefore, it is WFP's assessment that continuous kilns are the technology of choice to pursue for future investments in lumber drying.

Jarrad Astren, P.Eng, Capital Projects Engineer

Jarrad Astren
_____
(name)

APPENDIX D




Fortis BC
Natural Gas Supply
Kiln Burner & Heat Fan
(25MMBtu/hr capacity,
15MMBtu/hr design)
Condensate Burner
(7.5MMBtu/hr capacity,
2.5MMBtu/hr design)
Return Duct Re-
Circulates Air Into
Burner
Heat and Fans Dry Lumber
in the Kiln
Combustion Products
Include: PM, NOx, CO
Heating Coil Inside
Condensate Tank Evaporates
Condensate
Combustion Products
Include: PM, NOx, CO
Moisture and By-product
Heat and Combustion Gases
Leave the Kiln Through
Humidity Controlled Vents
and Extraction Fans to
Atmosphere
Heat & Combustion Products
Vent to Atmosphere

APPENDIX E

Western Forest Products Inc.
DEFINING A HIGHER STANDARD™

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Introduction

1.1 Company and Permit

Western Forest Products (WFP) operates the Duke Point sawmill (DPS), planer and related facilities located at 500 Duke Point Highway, Nanaimo, BC. (see Figure 1 below).

WFP currently holds a permit to discharge air contaminants under the provisions of the Environmental Management Act (permit number 8003). The air discharge permit was renewed by the BC Ministry of Environment on June 7, 2022. A requirement of the permit is to control fugitive dust emissions through the preparation and implementation of a dust control plan (the Plan), which includes measures to control dust from, but not limited to, dust produced within the property boundaries by traffic, storage activities or handling of materials.

A copy of the dust control plan must be immediately provided to a Director or Officer upon request.

1.2 Purpose of the Plan

The purpose of the Plan is to guide fugitive dust control activities at the Duke Point sawmill facility consistent with the above permit requirements.

2.0 Roles and Responsibilities

Development of the fugitive dust control plan was the responsibility of WFP's Director of Environment with support from Duke Point Operations and a consultant specializing in air discharge permit requirements. Duke Point Operations is responsible for implementation of the fugitive dust control plan, mitigation measures and compliance with permit conditions.
Specific roles at DPS and their relevant responsibilities include:

- Mill Manager: responsible for all operations at DPS including the Fugitive Dust Plan
- Production Superintendent: responsible for all operational items at DPS including clean up
- Maintenance Superintendent: responsible for all maintenance activities at DPS
- Environmental Champion: responsible for implementing and monitoring all environmental activities at DPS

