

United States Environmental Protection Agency
Region 10, Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101

Permit Number: R10T5020200
Issued: July 1, 2021
Effective: August 1, 2021
Expiration: August 1, 2026
Replaces: R10T5020101
AFS Plant I.D. Number: 16-009-00018

Statement of Basis

Title V Air Quality Operating Permit Permit Renewal #2

Permit Writer: Christopher Familiare

Stimson Lumber Company
(formerly Plummer Forest Products, Inc.)
Coeur d'Alene Reservation
Plummer, Idaho

Purpose of Permit and Statement of Basis

Title 40 Code of Federal Regulations Part 71 establishes a comprehensive air quality operating permit program under the authority of Title V of the 1990 amendments to the federal Clean Air Act. The air quality operating permit is an enforceable compilation of all of the applicable air pollution requirements that apply to an existing affected air emissions source. The permit is developed via a public process, may contain additional new requirements to improve monitoring of existing requirements, and contains procedural and prohibitory requirements related to the permit program itself. The permit is valid for 5 years and may be renewed.

This document, the statement of basis, summarizes the legal and factual basis for the permit conditions in the air quality operating permit to be issued to Stimson Lumber Company (referred to herein as Stimson, facility, source, or permittee). Unlike the air quality operating permit, this document is not legally enforceable. This statement of basis summarizes the emitting processes at the facility, air emissions, permitting and compliance history, the statutory or regulatory provisions that relate to the subject facility, and the steps taken to provide opportunities for public review of the permit. The permittee is obligated to follow the terms of the permit. Any errors or omissions in the summaries provided here do not excuse the permittee from the requirements of the permit.

Table of Contents

Abbreviations and Acronyms	3
1. EPA Authority to Issue Title V Permits.....	4
2. Facility Information.....	4
2.1 Location	4
2.2 Coeur d’Alene Reservation	4
2.3 Facility Description.....	4
2.4 Local Air Quality and Attainment Status.....	6
2.5 Permitting, Construction and Compliance History	6
3. Emission Inventory	8
3.1 Emission Inventory Basics	8
3.2 Potential to Emit (PTE).....	9
4. Regulatory Analysis and Permit Content	10
4.1 Federal Air Quality Requirements	10
4.2 Other Federal Requirements	18
5. Permit Conditions	19
5.1 Permit Conditions Changed from Expiring Permit No. R10T5020101	19
5.2 Permit Conditions from Non-Title V Permit No. R10NT501001 not in Renewal Permit No. R10T5020200.....	22
5.3 Permit Conditions for Renewal Permit No. R10T5020200	23
Permit Section 1 - Source Information and Emission Units	23
Permit Section 2 - Standard Terms and Conditions	23
Permit Section 3 - General Requirements.....	24
Permit Section 4 - Facility-Specific Requirements.....	27
Permit Section 5 - Unit-Specific Requirements - EU-1 (Hog Fuel-fired Boiler).....	28
Permit Section 6 - Unit-Specific Requirements - EU-2 (Lumber Drying Kilns).....	40
Permit Section 7 - Unit-Specific Requirements - EU-3 (Sawmill)	43
Permit Section 8 - Unit-Specific Requirements - EU-4 (Planer Mill)	43
Permit Section 9 - Unit-Specific Requirements - EU-5 (Used Oil-Fired Heater).....	44
6. Public Participation	44
6.1 Public Notice and Comment Period.....	44
6.2 Response to Public Comments and Permit Issuance.....	44
Appendix A - PTE Emission Inventory	A-1

Abbreviations and Acronyms

Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CAM	Compliance assurance monitoring
CFR	Code of Federal Regulations
CO	Carbon monoxide
COMS	Continuous opacity monitoring system
dscf	Dry standard cubic feet
EU	Emission unit
EPA	United States Environmental Protection Agency (also U.S. EPA)
FARR	Federal Air Rules for Reservations
FHISOR	Fuel heat input to steam output ratio
FR	Federal Register
gr/dscf	Grains per dry standard cubic foot (7,000 grains = 1 pound)
HAP	Hazardous air pollutant
hr	Hour
IEU	Insignificant emission unit
lb	Pound
lbm	Pound-mole
MACT	Maximum Achievable Control Technology
mm	One million
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Parts 61 and 63)
NO _x	Nitrogen oxides
PM	Particulate matter
PM ₁₀	Particulate matter less than or equal to 10 microns in aerodynamic diameter
ppmdv	Parts per million on a dry, volume basis
PSD	Prevention of significant deterioration
PTE	Potential to emit
S	Sulfur
SO ₂	Sulfur dioxide
tpy	Tons per year
VOC	Volatile organic compound

1. EPA Authority to Issue Title V Permits

On July 1, 1996, EPA adopted regulations (see 61 Federal Register (FR) 34202) codified at 40 Code of Federal Regulations (CFR) Part 71 setting forth the procedures and terms under which the Agency would administer a federal operating permit program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to affected stationary sources in Indian Country.

As described in 40 CFR 71.4(a), EPA will implement a Part 71 program in areas where a state, local, or Tribal agency has not developed an approved Part 70 program. Unlike states, Indian Tribes are not required to develop operating permit programs, though EPA encourages Tribes to do so. See, for example, Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian Country, EPA will administer and enforce a Part 71 federal operating permit program for stationary sources until the governing Indian Tribe receives EPA's approval to administer its own operating permit program.

2. Facility Information

2.1 Location

The Stimson facility is located south of Plummer, Idaho, and west of Highway 95. The facility is within the boundaries of Benewah County and the Coeur d'Alene Indian Reservation and is in Indian Country as defined in 40 CFR Part 71.

2.2 Coeur d'Alene Reservation

The Coeur d'Alene Reservation was established by Executive Order in 1873. By a series of treaty agreements, the reservation was reduced to its present size of approximately 345,000 acres. The reservation is considered to be Indian Country, as defined in 40 CFR Part 71. The Tribe is organized under a Constitution approved by the Bureau of Indian Affairs. The Constitution provides for a seven-member tribal council to serve as the governing body of the Tribe.

Tribal Contact: Les Higgins
Air Quality Manager
Coeur d'Alene Tribe
P.O. Box 408, 850 A Street
Plummer, Idaho 83851-0408
Phone: (208) 686-8101
Email: lhiggins@scdtribe-nsn.gov

2.3 Facility Description

The primary operation at the facility is the production of dimensional lumber from raw logs. The Stimson facility has debarkers and saws, kilns for drying lumber, a planer, a wood chipper, a bark hog, various storage bins and a hog fuel-fired boiler (to supply steam to the kilns). The site includes a log yard, shops, offices, and open and covered storage areas. There are no chemical wood preservative or gluing operations. Logs are received and stored in the log yard. The process of cutting the logs into lumber includes debarking, sawing, chipping, kiln drying, planing, and packaging for shipping.

The byproducts of lumber manufacturing are sawdust, wood chips, planer shavings, and hog fuel. These byproducts may be burned in the hog fuel (wood-waste) boilers or stored in bins until the material is sold and transferred off-site. The hog fuel boiler is used to provide steam to generate electricity and for the drying of rough green lumber in the drying kilns. Prior to steam use in the kilns, the steam is used to produce electricity in a steam turbine-powered 5-megawatt capacity generator. The electricity produced is primarily used on-site, but is also sold to the regional power grid.

SIC Code(s): 2421 Sawmills and Planing Mills, General (primary)
 4911 Electric Services, Electric Power Generation

Note that while two SIC codes are listed, the sawmill and planing mill SIC code of 2421 is considered the primary code. Since most of the electrical power generated (SIC code 4911) onsite is used for powering the facility, these activities are considered to be support activities to the sawmill.

The air pollution emission units and control devices that exist at the facility are listed in Table 2-1 below by emission unit identification number (EU ID #). None of the emission units vent through a stack shared with another emission unit. Installation dates for each emission unit are listed because they are important in determining applicability of federal PSD, NSPS and MACT standards (see further discussion in Section 4). Capacities are listed for several emission units based on the best information available from the applicant. The capacity of the kilns is based on applicant statements that the kilns together can produce 130 mmbf/yr. The control devices that are required by rule or this permit are so noted.