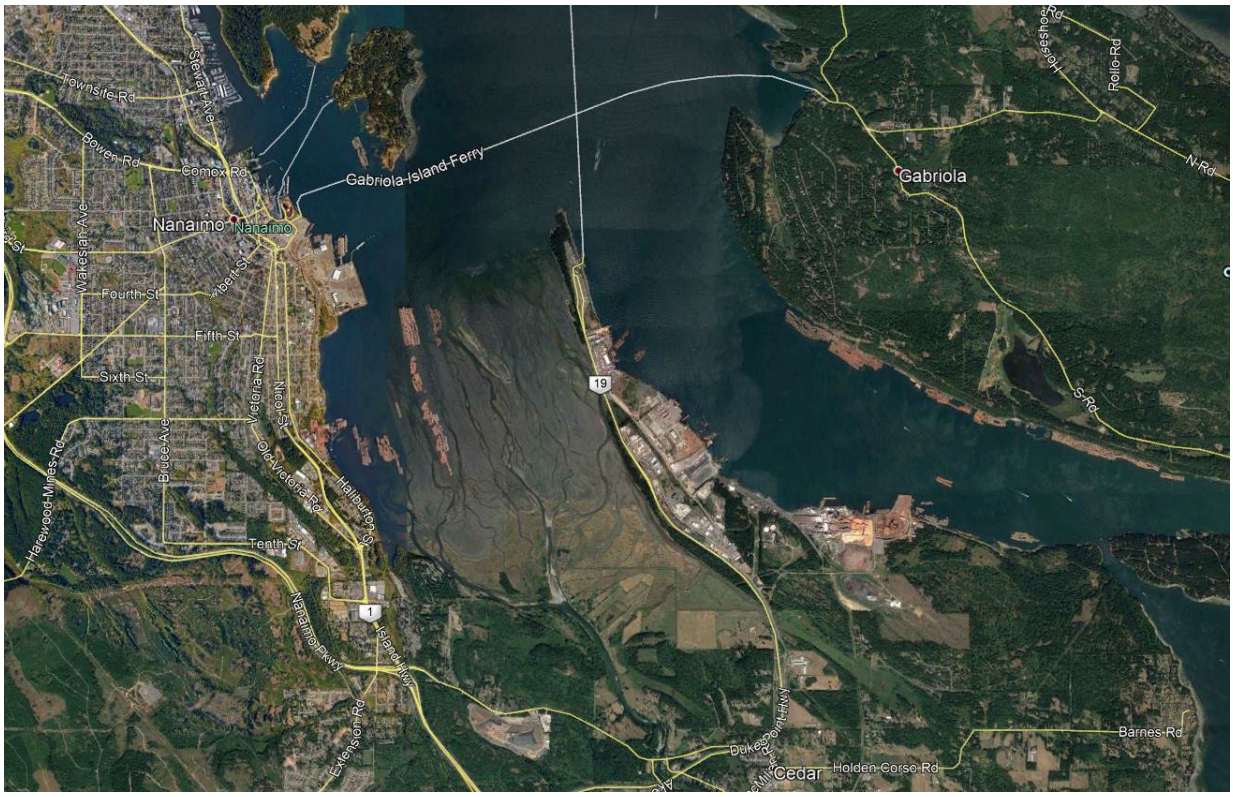
FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

3.0 Facility Description and Setting

3.1 Physical Location

The Duke Point sawmill is owned and operated by WFP. It is situated along the east side of a peninsula and has been operating at this location for decades (Figure 1). Northumberland Channel and Gabriola Island are located to the east of the peninsula, and the Nanaimo River Estuary and the City of Nanaimo are located to the west. Land use surrounding the sawmill includes the BC Ferry Services Inc. Duke Point terminal to the north, Jack Point and Biggs Parks to the west and various industrial/commercial uses to the south, including the Nanaimo Port Authority's deep-sea terminal.

Figure 1. Western Forest Products' Duke Point Sawmill Location.



FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

3.2 Descriptive Overview of the Facility

Details of the Duke Point sawmill are shown in Figure 2. The operation includes a log storage area on the foreshore, sawmill, planer, shipping, and barging infrastructure.

Logs are transported to the site via the marine environment for temporary storage until they are transferred into the sawmill by loading logs from a crane mounted on a dock onto a conveyor processing into lumber and by-products including chips, sawdust and hog fuel.

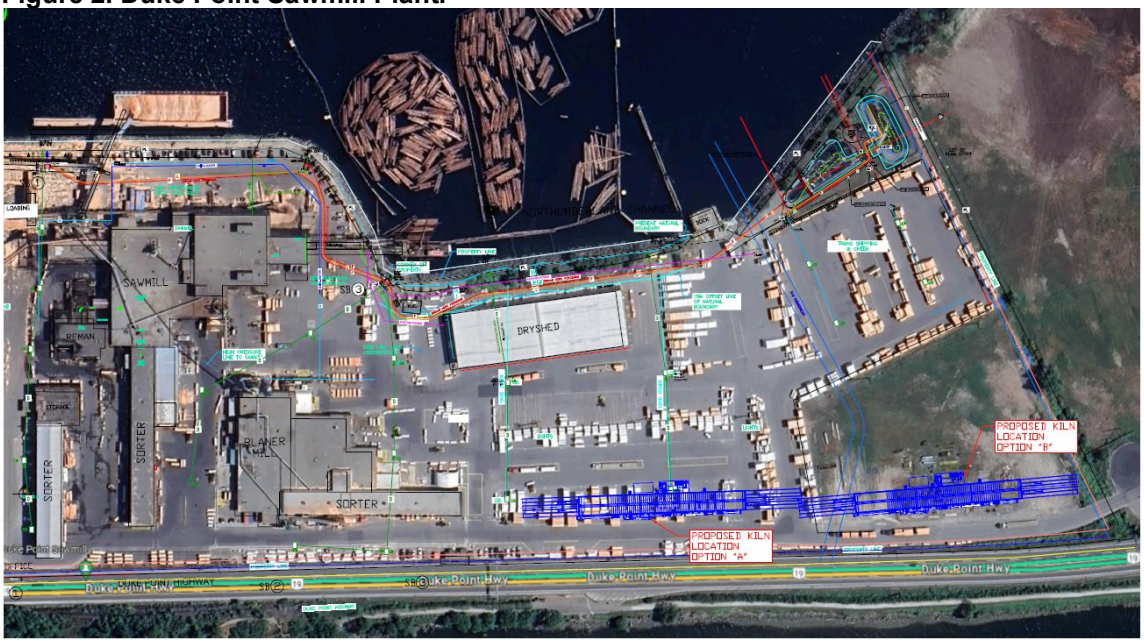
Lumber is sorted and stored on site until it can be further processed in the planer or shipped directly via a barge or truck to other sites for processing or to customers.

A new continuous lumber drying kiln is planned to be constructed in late 2025 but not expected to impact fugitive dust. The location of the kiln is to be confirmed but the two locations options are shown in Figure 2.

Chips are loaded on to a barge from land. Sawdust and hog by-products are stored in bins prior to being loaded into trucks for transport to pulp mills.

The Duke Point property is primarily paved.

Figure 2. Duke Point Sawmill Plant.



FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

4.0 Identification of Potential Sources of Fugitive Dust

4.1 Fugitive Dust Source List

Potential sources of fugitive dust emissions include:

- Wood shavings and dust originate from the bins containing hog and sawdust while loading trucks and transferring chips into the conveyor system that loads the barge
- Road dust in parking areas
- Sawdust and residue from material handling and conveyors.
- Shavings emitted from cyclones
- Lumber debris and by-products stored near sawmill infeed until it can be re-processed.
- Dust from overhead material handling conveyors

4.2 Source List Review

It is the responsibility of the DPS environmental leadership personnel, including the Mill Manager and Environmental Representative, to review the source list.

5.0 Fugitive Dust Management

5.1 Site Specific Mitigation Measures

Fugitive dust mitigation measures are addressed in Section 6.0 below, along with monitoring and maintenance. For details on site specific mitigation actions, please see Table 1.

6.0 Plan Implementation

6.1 Training

WFP operations personnel at Duke Point will be trained in the implementation of the Plan. For new employees, the Plan will be included in the new employee training program.

The effectiveness of the fugitive dust control plan will be reviewed annually by the Director of Environment with support from operations to ensure:

- Ongoing awareness of the need to report and manage fugitive dust,
- That the Plan reflects current conditions,

- That the Plan is effective in the prevention of fugitive dust as reflected by observation, inspection records and the history of complaints, and
- That the Plan is adjusted according to new requirements, and review of the fugitive dust source list.

It is the responsibility of every WFP employee to observe and report spills (including oil, etc.), fugitive emissions, abnormal point source emissions and any other occurrence that can have an impact on the environment.

6.2 Monitoring and Maintenance

WFP employs a number of mitigation measures onsite to manage fugitive dust emissions including the following:

- Pavement of the facility, except for a small non-paved area on the south side of the property that is used for storing surplus equipment
- Implementation of a Facility Wood Waste and Drainage Management Checklist, which includes measures for managing fugitive dust (Attachment A)
- Minimization of the accumulation of significant volumes of wood chips, sawdust and log storage through the development and implementation of a facility wood waste and drainage management plan
- Wet sweepers used to remove wood fines, traction material and dust from roadways as needed.
- Preventative maintenance programs to reduce dust emissions from baghouses, cyclones and associated ductworks, and material handling conveyors
- Active consultation with transport companies and pulp mills to reduce volumes accumulating on ground.