Table 2-1 - Emission Units (EU) & Control Devices

EU #	Emission Unit Description	Control Device ¹
EU-1	Hogged Fuel-Fired Boiler: Riley R-X-1, Serial No. 2771, 70,000 lb/hr steam output capacity, 105 mmBtu/hr heat input capacity, moving grate spreader-stoker, pre-heated under-grate combustion air with two over-fire air ports, post-classifier fly ash carbon reinjection near lower of the two over-fire air ports, economizer upstream of multiclone, combustion air preheater downstream of multiclone, super-heated 400 psig steam provided to steam turbine to generate electricity, saturated steam supplied to kilns either through turbine or via desuperheater, fuel is hogged bark and wood residue, no back-up fuel, FD fan pushing combustion air through preheater shell, ID fan pulling boiler exhaust through air preheater tubes, SMARS controls (a) fuel feed rate (auger screw speed) and (b) under-grate air (forced draft FD fan flow rate) in order to achieve 400 psig set point. A programmable logic controller system was installed in 2020. Boiler manufactured 1951, installed 1983.	Joy Manufacturing multiclone with two hoppers (and associated air locks). Orifice-type Yanke Energy orifice type wet scrubber employing four overhead nozzles supplying fresh water (sprayed directly into exhaust exiting the scrubber) followed by a mist eliminator, installed July 2009.
EU-2	Lumber Drying Kilns: Four, batch-type, indirect steam-heated, dual-track, field-erected, Wellons multizoned computer controlled with continuous monitoring of air temperature and lumber moisture content, combined annual capacity of 130 million board feet (mmbf).	None
EU-3	Sawmill: Includes log bucking and debarking, hog, bark conveying, log sawing, sawdust conveying, chipper, chip conveying and loading, unloading and storage of materials in sawdust and chip truck bins; annual capacity = 109.2 mmbf of logs, or 393,000 dry tons of logs	None
EU-4	Planer Mill; includes planer shavings cyclone and the planer chipper cyclone; annual capacity 130 mmbf/year	None
EU-5	Used Oil-Fired Heater: Clean Burn 4000, 280,000 Btu/hr.	None
EU-6	Piles and handling; bark fuel pile, sawdust pile, shavings pile; drop onto pile, wind erosion of piles	None
EU-7	Tanks: diesel (15,000 gallon), gasoline (500 gallon) and used	None

	oil (2,120 gallon) fuel tanks, horizontal	
EU-8	Plant Traffic: in log yard, on paved areas and in green lumber stacking area; involves front-end loaders and trucks	None
EU-9 ²	Miscellaneous activities that consist of the application of surface protection products that generate emissions.	None

¹ The multiclone and scrubber are required to be used by this permit.

² This source has been designated an ‘Insignificant Emission Unit’ as its potential to emit regulated air pollutants, excluding HAPs, do not exceed 2 tpy.

An emission unit or activity qualifies as an insignificant emission unit (IEU) if it is an activity type listed in 40 CFR 71.5(c)(11)(i) or emits less than 2 tons per year of any regulated air pollutant excluding HAPs [40 CFR 71.5(c)(11)(ii)(A)] and less than 1000 pounds per year of any HAP or the de minimus HAP level established under Section 112(g), whichever is lower [40 CFR 71.5(c)(11)(ii)(B)]. Stimson is claiming that the application of surfacing protection products, listed under EU-9, is an IEU because there are no HAPs associated with this activity and the potential to emit of the regulated air pollutant, VOCs, is less than 2 tpy.

2.4 Local Air Quality and Attainment Status

The Coeur d’Alene Indian Reservation, Benewah County and Kootenai County are located in northern Idaho. These areas are designated attainment with the national ambient air quality standards (NAAQS) for all criteria pollutants or are unclassifiable. An area is unclassifiable when an area cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. Although there are not any regulatory monitors operating within the Coeur d’Alene Reservation, there is a non-regulatory PM2.5 monitor located in Plummer, less than a mile NE of the facility. The preliminary data from this monitor indicate that the ambient levels of fine particle pollution are below the CAA standards both for daily and annual average values.

2.5 Permitting, Construction and Compliance History

The subject facility was built in the 1960’s as a planer mill only. The sawmill was added in the 1970’s. In October 1983, the Riley boiler and electrical generator were added. The sawmill was operated by Pacific Crown and the co-generation plant (i.e. boiler and electrical generator) were operated by Wood Power.

In August 1982, Wood Power had applied to the Idaho Department of Health and Welfare (IDHW) for a Permit to Construct (Idaho Department of Environmental Quality (IDEQ) was previously a Division of IDHW). On September 29, 1982, Wood Power received a two-page Permit to Construct.

In 1995, the Pacific Crown facility was sold to ITT Rayonier. On August 16, 1996, Rayonier submitted a Permit to Construct application to IDHW to replace three direct contact kilns with three non-contact lumber drying kilns. This would allow the facility to dry all of their lumber instead of selling green lumber. IDHW issued the facility a Director’s Exemption instead of a Permit to Construct.

It is EPA’s position that unless EPA has explicitly approved a program as applying in Indian Country, State or local regulations are not effective within the boundaries of that Indian Country land for purposes of complying with the Clean Air Act. See Federal Operating Permits Program Final Rule, 64 FR 8247, 8254 (February 19, 1999). This would include permits issued under State or local regulations. EPA therefore does not consider any permits issued by Idaho to Stimson or its predecessors to be federally enforceable or to establish applicable requirements for purposes of the Clean Air Act. There are no existing PSD permits issued to Stimson.

In 1997, the co-generation plant was also sold to ITT Rayonier. The sawmill burned down in 1998, but the planer mill continued to operate. On September 21, 1999, the entire facility was sold to the Coeur d’Alene Tribe, and in May 2000, Plummer Forest Products leased the facility from the Tribe. After rebuilding the sawmill with mostly new equipment, the sawmill started up in June 2001. The co-

generation equipment was started up in September 2001. For about four months (June through September 2001), temporary power generators were used to supply power to the sawmill. The temporary power generators were removed in October 2001. An oil-fired package boiler (originally built in 1973) was installed in April 2002, but rarely operated before being removed.

The initial Title V permit for this plant was issued to Plummer Forest Products on May 17, 2006. The plant was sold to Stimson Lumber Company on May 31, 2006. The permit and statement of basis were administratively amended to address the change in permittee. The company name, responsible official, contact information and introductory paragraphs on the front page of the permit and statement of basis were revised. Issuance dates were also changed, as well as the footers on the permit, statement of basis and appendices to the statement of basis. No other changes were made.

In 2007, Stimson applied for and was issued a non-Title V permit that established limits on hazardous air pollutants such that the company could be treated as a minor source for hazardous air pollutant purposes. Compliance with these limits allows Stimson to avoid two MACT standards that only apply to major sources of hazardous air pollutants. EPA is revising the non-Title V permit while processing Stimson's second Title V permit renewal application. The proposed requirements in the draft non-Title V permit, if finalized, are considered applicable requirements and have been included in this Title V permit.

In July 2009, Stimson notified EPA that they planned on replacing the scrubber on the boiler with an identical unit. After realizing that the new scrubber operated differently than the former scrubber, in early 2010, Stimson applied for a significant modification of their permit to revise the scrubber parameter range required in the permit. Stimson was having trouble operating the new scrubber within the required scrubber parameter range in the original permit. Stimson has been working on the issue since then, trying to decide what an appropriate range should be and whether there are operational issues with the scrubber.

Even though EPA sent Stimson a reminder letter, Stimson's application to renew their Title V permit missed the December 16, 2010, deadline. In June 2011, Stimson and EPA signed an Administrative Order on Consent which addressed the late application and adjusted the scrubber parameters ranges in the permit. Also in June 2011, EPA agreed to a Consent Agreement and Final Order addressing the late application.

Stimson continued to struggle to meet the scrubber parameter ranges. Additional source testing was performed in the fall of 2012. Stimson submitted a new CAM plan to set new scrubber parameter ranges on March 11, 2013. Those new ranges were incorporated into the August 2014 Title V permit.

EPA inspected the facility on various occasions during the prior permit term. There are no other current compliance actions.

A chronological summary of permit activities for Stimson follows:

May 17, 2006	EPA issues Stimson's initial Title V permit.
November 9, 2006	EPA administratively amends the permit to name Stimson the permittee.
September 28, 2007	EPA issues Stimson's Non-Title V permit with HAP limits.
February 24, 2010	Stimson submits an application for a significant modification to their permit to revise the scrubber parameters ranges.
December 16, 2010	Stimson's renewal application was due to EPA.
January 1, 2011	EPA receives Stimson's renewal Title V permit application.
June 16, 2011	Stimson's initial Title V permit expired.

December 5, 2011	Stimson submitted an off-permit notice that they were adding a new saw line (a fencing product) to the sawmill.
Thru June, 2013	Additional information is submitted as requested.
August 1, 2013	Pre-draft permit is sent to Stimson and Coeur d'Alene Tribe for initial review.
August 20, 2013	Beginning of public comment period for draft permit.
September 20, 2013	End of public comment period for draft permit.
August 13, 2014	Final renewal permit issued.
May 13, 2015	Administrative amendment issued to change responsible official.
February 13, 2019	EPA receives Stimson's second renewal Title V permit application.
August 13, 2019	Stimson's Title V renewal permit expired.
January 29, 2021	Pre-draft revised non-Title V permit and pre-draft Title V permit renewal are sent to Stimson and Coeur d'Alene Tribe for review.
April 21, 2021	Beginning of public comment period for draft permit.
May 21, 2021	End of public comment period for draft permit.
July 1, 2021	Final renewal permit issued.

3. Emission Inventory

3.1 Emission Inventory Basics

An emission inventory generally reflects either the “actual” or “potential” emissions from a source. Actual emissions generally represent a specific period of time and are based on actual operation and controls. Potential emissions, referred to as potential to emit (PTE), generally represent the maximum capacity of a source to emit a pollutant under its physical and operational design, taking into consideration regulatory restrictions, but only required control devices. PTE is often used to determine applicability to several EPA programs, including Title V, PSD and Section 112 (MACT).

Emissions can be broken into two categories: point and fugitive. Fugitive emissions are those which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Examples of fugitive emissions are roads, piles that are not normally enclosed, wind blown dust from open areas, and those activities that are normally performed outside buildings. Point sources of emissions include any emissions that are not fugitive.

The equation below represents the general technique for estimating emissions (in tons per year) from each emission unit at the facility. Emissions are calculated by multiplying an emission factor by an operational parameter. To estimate actual emission, the permittee will need to track the actual operational rates. Note that emission factors may be improved over time. For those estimation techniques that require substantial site-specific parameter tracking, such as piles and roads, emissions associated with a defined operational rate can be estimated to establish a set ratio that can be used to multiply by the actual operational rate in future years, significantly simplifying the annual inventory effort. All of the techniques and site-specific parameters and assumptions should be reviewed each year before estimating emissions to be sure they remain appropriate.

$$E = EF \times OP \times K$$

Where:

$$E = \text{pollutant emissions in tons/year}$$

EF = emission factor (see Appendix A)
 OP = operational rate (or capacity for PTE)
 K = 1 ton/2000 lbs for conversion from pounds per year to tons per year

3.2 Potential to Emit (PTE)

EPA reviewed and revised Stimson’s emission inventory (for PTE) and has documented the facility PTE in Appendix A. Where appropriate, EPA revised the emission estimates using the latest emission factors to more accurately reflect the emissions from the facility. A summary of Stimson’s PTE is presented in Table 3-1. Note that while fugitive emissions are included in Table 3-1, fugitive emissions are not always used to determine program applicability as explained in more detail in Section 4.1 of this statement of basis.

The PTE estimates for the facility generally assume all units operate 8760 hours per year. Potential particulate matter emissions consider the multiclone and scrubber as required control devices because it is assumed that the control devices are necessary for the boilers to comply with the particulate matter and opacity limits. The permit assures this assumption by requiring that the boiler be vented to the control devices at all times.

Emission factors for the boiler are based on heat input (fuel) to the boiler. Because steam production records are used to calculate boiler heat input (firing rate) for the purpose of the emission inventory, the conversion factor applied to convert steam production to heat input must be based on an accumulation of site specific boiler testing and fuel sampling data from which Stimson is required to calculate an average FHSOR. Appendix C to the permit explains the procedures for developing FHSOR.

Table 3-1 - Facility Potential to Emit¹

Pollutant ²	PTE in tons per year							Facility Total
	EU-1	EU-2	EU-3	EU-4	EU-6	EU-7	EU-8	
CO	206							206
Pb	<1							<1
NOx	122							122
PM	51	2	26	12	<1		196	286
PM10	60	4	15	8	<1		56	143
PM2.5	60	4	8	4	<1		6	81
SO2	4							4
VOC	12	240	23	3		<1		279
GHG	114,530							114,530
Plant-wide Total HAP ³								24
Plant-wide Single HAP ³								9

¹ Fugitive emissions are included in this table but may not always be used in applicability determinations (see Section 4.1)

² CO = carbon monoxide; Pb = lead; NOx = oxides of nitrogen; PM = particulate matter; PM10 = particulate matter with diameter 10 microns or less; PM2.5 = particulate matter with diameter 2.5 microns or less; SO2 = sulfur dioxide; VOC = volatile organic compounds; HAP = hazardous air pollutants [see Clean Air Act, Section 112(b)]; GHG = greenhouse gases; plant-wide total HAP = all HAPs totaled; plant-wide single HAP = highest individual HAP

³ HAP PTE is capped by plant-wide emission limits created in a Non-Title V permit

Stimson is expected to use the emission factors and calculation methods presented in Appendix A unless Stimson demonstrates that a more appropriate emission factor or calculation method should be used (e.g., results of more recent source testing or sampling, revised emission factors published in AP-42 or etc.). It is important to emphasize that to the extent Stimson relies on any type of emission control technique to estimate emissions used to determine annual fees, or the applicability of a regulatory program, use of the technique must be fully documented and verifiable. Compliance with the facility-wide 9 tpy single HAP limit and 24 tpy total HAP limit must be demonstrated using the emission factors (or the methods

prescribed to derive them) specified in the permit.

4. Regulatory Analysis and Permit Content

EPA is required by 40 CFR Part 71 to include in this Title V permit all emission limitations and standards that apply to the facility, including operational, monitoring, testing, recordkeeping and reporting requirements necessary to assure compliance. This section explains which air quality regulations apply to this facility and how those requirements are addressed in the permit.

Located within Indian Country, the facility is subject to federal air quality regulations, but is not subject to state air quality regulations. EPA does not consider any permits issued by Idaho for this facility to be applicable requirements. The facility could be subject to tribal air quality regulations; however, the Coeur d'Alene Tribe has not gone through the process of obtaining authorization to be treated in the same manner as states under 40 CFR 49.6 and 49.7 (Tribal Authority Rule) and obtaining approval of air quality regulations as a "Tribal Implementation Plan." Therefore, Tribal air quality regulations, if any, are not federally enforceable and do not meet the definition of "applicable requirement" under 40 CFR Part 71. As such, there are no Tribal air quality regulations in this Title V permit.

EPA relied on information provided in the permittee's Title V permit application and on supplementary information provided by the permittee to determine the requirements that are applicable to the facility. Future modifications to the mill could result in additional requirements applying.

4.1 Federal Air Quality Requirements

Title V Operating Permit Program - Title V of the Clean Air Act and the implementing regulation found in 40 CFR part 71 require major sources (as well as a selection of non-major sources) of air pollution to obtain operating permits and form the legal bases for this permit. A source is major if it has the potential to emit 100 tons per year or more of any Title V pollutant, 25 tons per year or more of hazardous air pollutants (total) or 10 tons per year or more of any single hazardous air pollutant (see 40 CFR 71.2). This facility is a major source subject to Title V because it has the potential to emit more than 100 tons per year of CO, NO_x and VOC not counting fugitive emissions (see Table 3-1 and Appendix A). While PM and PM₁₀ emissions (fugitive and non-fugitive) in Table 3-1 exceed 100 tons per year, PM and PM₁₀ non-fugitive emissions account for only 70 and 71 tpy, respectively. EPA does not consider PM a regulated pollutant for Title V applicability purposes.

The Title V operating permit serves as a comprehensive compilation of the air quality requirements that are applicable to a source. The permit also must assure compliance, so source-specific testing, monitoring, recordkeeping and reporting have been added where EPA believes it is necessary, as explained in Section 4.3 (Permit Conditions) of this Statement of Basis below.