Mitigation, frequency of inspection, responsibility, records kept and actions taken are summarized in Table 1.

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Table 1. Mitigation measures implemented at Duke Point Sawmill to control fugitive dust.

Mitigation Measure	Frequency	Who is Responsible	Records	Actions
Yard Fugitive Dust Control Checklist	Weekly	Loader Operator / Supervisor	Facilities Wood Waste and Drainage Management Checklist	Actions are dealt with upon discovery or prioritized into clean-up work plans
Street sweeping of site roadways	Weekly/Biweekly Dependent on weather and site conditions	Superintendent or delegate	Facilities Wood Waste and Drainage Management Checklist Invoices are kept for tracking with Office Administrator.	Site Administrator coordinates frequency of Power Sweep contractor
Trucks to remove hog and sawdust from bins regularly to reduce stockpiling on ground	~125 truck loads per week	Superintendent or delegate	Facilities Wood Waste and Drainage Management Checklist Freight companies provide records to WFP Fiber Supply to support tracking and invoicing.	Superintendent or delegate contacts Manager, Pulp Wood & By-Product Sales to advise if additional trucks are required.
Chip barges are scheduled to reduce stockpiles of chips in the yard	~1 barge (scow) per week	Superintendent or delegate	Facilities Wood Waste and Drainage Management Checklist Pulp companies provide records to WFP Fiber Supply to support tracking and invoicing.	Superintendent or delegate contacts Manager, Pulp Wood & By-Product Sales to advise if more barge capacity required
WFP Sites coordinate Cut programs to	As Required / Weekly Log call	GMs / Fiber Supply	Cut plan changes are communicated weekly on call	GMs and Manager, Pulp Wood & By-Product

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

ensure no more than two species are cut at same time to ensure truck take-away			between Manufacturing and Fiber Supply	Sales communicate to ensure 3 species are not cut same day.
Excess residual by-products removed by third party processors.	As Required	Site Manager	Facilities Wood Waste and Drainage Management Checklist Work Orders and Invoices on site for tracking	At discretion of Site Manager and guidance from Manager, Pulp Wood & By-Product Sales Fiber Supply, third party processors will be hired when volume is too large to be reprocessed at sawmill.
Loaders to maintain excess chips, dust and other debris into designated area	Daily	Loader Operator / Superintendent or delegate	Facilities Wood Waste and Drainage Management Checklist	Actions are dealt with upon discovery or prioritized into clean-up work plans. Advise WFP Fiber Supply if truck or barge capacity is required to remove debris and/or prioritize clean-up resources.
Daily Cleaning of accumulated fugitive dust	As required	Dayshift Cleanup Employee	Facilities Wood Waste and Drainage Management Checklist	Areas with high accumulation assigned to graveyard or weekend cleanup employees (will need to ensure site keeps records)

Regular maintenance to ensure equipment functioning as intended	As required	Supervisor or delegate	Facilities Wood Waste and Drainage Management Checklist, EMS Monthly Inspection list, and/or Work Orders	Actions are addressed upon discovery or prioritized into maintenance work plans

7.0 Reporting and Record Keeping

7.1 Record Keeping

All checklists, work orders, and other documents relative to the Fugitive Dust Management Plan as described in section 6.2 Monitoring and Maintenance above (and environmental monitoring in general) are saved on DPS's shared file system for a minimum of five years.

7.2 Reporting and Communicating

This section is not currently applicable, as WFP has not yet received an amended permit that includes reporting requirements. This section will be updated after an amended permit has been received and the requirements of the annual report have been reviewed.

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Attachment A – Facilities Wood Waste and Drainage Management Checklist

Complete the checklist once per week at a minimum. These are mandatory as per the *Facilities Wood Waste and Drainage Management Standard*.

Any noted as "No" requires an explanation in the Comment section AND Action plan(s).
For Timberlands facilities, enter the LRM number assigned to the inspection when entered into the LRM-EMS Module.