Compliance Assurance Monitoring (CAM) - CAM applies to emission units that are subject to an emission limit with a pre-control potential to emit emissions equal to or greater than the major source threshold defined in Title V (generally, 100 tons per year) and that use a control device to comply with the limit (see 40 CFR Part 64). All units that meet the CAM applicability criteria must be in compliance with CAM at permit renewal and may also be required to submit a CAM plan if a significant change is made to the unit prior to renewal. The multiclone and scrubber that control particulate matter emissions from the boiler are the only control devices at the facility. Cyclones employed in the pneumatic conveyance of wood residue are considered process units and not particulate matter control devices.¹ Pre-control PM₁₀ and PM_{2.5} emissions from the boiler are greater than 100 tons per year; therefore, the boiler controls are subject to CAM.² Based on the emissions inventory in Appendix A, post-control

¹ EPA November 27, 1995 letter to Intel at <https://19january2017snapshot.epa.gov/sites/production/files/2015-07/documents/proequip.pdf>

² PM₁₀ pre-control PTE: 280 tpy = (70 mlb/hr) x (1.768 mmBtu/mlb) x (0.517 lb/MMbtu) x (8760 hr/hr) x (ton/2000 ton); PM_{2.5} pre-control PTE: 242 tpy = (70 mlb/hr) x (1.768 mmBtu/mlb) x (0.447 lb/MMbtu) x (8760

potential to emit PM10 and PM2.5 are less than 100 tpy, so the boiler is not considered a large pollutant-specific emission unit. Table 4-1 below illustrates the results of the applicability analysis.

Table 4-1 – Boiler EU-1 CAM Applicability

Pollutants	Control Device	CAM-Eligible Emission Limit	Pre-Control PTE (tpy)	Post-Control PTE (tpy)	Does CAM Apply?	Large PSEU?
PM ₁₀ , PM _{2.5}	Multiclone & Wet Scrubber	VE ≤ 20% opacity, 6-min avg	PM10: 280, PM2.5: 242	PM10: 60, PM2.5: 60	Yes	No
		PM ≤ 0.2 gr/dscf @ 7% O ₂ , 3-hr avg				

At the time of the initial Title V permit renewal (permit issued August 13, 2014) to assure compliance with the two FARR emission limitations, Stimson was required to (1) install, calibrate, operate and maintain certain equipment to measure and record various boiler and control device operating parameters, (2) ensure that the monitoring equipment was generating representative and valid data, and (3) take corrective action in the event scrubber pressure drop and scrubber water flow were not greater than specified minimums, and when visible emissions exceeded 10% opacity.

Prevention of Significant Deterioration (PSD) - Under the PSD pre-construction permitting program found in Part C of the Clean Air Act and 40 CFR 52.21, no “major stationary source” or “major modification” to a major stationary source can begin actual construction without first obtaining a PSD permit. The PSD program has been changed over the years, but in general, a major stationary source for purposes of the PSD program is a source with a PTE of more than 250 tons per year of any PSD pollutant. Based upon information available today and the calculations presented in Attachment A, the facility is a PSD major source with a VOC PTE of 279 tpy largely based upon the mill’s potential to continuously and exclusively dry ponderosa pine lumber at 240°F.³ Potential emissions of CO are 82% of the major source threshold based upon a PTE calculation using a two-test (conducted in 2005 & 2014) average emission factor. As new information becomes available regarding emission factors and the source’s operating capacity, EPA’s estimation of PTE may change.

A modification to an existing major source is major (and subject to review) if it results in emission increases that equal or exceed the defined significance levels. Historical reviews of potential PSD projects are difficult due to the lack of specific details about the sources, their emissions and the various applicability requirements in previous PSD programs. Based on the information available today, EPA is not aware of any modifications that would have been subject to PSD. EPA is not aware of any other modifications to the facility and does not draw any conclusions regarding compliance with past permitting requirements for this facility. Therefore, no permit shield is implied or explicit for past new source review or PSD requirements.

New Source Performance Standards (NSPS) - Four NSPS subparts may apply to boilers (steam generating units) and heaters: 40 CFR 60, Subparts D (Fossil-Fuel-Fired Steam Generators), Da (Electric Utility Steam Generating Units), Db (Industrial-Commercial-Institutional Steam Generating Units) and Dc (Small Industrial-Commercial-Institutional Steam Generating Units). Subparts D and Da do not apply because the boiler’s heat input capacity is only 105 mmBtu/hr, much less than the applicability thresholds

hr/hr) x (ton/2000 ton); see AP-42 (9/03) Table 1.6-1 for EF (filterable + condensable PM) reflecting combustion of bark/bark and wet wood with no controls.

³ The mill buys timber by the ton, independent of species, as it arrives on the truck, and ponderosa pine is the 4th most processed species (by timber volume) received at mills in Idaho producing lumber or veneer. E.A. Simmons and T.A. Morgan. Idaho 2015 Tables. Bureau of Business and Economic Research. University of Montana. Idaho’s Forest Products Industry and Timber Harvest, 2015. August 2, 2017. A temperature of 240°F (heated air entering lumber stack) is on the high side of the range of maximum temperatures associated with schedules for drying softwood lumber in commercial kilns in the Pacific Northwest.

of 250 mmBtu/hr for D and Da. Subpart Db and Dc do not apply because the boiler was manufactured in 1953, well before the 1984 and 1989 applicability dates, respectively, and there is no information that indicates that the boiler was modified or reconstructed after the applicability dates.

There are three above-ground fuel storage tanks as follows by storage capacity and fuel type: 15,000 gallons (56.8 cubic meter) diesel, 2,120 gallons (8.0 cubic meters) used oil and 500 gallons (1.9 cubic meters) gasoline. Three NSPS subparts may apply to the fuel storage tanks: 40 CFR 60, Subparts K (Storage Vessels “Commenced” from 6/12/73 to 5/18/78), Ka (Storage Vessels “Commenced” from 5/19/78 to 7/22/84) and Kb (Storage Vessels “Commenced” after 7/23/84). While it is not clear when the fuel tanks were installed, reconstructed or modified, Subparts K and Ka only apply to tanks larger than 40,000 gallons and Subpart Kb only applies to tanks larger than 75 cubic meters (20,000 gallons), so the tanks are not subject to NSPS.

Subpart A of 40 CFR Part 60 applies only if a source category-specific subpart applies. There are no other NSPS subparts that apply to the type of emissions units at the facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP) - Three NESHAP (MACT) Subparts may apply to the facility: 40 CFR 63, Subpart DDDD (Plywood and Composite Wood Products), DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters) and JJJJJ (Industrial, Commercial, and Institutional Boilers for Area Sources). Lumber kilns are included in Subpart DDDD source category and hog fuel-fired boilers are included in Subparts DDDDD and JJJJJ. Subparts DDDD and DDDDD only apply to sources that were major for HAP on the first compliance date of the MACT. The compliance date for Subpart DDDD is October 1, 2007, and for Subpart DDDDD is January 31, 2016. Stimson applied for a Non-Title V operating permit to limit plant-wide HAP emissions below the major source thresholds of 10 and 25 tons per year. EPA issued the Non-Title V permit September 27, 2007, so the facility is no longer considered a major source of HAP (based on PTE). Requirements from that non-Title V permit are being revised (to strengthen its enforceability) and concurrently incorporated into this Title V renewal permit. The facility, therefore, is not subject to Subparts DDDD or DDDDD. As an area source with a wood waste-fired boiler, the facility is subject to Subpart JJJJJ; that subpart is included in this permit. There are no other NESHAP subparts that apply to the types of emission units at the facility.

Table 4-2 – NESHAP Subpart JJJJJ Applicability, 40 CFR Part 63

Citation	Description	Applicability
63.11193-63.11195	Applicability and affected source	Applies, but not in permit.
63.11196(a)	Startup of affected source before 5/20/11	Applies; see Permit Condition 5.32.
63.11196(b)	Startup of affected source after 5/20/11	Does not apply because source started up before 5/20/11.
63.11196(c)	New source compliance provisions	Does not apply.
63.11196(d)	Incinerators, EGUs and control devices	Does not apply because the boilers are not any of the units listed.
63.11200	Subcategories	Applies (Subcategory b), see Permit Condition 5.40.2 and 5.41.
63.11201(a)	Emission limits in Table 1	Does not apply because no applicable emission limits.
63.11201(b)	Work practice standards in Table 2	Applies; see Permit Condition 5.32.
63.11201(c)	Operating limits in Table 3	Does not apply because no applicable operating limits.
63.11201(d)	Standards apply at all times	Applies; but is not included in the permit.
63.11205(a)	General compliance	Applies; see Permit Condition 5.33.

Citation	Description	Applicability
63.11205(b-c)	Compliance with emission limits	Does not apply because no applicable emission limits.
63.11210(a)	General testing and fuel analysis	Does not apply because no testing or fuel analysis is required.
63.11210(b)	Existing source applicable emission limits	Does not apply because no applicable emission limits.
63.11210(c)	Existing source applicable work practice standards	Applies; see Permit Condition 5.32.
63.11210(d-k)	New affected boilers	Does not apply, not a new boiler.
63.11211	Initial compliance with emission limits	Does not apply because no applicable emission limits.
63.11212	Stack tests and procedures	Does not apply because there are no stack tests.
63.11213	Subsequent fuel analyses and report	Does not apply to facilities' biomass boiler.
63.11214(a)	Existing coal boiler	Does not apply to facilities' biomass boiler.
63.11214(b)	Existing boiler performance tune-up	Applies; Stimson satisfied with submission on CEDRI.
63.11214(c)	Existing boiler energy assessment	Applies; Stimson satisfied with submission on CEDRI.
63.11214(d)	Start up shut emissions	Does not apply because no applicable emission limits.
63.11220	Fuel analysis	Does not apply because fuel analysis is not required for boiler.
63.11221	Monitoring	Does not apply because boiler is not subject to limits that require monitoring.
63.11222	Continuous compliance with emission limits	Does not apply because boiler is not subject to limits that require compliance.
63.11223(a)	Work practice: continuous compliance	Applies; see Permit Conditions 5.32, and 5.32.3.
63.11223(b)	Work practice: biennial tune-up	Applies; see Permit Conditions 5.32.1, 5.32.2, 5.32.4, 5.32.5, 5.34, 5.38 and 5.38.1, and 5.38.2.
63.11223(c)	Work practice: 5-year tune-up, delayed inspection and oxygen level	Does not apply to facilities' biomass boiler.
63.11223(d-g)	Work practice: Seasonal, oil-fired, limited use boilers and startup shutdown	Does not apply to boiler and no applicable emission limits.
63.11224	Monitoring, installation, operation, and maintenance	Does not apply because no applicable emission limits.
63.11225(a)	Initial compliance notification	Applies but not is permit.
63.11225(b)	Annual compliance certification	Applies; see Permit Conditions 5.39, 5.39.1, 5.39.2, 5.39.3, 5.39.4, and 5.39.5.
63.11225(c-d)	Recordkeeping for compliance	Applies; see Permit Conditions 5.35, 5.35.1, 5.35.2, 5.35.3, 5.36, 5.36.1, 5.36.2, and 5.37.
63.11225(e)	Performance testing	Does not apply because no testing required.

Citation	Description	Applicability
63.11225(f)	Notification of combustion of solid waste	Applies; see Permit Conditions 5.40, 5.40.1, 5.40.2, 5.40.3, and 5.40.4.
63.11225(g)	Notification of fuel switch	Applies; see Permit Conditions 5.41, 5.41.1 and 5.41.2.
63.11235 Table 8	General provisions	See Table 4-3 below.
63.11236	Who implements?	Apply but are not included in the permit.
63.11237	Definitions	Apply but are not included in the permit.

Because 40 CFR Part 63, Subpart JJJJJ applies to the boilers, Subpart A of Part 63 also applies. NESHAP Subparts A and JJJJJ requirements that do not apply to the facility are not included in the permit; requirements that apply but do not create specific requirements are also not included in the permit. Table 4-3 explains whether specific requirements of Subpart A apply to the boilers and where the requirements are located in the permit.

Table 4-3 – NESHAP Subpart A Applicability, 40 CFR Part 63

Citation	Description	Applicability
63.1 – 63.3	Applicability, definitions and abbreviations	Applies but are not included in the permit.
63.4	Prohibited activities and circumvention	Applies but are not included in the permit.
63.5	Preconstruction review	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(a), (b)(1)- (b)(5), (b)(7), (c), (f)(2)-(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Applies but are not included in the permit.
63.6(e)(1)(i)	General Duty to minimize emissions	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(e)(3)	SSM Plan	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(f)(1)	SSM exemption	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(h)(1)	SSM exemption	Does not apply according to Table 8 in Subpart JJJJJ.
63.6(h)(2-9)	Compliance with opacity	Does not apply because facilities' biomass boilers are not subject to opacity limits.
63.6(i)	Extension of compliance with emission standards	Does not apply because facilities' biomass boilers are not subject to emission standards.
63.6(j)	Presidential exemption	Applies but is not included in the permit.
63.7	Testing requirements	Does not apply because facilities' biomass boilers are not subject to testing.
63.8	Monitoring requirements	Does not apply because facilities' biomass boilers are not subject to monitoring.
63.9(a)	Notification applicability	Applies but is not included in the permit.

Citation	Description	Applicability
63.9(b)(1)	Initial notifications	Applies but is not included in the permit because it is a past requirement.
63.9(b)(2)	Initial notifications	Applies but is not included in the permit because it is a past requirement.
63.9(b)(4-5)	New source notifications	Do not apply because facilities' biomass boilers are an existing source.
63.9(c)	Extension of compliance	Does not apply because facilities' biomass boilers are not subject to emission standards.
63.9(d)	Notifications for 63.6(b)	Does not apply because facilities' biomass boilers are existing.
63.9(e)	Test notification	Does not apply because facilities' biomass boilers are not subject to testing.
63.9(f)	Opacity notifications	Does not apply because facilities' biomass boilers are not subject to opacity limits.
63.9(g)	CMS notifications	Does not apply because facilities' biomass boilers are not subject to CMS requirements.
63.9(h)(1)	Notification of compliance status	Applies but is not included in the permit.
63.9(h)(2-3)	Notification of compliance status	Applies; but is not included in the permit.
63.9(h)(5)	Actual emission data	Does not apply because facility was not subject to 63.5.
63.9(h)(6)	Advice from the administrator	Applies but is not included in the permit.
63.9(i)	Adjustments to time periods	Applies but is not included in the permit.
63.9(j)	Changes to provided information	Applies but is not included in the permit.
63.10(a)	Applicability	Applies but is not included in the permit.
63.10(b)(1)	General recordkeeping files	Applies but is not included in the permit.
63.10(b)(2)(i, iii-xiii)	General recordkeeping files	Does not apply because facilities' biomass boilers are not subject to emission limits, or monitoring.
63.10(b)(2)(ii)	Malfunction of process equipment records	Applies but is not included in the permit.
63.10(b)(2)(xiv)	Documentation supporting initial notifications and notifications of compliance status	Applies; see Permit Condition 5.35.1.
63.10(b)(3)	Applicability determination records	Applies but is not included in the permit.
63.10(c)	CMS recordkeeping	Does not apply because facilities' biomass boilers are not subject to CMS requirements.
63.10(d)(1)	General reporting	Applies but is not included in the permit.
63.10(d)(2-3)	Test and opacity reporting	Does not apply because facilities' biomass boilers are not subject to testing and opacity requirements.
63.10(d)(4)	Compliance extension progress reporting	Does not apply because facilities' biomass boilers are not subject to a compliance extension.
63.10(d)(5)	Periodic and immediate reporting	Do not apply according to Table 8 in Subpart JJJJJ.

Citation	Description	Applicability
63.10(e)	Reports for CMS	Does not apply because facilities' biomass boilers are not subject to CMS requirements.
63.10(f)	Reporting Waivers	Applies but is not included in the permit.
63.11	Control device requirements	Does not apply according to Table 8 in Subpart JJJJJ.
63.12	State authority and delegation	Applies but is not included in the permit.
63.13	Addresses	Applies, but reports are required to be submitted via CEDRI. Current EPA address is included in Permit Condition 3.40 in the event CBI is submitted.
63.14	Incorporations by reference	Applies but is not included in the permit.
63.15	Availability of information	Applies but is not included in the permit.
63.16	Performance track provisions	Applies but is not included in the permit.

Section 111(d) and Section 129 Regulations - There are no CAA, Section 111(d) or 129 regulations that apply to the type of emission units at the facility. Hog fuel (wood waste) combustion in the boilers is not considered solid waste or municipal waste combustion or incineration.