Operation/Site:			
Inspector:		**Date:**	
Reviewed and Approved:		**Date:**	
Entered into LRM by: (Timberlands ONLY)		**LRM No.: (Timberlands ONLY)**	

Inspection Elements

Item No.	Conformance	Yes	No	N/A
1	Are woody debris and byproducts stored in the designated area(s)?			
2	Is existing infrastructure or natural barriers intact and directing runoff water away from the wood waste and byproducts piles?			

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

3	Are perimeter ditches, drains, drainage control mechanisms, settling basins, constructed wetlands, and oil/water separators clean, functioning, and discharged to the appropriate area?			
4	Is the adjacent marine environment free of observed signs of oily sheen, suspended solids, or other visible environmental disturbances?			

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Comments

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Item No.	Action Item	Responsible	Due Date

FUGITIVE DUST CONTROL PLAN – DUKE POINT SAWMILL

Version History

Version	Revisions By	Revision Date	Description of Revision	Approval
1.0	A. Chrystal and W. Sloan	December 22, 2020	New form creation	B. Sander
1.1	W. Sloan	January 13, 2021	Minor update to item 6 to align with “no” needing an action plan	B. Sander
1.2	W. Sloan	February 15, 2022	Added box to document qualitative assessment of the amount of wood waste that is taken off site or the amount that remains onsite; minor formatting changes	B. Sander
2.0	Environment Team	June 3, 2024	Formatting and changed questions to make them clearer and more direct.	B. Sander

Ministry of Environment and Climate Change Strategy

Discharge Factor Amendment Form

for an Authorization to discharge waste under the *Environmental Management Act*

AMENDMENT to Permit, Approval, or Operational Certificate

FORM REFERENCE CODE: EPD-EMA-06.2

INSTRUCTIONS:

The amendment application process is comprised of multiple steps that requires submission of a preliminary application and fee, followed by meetings with Ministry staff, and submission of a final application. **This form may be used in conjunction with the submission of a Preliminary Application to amend a Permit, Approval or Operational Certificate.**

Before completing this application form, please review the following:

- Waste Discharge Regulation under the *Environmental Management Act* at www.bclaws.ca; and,
- Ministry information and guidance documents that will assist in understanding the registration process and any other documents that may be required at http://www2.gov.bc.ca/gov/content?id=0876E90DA4744A449423D35EB4E09785.

It is preferred that this form is completed using a computer or typewriter. If completing this form by hand, please PRINT clearly.

Mandatory fields are marked with an asterisk (*). Please ensure all required fields are completed or the application form may not be accepted.

Once the final application has been submitted, the application will be proceed through the Screening Phase to verify administrative and technical completeness.

A Tracking Number will be assigned to your request. Both the Authorization Number and Tracking Number should be referenced on all further documents submitted to support the amendment application request.

Under *Environmental Management Act, a* person is prohibited from introducing waste into the environment without authorization. Submitting an application to discharge is NOT an authorization to discharge.

This application form can be submitted to the Ministry by email (preferred), mail or by courier.

Mail or Email	**Courier**
Environmental Protection Division Business Services PO Box 9377 Stn Prov Govt Victoria, BC V8W 9M6 **Email:** PermitAdministration.VictoriaEPD@gov.bc.ca	Ministry of Environment & Climate Change Strategy Environmental Protection Division Business Services 3rd Floor, 525 Superior Street Victoria, BC V8V 0C5

Section 1: Application Information

***Authorization Number**	8003	1
***Tracking Number**	424113	2
***Applicant Name**	Western Forest Products Inc.	3
***Facility Name**	Duke Point Sawmill	4
***Number of discharge points**	1	7

A copy of Section 2 must be completed for each discharge point. I.e. If there are three points of discharge, there should be three copies of Section 2 completed and submitted.