Federal Air Rules for Reservations (FARR) - On April 8, 2005, EPA promulgated a Federal Implementation Plan (FIP) for Reservations in Idaho, Oregon and Washington. This FIP is commonly referred to as the FARR. EPA published the FARR rules that generally apply to Indian Reservations in EPA Region 10 in 40 CFR 49.121 to 49.139. The FARR rules that specifically apply on the Coeur d'Alene Reservation are codified at 40 CFR 49.9921 to 49.9950. Those FARR requirements that apply to the permittee and have been included in the permit are listed in Table 4-4 and discussed in Section 5.3 of this document, including the requirements created in a Non-Title V permit issued per 40 CFR 49.139. FARR requirements that apply generally to all regulated entities but do not impose specific requirements on the permittee are also identified in Table 4-4 but not included in the permit. Several requirements of the FARR that are in effect on the Coeur d'Alene Reservation do not apply to the facility. Table 4-5 lists the FARR requirements that do not apply to the permittee and explains why.

Table 4-4 – FARR Applicability, 40 CFR Part 49

Citation	Description	Applicability
49.121 – 49.122	Introduction and delegation	Apply, but are not included in the permit.
49.123(a-c)	Definitions, testing, monitoring, recordkeeping, reporting, and credible evidence and incorporation by reference	Apply, but are not included in the permit.
49.123(d)	Credible evidence	Applies, see Permit Condition 2.6.
49.124(a-b, f)	Visible emission limits purpose, applicability and definitions	Apply, but are not included in the permit.
49.124(c)	Exemptions	Applies, see Permit Condition 3.10.
49.124(d)(1-2)	Visible emission limit	Applies; see Permit Conditions 3.9, 3.11, 4.14 and 5.5.
49.124(d)(3)	Visible emission limit for oil and solid fuel	Applies; see Permit Condition 3.11.2.
49.124(e)	Reference method	Applies; see Permit Condition 3.9.
49.125(a-c, f)	PM limits purpose, applicability and definitions	Apply, but are not included in the permit.

Citation	Description	Applicability
49.125(d)(1, 3)	PM limits	Apply; see Permit Conditions 4.14, 5.1.1, 5.5, 6.1, 7.1 and 8.1.
49.125(d)(2)	PM limit for wood fuel	Applies; see Permit Conditions 4.14, 5.1.2, and 5.5.
49.125(e)	Reference method	Applies; see Permit Conditions 5.1, 6.1, 7.1, and 8.1.
49.126(a-b, f)	Fugitive PM limits purpose, applicability and definitions	Apply, but are not included in the permit.
49.126(c)	Exemptions	Applies; see Permit Condition 3.17.
49.126(d-e)	Fugitive PM	Apply; see Permit Conditions 3.12-3.16 and 3.35.
49.129(a-c, f)	SO ₂ limits purpose, applicability and definitions	Apply, but are not included in the permit.
49.129(d)(1)	SO ₂ limit for combustion sources	Applies; see Permit Condition 5.2.
49.129(d)(2)	SO ₂ limit for process sources	Does not apply because the facilities' processes units do not emit SO ₂ .
49.129(e)	Reference method	Applies; see Permit Condition 5.2.
49.130(a-c, g)	Fuel sulfur limit purpose, applicability and definitions	Apply, but are not included in the permit.
49.130(d)(7)	Fuel sulfur limits for solid fuels	Applies; see Permit Condition 4.2.
49.130(d)(1-6, 8)	Fuel sulfur limit for oil, liquid (non-oil) and gaseous fuels and coal	Does not apply because facility combusts solid fuel.
49.130(e)(3)	Reference methods for solid fuels	Applies; see Permit Condition 4.2.1.
49.130(e)(1,2, 4)	Reference method for oil, liquid (non-oil) and gaseous fuels and coal	Does not apply because facility combusts solid fuel.
49.130(f)(1)(iii)	Recordkeeping for solid fuels	Applies; see Permit Condition 4.3.
49.130(f)(1)(i, ii)	Recordkeeping for oil, liquid (non-oil) and gaseous fuels	Does not apply because facility combusts solid fuel.
49.130(f)(2)	Records of fuel purchases and fuel sulfur content	Applies; see Permit Condition 3.35.
49.130(f)(3)	Recordkeeping exemption for residences	Does not apply because facility is not a residence.
49.131(a, b, f)	Open burning purpose and applicability	Apply, but are not included in the permit.
49.131(c, d, e)	Open burning	Applies; see Permit Conditions 3.4-3.8.
49.135	Detrimental emissions	Applies, but are not included in the permit.
49.137(a, b, d)	Air pollution episode purpose, applicability and definitions	Apply, but are not included in the permit.
49.137(c)(1-3)	Air pollution episodes	Apply, but are not included in the permit.
49.137(c)(4)(i-ii)	Air pollution episodes	Apply; see Permit Conditions 3.6 and 3.7.
49.137(c)(4)(iii)	Air pollution episodes	Apply, but are not included in the permit.
49.138(a-c, g)	Registration purpose, applicability and definitions	Apply, but are not included in the permit.
49.138(d) and (f)	Registration and reporting for Part 71 sources	Apply, but are not included in permit. See Permit Condition 3.46.2 for FARR registration reporting via FORS and Permit Condition 3.40 for all other reporting via CEDRI.

Citation	Description	Applicability
49.138(e)(1-2, 5-8)	Reporting for non-Part 71 sources	Do not apply because facility is a Part 71 source.
49.138(e)(3)(i-xi, xiii-xiv)	Reporting for non-Part 71 sources	Do not apply because facility is a Part 71 source.
49.138(e)(3)(xii)	Reporting for Part 71 sources	Apply; see Permit Condition 3.46.
49.138(e)(4)	Reporting for Part 71 sources	Apply; see Permit Conditions 3.46 and 3.46.1.
49.139	Non-Title V operating permits	Applies, but is not included in the permit.

Table 4-5 – Inapplicable FARR Requirements

Citation	Description	Reason Inapplicable
49.127	Rules that apply to wood waste burners (wigwam burners).	No wigwam burners exist.
49.128	Rules that apply to wood veneer, plywood, particleboard and hardboard manufacturing.	None of these products are produced at the facility.
49.129(d)(2)	Limits SO ₂ from “process source stacks.”	None of the “processes” at the facility emit SO ₂ .
49.130(d)(1-6) and (8)	Limits amount of sulfur in liquid fuels, coal and gaseous fuels.	None of these fuels are burned at the facility.
49.130(f)(1)(ii)	Additional requirements that apply to gaseous fuels.	No gaseous fuels are burned at the facility.
49.135	Restricts emissions determined to be detrimental to human health or welfare.	Actual requirements will result from EPA’s determination and subsequent permits or orders that address an issue.

Mandatory Greenhouse Gas Reporting Rule. This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 71.2, neither 40 CFR part 98, nor CAA 307(d)(1)(V), the CAA authority under which 40 CFR part 98 was promulgated, are listed as applicable requirements for the purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR part 71, the permittee is not relieved from the requirement to comply with the rule separately from compliance with their part 71 operating permit. It is the responsibility of each permittee to determine applicability to part 98 and to comply, if necessary.

Acid Rain Program - Title IV of the CAA created a SO₂ and NO_x reduction program found in 40 CFR Part 72. The program applies to any facility that includes one or more “affected units” that produce power. The hogged fuel-fired boiler is not a “unit” as defined in 40 CFR 72.2 because it does not combust fossil fuels. The used oil-fired heater is not large enough to be subject to the acid rain program in Part 72.

4.2 Other Federal Requirements

EPA Trust Responsibility. As part of the EPA Region 10’s direct federal implementation and oversight responsibilities, Region 10 has a trust responsibility to each of the 271 federally recognized Indian tribes within the Pacific Northwest and Alaska. The trust responsibility stems from various legal authorities including the U.S. Constitution, Treaties, statutes, executive orders, historical relations with Indian tribes and, in this case, the Executive Order in 1873. In general terms, the EPA is charged with considering the

interest of tribes in planning and decision making processes. Each office within the EPA is mandated to establish procedures for regular and meaningful consultation and collaboration with Indian tribal governments in the development of EPA decisions that have tribal implications. Region 10's Air and Radiation Division has contacted the Tribe to invite consultation on this Title V operating permit project.

Endangered Species Act (ESA) - Under this act, EPA is obligated to consider the impact that a federal project may have on listed species or critical habitats. It is EPA's conclusion that the issuance of this Title V permit will not affect a listed specie or critical habitat because it does not authorize new emissions units, increase existing emission limits or impose any new work practice requirements. Therefore, no additional analysis and no additional requirements will be added to this permit for ESA reasons. EPA's no-effect determination concludes EPA's obligations under Section 7 of the ESA. For more information about EPA's obligations, see the Endangered Species Consultation Handbook: Procedures for Conducting Consultation and Conference Activities under Section 7 of the Endangered Species Act, published by the FWS and NMFS (March 1998, Figure 1).

National Environmental Policy Act (NEPA) - Under Section 793(c) of the Energy Supply and Environmental Coordination Act of 1974, no action taken under the Clean Air Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969. This permit is an action taken under regulations implementing the Clean Air Act and is therefore exempt from NEPA.

National Historic Preservation Act (NHPA) - As noted earlier, the issuance of this Title V permit does not authorize new emissions units, increase existing emission limits or impose any new work practice requirements. No changes to the facility are expected as a result of this permit action. Consequently, no adverse effects are expected, and further review under NHPA is not indicated.

Environmental Justice (EJ) Policy - Under Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed on February 11, 1994, EPA is directed, to the greatest extent practicable and permitted by law, to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States. This permit action does not allow new or additional emissions and therefore impacts. As a result, there is no information available that indicates that there are disproportionately high and adverse impacts to a minority or low-income population.

5. Permit Conditions

5.1 Permit Conditions Changed from Expiring Permit No. R10T5020101

The second Title V renewal permit has been changed from the first renewal permit, in part, to incorporate requirements from Non-Title V Permit No. R10NT501001 issued concurrent with the second renewal permit. Non-Title V Permit No. R10NT501001 replaces Non-Title V Permit No. R10NT501000. The revised non-Title V permit created new requirements and changed or removed many of the requirements from the original non-Title V permit. The second renewal permit reflects the changes. Periodic monitoring in the expiring Title V permit created for the benefit of assuring compliance with emission limits in the original non-Title V permit have been removed because the revised non-Title V permit contains monitoring sufficient to assure compliance with the 9/24 tpy single and total HAP limits. The changed or removed conditions from Title V Permit No. R10T5020101 associated with the revisions to the non-Title V permit are generally explained below.

Permit Conditions 4.14 and 4.15 are now Permit Conditions 4.12 and 4.13 in the second renewal permit. The conditions have been revised to reference new conditions that specify the compliance demonstration for the 9 tpy single HAP and 24 total HAP emission limits.

Permit Condition 4.16 (and 9.1 through 9.4 unrelated to limiting HAP emissions) have been removed as Stimson is prohibited from operating heater EU-5 and is required to remove the unit from the facility.

Permit Condition 4.17 is now Permit Condition 4.15 and has been revised to specify (1) the day of the month by when the 12-month rolling facility-wide emissions must be calculated, and (2) that the monthly emissions (used in the 12-month rolling calculation) must be calculated consistent with the methodology specified in the permit.

Permit Condition 4.18 has been replaced with Permit Conditions 5.7, 5.8, 5.9, 5.10 and 5.11 specifying an initial FHSOR of 1.768 mmBtu/mlb steam and a methodology for updating the value.

Permit Condition 4.19 has been replaced with numerous new conditions that specify unit-specific monitoring requirements to track and record operating activity to enable the calculation of monthly emissions.

Permit Condition 4.21 is now Permit Condition 4.20 and has been revised to clarify that the emissions required to be reported must reflect calculations performed consistent with the methodology specified in the permit. Also, the non-Title V permit emissions reporting requirement (submittal via CEDRI) has been decoupled from the FARR annual registration reporting requirement (submittal via FORS).

Permit Condition 5.9 is now Permit Condition 5.20 in the second renewal permit. The boiler EU-1 CAM and periodic monitoring requirements (except for boiler steam pressure monitoring) that assure compliance with the FARR PM and visible emissions limits have been streamlined⁴ in light of more stringent monitoring requirements from the revised non-Title V permit that assure compliance with 9/24 tpy single and total HAP emission limits.⁵ In the renewal permit, the underlying CAM and periodic monitoring authority for the streamlined requirements together with the revised non-Title V permit are cited as the basis for the new permit condition.

Permit Conditions 5.10.1 through 5.10.4 are now Permit Conditions 4.17.1 through 4.17.4 in the second renewal permit with shared authority between CAM and the revised non-Title V permit. CAM is the basis for applying Permit Condition 4.17 to monitoring required in Permit Conditions 5.19 and 5.20. The non-Title V permit is the basis for applying Condition 4.17 to monitoring required in Conditions 5.17, 5.18, 5.20, 5.26, 6.7, 6.9, 6.11, 7.3 and 8.3.

Permit Condition 5.15 is now Permit Condition 5.26 and parts of Permit Conditions 5.8, 5.9 and 5.10 in the second renewal permit. Permit Condition 5.26.2 now specifies the location from which samples must be extracted from the fuel delivery system. Permit Conditions 5.8, 5.9 and 5.10 specify a new methodology for calculating HCl emission factor based upon sampling results.

Permit Condition 5.17 has been removed. The permittee is required to submit fuel sampling and analysis results used to calculate FC for chlorine (and fluorine and three trace metals) in support of two source tests to determine boiler EU-1 RF pursuant to Permit Conditions 3.30 and 5.29. If the emissions calculations submitted annually pursuant to Permit Condition 4.20 show use of FC values (average of the most recent eight quarters) considerably less than those calculated from testing performed to satisfy Permit Condition 5.13, then EPA may inquire the permittee for copies

⁴ For discussion of streamlining, see EPA March 5, 1996 memorandum entitled, “White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program” online at <https://www.epa.gov/title-v-operating-permits/white-paper-number-2-improved-implementation-part-70-operating-permits>.

⁵ Permit Condition 5.19 (formerly Condition 5.8) continues to reflect boiler EU-1 CAM and periodic monitoring requirement to periodically conduct visible emissions monitoring of the boiler stack. Visible emissions monitoring of the boiler EU-1 stack, however, is not an element of the non-Title V permit.

of the laboratory results generated by quarterly fuel sampling and analysis performed to satisfy Permit Condition 5.26.

Permit Condition 6.2 (Title V periodic monitoring for kilns EU-2) has been removed as the renewal permit incorporates monitoring from the revised non-Title V permit that assures sufficient tracking of kilns EU-2 emissions.

Appendix A is now Appendix D in the second renewal permit. The procedure to determine boiler EU-1 FHISOR is now clearer with the inclusion of a brief introduction and clarifying revisions.

Appendix B is now Appendix C in the second renewal permit. The boiler EU-1 fuel sampling and analysis procedure has been revised from a procedure to determine the hydrogen chloride emission factor to a procedure to determine the halogen (chlorine and fluorine) and trace metal content of the fuel.

See Section 5.3 of this Statement of Basis for explanation of requirements from the revised non-Title V permit not previously included in the previous Title V renewal permit.

The renewal permit reflects the removal of, or changes to, requirements unrelated to the non-Title V permit that are either no longer applicable or in need of revision since issuance of first renewal permit on August 13, 2014 as generally explained below.

Permit Conditions 2.7, 2.8, and 2.9. In this proposed renewal of an existing part 71 permit, the EPA is not including the “Emergency Provisions” provision as they appeared in the existing permit located in permit condition VI.C in the existing part 71 permit. These provisions were modeled on the “Emergency provision” contained in the regulations contained in 40 CFR part 71 applicable to federal operating permit programs. Specifically, in the regulations discussing the contents of title V operating permits issued under the federal operating permits program, 40 CFR 71.6(g) provides that certain “emergency” events that can constitute “an affirmative defense in an action brought for non-compliance” with certain emission limits contains in the permit, when certain conditions are met. However, nothing in the CAA or 40 CFR part 71 requires that these types of emergency provisions be included as conditions in operating permits issued by the EPA, and for the reasons discussed below, we are exercising our discretion not to include them in this proposed renewal part 71 permit.

In 2014, a federal court ruled that the CAA does not authorize the EPA to create affirmative defense provisions applicable to certain enforcement actions. *See NRDC v. EPA*, 749 F.3d 1055 (D.C. Cir. 2014). The court ruled that Sections 113 and 304 of the Clean Air Act preclude the EPA from creating affirmative defense provisions in the Agency's regulations imposing hazardous air pollutants emission limits on sources. The court concluded that those affirmative defense provisions purported to alter the jurisdiction of federal courts generally provided in the CAA to assess liability and impose penalties for violations of emission limits in private civil enforcement cases, and that the CAA did not provide authority for the EPA to do so. Consistent with the reasoning in the *NRDC v. EPA* court decision, EPA has determined that is also not appropriate under the CAA to alter the jurisdiction of the federal courts through affirmative defenses provisions in its title V regulations, such as those contained in the emergency provisions of 40 CFR 71.6(g), and that such provisions are inconsistent with the CAA. In light of the above-described D.C. Circuit Court decision and the EPA's obligation to issue title V permits consistent with the applicable requirements of the Act, it is no longer appropriate to include permit conditions modeled on affirmative defenses such as those contained in the emergency provisions of 40 CFR 71.6(g) in operating permits issued by the EPA.