Section 2: Discharge Details

***Discharge Name** e.g. Planer Mill Cyclone #2	Kiln #1		1
***This discharge point is**	☐ Existing point of discharge ☒ New point of discharge		2
***Discharge Type**	☒ Air ☐ Effluent ☐ Refuse		3
***EMS ID** (existing) **OR Site ID** (new as referenced on Site Map[1]) e.g. Site A	Kiln #1		4
Additional description (if needed)			5
Proposed treatment method and equipment to be used e.g. UV Disinfection, baghouse	N/A		6
Discharge location description e.g. end of pipe, landfill, stack #1, etc	Non-point source		7
***Discharge location position** i.e. end of pipe coordinates *must be in decimal degree format to 4 decimal places*	Latitude (e.g., 49.8952) N Location A: 49.1516˚N or Location B: 49.1508˚N	Longitude (e.g., 116.8177) W Kiln Location A: 123.8883˚W or Kiln Location B: 123.8879˚W	8
***Source of Data**	☐ GPS ☐ Survey ☒ Google Earth ☐ Other (specify):		9
If the Legal Land Description for the facility location is different than this discharge location			
Legal Land Description (Lot/Block/Plan) OR PID/PIN/Crown File No.			10

[1] For each point of discharge, there must be a corresponding point displayed on a map using the Site Form (Form EPD-EMA-09).

*Table A: Proposed Flows

INSTRUCTIONS: Complete the maximum rate of discharge, and if applicable, the minimum, and/or average rate. Typically, only a maximum is needed. Include the duration of the discharge (e.g., hours/day) and the frequency of the discharge (e.g., days/week, days/month or days/year). Typically, a discharge may start when the authorization is issued and continues until the authorization is cancelled. If this discharge is to be time limited, this should be discussed at your pre-application meeting. All units are to be in System International (SI) metric units.

	Minimum Discharge Rate	Average Discharge Rate	Maximum Discharge Rate	Units (e.g. m^3/day)	Duration	Duration Units (e.g. hrs/day)	Frequency	Frequency units (days/weeks)
Existing Authorized Limit								
Change requested			3.43	m3/s	8400	hrs/year	7	days/week

*Table B: Proposed Contaminant Concentrations

INSTRUCTIONS: The contaminant data should be the characteristics of the waste when it enters the environment. Guidance on acceptable discharge quality may be found in applicable Provincial and Federal Regulations, Objectives, Guidelines, Criteria, Policies, Codes of Practice, Best Achievable Control Technology (BACT), Best Management Practices and, in some cases, draft documents.

Enter the contaminant and its maximum concentration and if applicable, the minimum, and/or average concentrations. All units are to be SI metric units. If the contaminant is to be discharged for a period less than the life of the authorization, enter the start and/or end dates. All air discharge rates are to be corrected to 20ºC, 1 atmosphere pressure, and zero water vapour.

Parameter or Contaminant Name	EXISTING Authorized Limit and Units	AMENDMENT REQUESTED Limit and Units
TPM		9 mg/m3
NOx		117 mg/m3
CO		98 mg/m3

Ministry of Environment and Climate Change Strategy

FINAL Application Form for an Authorization AMENDMENT

for authorization to discharge waste under the *Environmental Management Act*

Permit, Approval, or Operational Certificate

FORM REFERENCE CODE: EPD-EMA-05.2

INSTRUCTIONS:

The amendment application process comprises of multi-steps that requires submission of a preliminary application and fee, followed by meetings with Ministry staff, and submission of a final application. **This form may be used for submission of a Final Application to amend a Permit, Approval or Operational Certificate.**

Before completing this application form, please review the following:

- Waste Discharge Regulation under the *Environmental Management Act* at www.bclaws.ca; and,
- Ministry information and guidance documents that will assist in understanding the registration process and any other documents that may be required at http://www2.gov.bc.ca/gov/content?id=0876E90DA4744A449423D35EB4E09785.

It is preferred that this form is completed using a computer or typewriter. If completing this form by hand, please PRINT clearly.

Mandatory fields are marked with an asterisk (*). Please ensure all required fields are completed or the application form may not be accepted.

Once the Final Application has been submitted, the application will be screened for completeness before proceeding through the Screening Phase.

A Tracking Number has been assigned to your request. Both the Authorization number and the Tracking Number should be referenced on all further documents submitted to support the amendment application request.

Under *Environmental Management Act, a* person is prohibited from introducing waste into the environment without authorization. Submitting an application to discharge is NOT an authorization to discharge.

This application form can be submitted to the Ministry by email (preferred), mail or by courier.

Mail or Email	**Courier**
Environmental Protection Division Business Services PO Box 9377 Stn Prov Govt Victoria, BC V8W 9M6 **Email:** PermitAdministration.VictoriaEPD@gov.bc.ca	Ministry of Environment & Climate Change Strategy Environmental Protection Division Business Services 3rd Floor, 525 Superior Street Victoria, BC V8V 0C5

Section 1: Application Information

***Tracking Number**	424113	1
***Authorization Number**	8003	2
***Applicant Name**	Western Forest Products Inc.	3
***Facility Name**	Duke Point Sawmill	4
***Name of person completing this application**	Bettina Sander	5
***The person submitting this application is**	☒ The Applicant as named on the Preliminary Application for Amendment Form, Section 2 ☐ The Agent, as named on the Preliminary Application for Amendment Form, Section 4	6

The Application Package must include the following components or the application may be returned. Please refer to the guidance documents or contact the Ministry for further information on these requirements.

	Included	Not required / applicable	Submitted with Preliminary Application
Application Instruction Document (AID)	☒	☐	
Information Requirements Table (IRT)	☒	☐	☐
Technical Assessment Report	☒	☐	☐
Consultation Report	☐	☐	☐
Discharge Factor Amendment Form (Form EPD-EMA-06)	☒	☐	☒
Clause Amendment Form (Form EPD-EMA-07)	☐	☐	☐
Site Plan Form (Form EPD-EMA-09)	☒	☐	☐
Location Map Form (Form EPD-EMA-08)	☒	☐	☐

Section 2: Declaration and Signature

Please carefully read the following before placing your signature.

By completing this Application for an authorization, the Applicant understands and agrees with the following terms and conditions:

1. In this section:

   "Applicant" means the applicant as identified in section 2 of this application form;

   "Authorization" means the permit, approval, operational certificate, or amended permit, approval, operational certificate, sought pursuant to this application;

   "Director" means any statutory decision maker under EMA;

   "EMA" means the *Environmental Management Act*, S.B.C. 2003, c. 53, as amended or replaced from time to time;

   "FOIPPA" means the Freedom of Information and Protection of Privacy Act, R.S.B.C. 1996, c. 165, as amended or replaced from time to time;

   "Province" means Her Majesty the Queen in Right of British Columbia;

   "Regulatory Document" means:

   a) this application form,
   b) any document that the Applicant submits or causes to be provided submitted to the Province or the Director in support of this application, and
   c) any document that the Applicant submitted or causes to be submitted to the Director or the Province pursuant to
      i. the Authorization;
      ii. any regulation made under EMA that regulates the facility described above or the discharge of waste from that facility; or
      iii. any order issued under EMA directed against the Applicant that is related to the facility described above or the discharge of waste from that facility.

2. In consideration of the Province receiving this application, subject to paragraph 3, the Applicant hereby irrevocably authorizes the Province to publish on the B.C. government website the entirety of any Regulatory Document.

3. Despite paragraph 2, if the Applicant clearly identifies on the face of a Regulatory Document that the Regulatory Document, or clearly identified portions of it, are confidential and provides in writing with the document a rationale for why the document or portion thereof could not be disclosed under FOIPPA, the Applicant does not consent to the Province publishing the document or any portion of it if, in the opinion of the Director, the document or portion could not be disclosed under FOIPPA, if it were subject to a request under section 5 of FOIPPA.

4. In consideration of the Province receiving this application, the Applicant agrees that it will indemnify and save harmless the Province and the Province's employees and agents from any claim for infringement of copyright or other intellectual property rights that the Province or any of the Province's employees or agents may sustain, incur, suffer or be put to at any time that arise from the publication of a Regulatory Document.

5. The Applicant certifies that the information provided in this registration form is true, complete and accurate, and acknowledges that the submission of insufficient information may result in this registration being returned causing delays in the registration review process.

*Name of Applicant or Agent (print)	*Signature of Applicant or Agent	*Date
Bettina Sander		Aug 14, 2024