Although the EPA views the Part 71 emergency provisions as discretionary (i.e., neither the statute nor the regulations mandate their inclusion in Part 71 permits), the EPA is considering

whether to make changes to the operating permit program regulations in order to ensure the EPA's regulations are consistent with the recent D.C. Circuit decisions; and if so, how best to make those changes. Until that time, as part of the normal permitting process, it is appropriate for the EPA permitting authorities to rely on the discretionary nature of the existing emergency provisions to choose not to continue to include permit terms modeled on those provisions in operating permits that we are issuing in the first instance or renewing. By doing so, we are not only fulfilling the EPA's obligation to issue title V permits consistent with the applicable requirements of the Act, but we will also help ensure that Permittees do not continue to rely on permit provisions that have been found legally invalid. Accordingly, in this proposed renewal part 71 permit, the EPA is exercising its discretion to not include the "Emergency Provisions" provision as they appeared in the existing permit located in permit conditions 2.7 through 2.9 in the existing part 71 permit, in order to ensure the Part 71 permit is in compliance with the applicable requirements of the Act.

Permit Condition 3.40 reflects the requirement that (unless otherwise specified in the permit) any documents required to be submitted to EPA Region 10 shall be submitted electronically through CEDRI with hardcopy to the tribal office. If the document contains CBI, the document must be physically submitted to EPA Region 10 office with no hardcopy to the tribal office.

Permit Condition 3.43 has been updated to reflect new mailing address for fee payment and completed fee filing form.

Permit Condition 3.46.2 reflects the requirement to submit FARR annual registration to EPA Region 10 electronically through FORS with hardcopy to the tribal office. If the document contains CBI, the document must be physically submitted to EPA Region 10 office with no hardcopy to the tribal office.

Permit Condition 3.48 has been revised to reflect that EPA Region 10 is no longer receiving deviation reports via facsimile.

Permit Conditions 4.23, 4.24, 4.31, and 4.32 have been removed as the company has satisfied the one-time energy assessment and initial notification requirements in a submission on CEDRI to the Agency on July, 9, 2014.

Permit Condition 5.5 (now 5.15) has been revised. The most recent RM5 PM test of boiler EU-1 was conducted in October 2018 with emissions measured to be less than 75% of FARR RM5 PM 0.2 gr/dscf @ 7% O₂ limit. According to the expiring permit, additional RM5 PM testing must be conducted again once per four calendar years, between December 1 and March 31. This means that RM5 testing of boiler EU-1 must be conducted again between December 1 and March 31, and no later than the conclusion of the 2022 calendar year. The revised permit condition states that. The list of parameters to be monitored during testing has been expanded to include pressure of the water supplied to the scrubber.

Permit Condition 5.7 has been removed. Stimson satisfied the requirement to measure boiler EU-1 CO and NO_x emissions for the purpose of informing the PTE determination as to whether the source is major for PSD. At this time, no further testing of CO and NO_x is being required. See Section 4.1 of this document for further discussion of PSD major source status.

5.2 Permit Conditions from Non-Title V Permit No. R10NT501001 not in Renewal Permit No. R10T5020200

Permit Conditions 4.1 and 4.4 in the non-Title V permit are not explicitly referenced in the Title V permit given standard Permit Conditions 2.2 and 2.6, respectively, in the Title V permit. The non-Title V and Title V conditions are duplicative.

Permit Condition 4.2 in the non-Title V permit is not a condition in the Title V permit as inclusion is unnecessary given Permit Condition 2.2 in the Title V permit.

Permit Condition 4.3 in the non-Title V permit is not a condition in the Title V permit as it is not germane to the Title V permit. EPA may reopen the non-Title V permit for cause independent of this condition appearing in the Title V permit.

5.3 Permit Conditions for Renewal Permit No. R10T5020200

This Title V operating permit compiles all the applicable requirements that apply to the permittee. Additional monitoring, recordkeeping and reporting requirements have been created where needed so the permit assures compliance with all of the applicable requirements. Each permit condition in the permit is explained below. For certain requirements originating in the revised non-Title V permit, additional explanation is provided in technical support document supporting that permit. The permit is organized into the following nine sections:

- Permit Section 1: Source Information and Emission Units
- Permit Section 2: Standard Terms and Conditions
- Permit Section 3: General Requirements
- Permit Section 4: Facility-Specific Requirements
- Permit Section 5: Unit-Specific Requirements - EU-1 (Hog Fuel-fired Boiler)
- Permit Section 6: Unit-Specific Requirements - EU-2 (Lumber Drying Kiln)
- Permit Section 7: Unit-Specific Requirements - EU-3 (Sawmill)
- Permit Section 8: Unit-Specific Requirements - EU-4 (Planer Mill)
- Permit Section 9: Unit-Specific Requirements – EU-5 (Used Oil-Fired Heater)

Permit Section 1 - Source Information and Emission Units

This permit section contains a brief description of the facility and a list of emission units. A more detailed description of the facility can be found in Section 2 of this Statement of Basis.

Permit Section 2 - Standard Terms and Conditions

This permit section includes generic compliance terms that are required in all Title V permits, but are not subject to the annual compliance certification requirements found in Permit Condition 3.49.

Permit Condition 2.1 explains that the language in the underlying regulations takes precedence over paraphrased language in the permit. Some applicable requirements are paraphrased in the permit with the intention of clarifying the requirement, but with no intention of changing the underlying meaning of the requirement. Where there is a difference between the language in a permit and an underlying regulation, the wording in the underlying regulation should be used to interpret and implement the requirement. This permit condition also notes some underlying authorities that may have been used to create additional requirements in this permit.

Permit Conditions 2.4 and 2.5 address a general permit shield which states that compliance with the permit is deemed compliance with the applicable requirements listed in the permit. The permittee is responsible for complying with any applicable requirements that exist but have not been included in the permit. The permittee did not request a specific permit shield for any specific requirement excluded from this permit and none is being granted.

Permit Conditions 2.12 through 2.14 address the expiration of the permit and the ramifications if the permittee does or does not renew their permit. It is important to note that, if the permittee does not submit a complete and timely renewal application, the permittee's right to operate is terminated. The expiration date of the permit is listed on the top right-hand corner of the front page of the permit. Specific requirements regarding permit renewal are in Permit Conditions 3.51 and 3.52.

Permit Conditions 2.15 through 2.17 address options for making certain physical and operational changes in the facility that do not require a permit modification. If the permittee uses any of these options, they must comply with the applicable recordkeeping requirement found in Permit Condition 3.32 and reporting requirements found in Permit Conditions 3.38 and 3.39.

Permit Section 3 - General Requirements

This permit section includes conditions that are required in all Title V permits. In some cases, facility-specific testing, monitoring, recordkeeping and reporting requirements for these permit conditions might be found in Section 4 of the permit because those requirements can vary from permit to permit. Unless otherwise specified, emission units are subject to the general requirements in Section 3 of the permit as well as the facility-specific and unit-specific requirements in Sections 4 through 9 of the permit.

Permit Conditions 3.1 and 3.2 are general compliance schedule requirements. Because EPA is not aware of any non-compliance at the time of permit issuance, there is no issue-specific compliance schedule in Section 4 of the permit.

Permit Condition 3.3 requires the permittee to allow EPA-authorized representatives access to the facility and required records.

Permit Conditions 3.4 through 3.8 restrict open burning wherever the FARR applies including at industrial facilities. If the permittee performs any open burning, recordkeeping requirements specific to open burning found in Permit Condition 3.33 will apply.

Permit Conditions 3.9 through 3.11 limit visible emissions, require the use of either Reference Method 9 or a continuous opacity monitoring system (COMS) for determining compliance with the limit and provide exception to the rule. Reference Method 9 includes specific guidance for reading opacity when there is a wet plume (both attached and detached and directs the observer to take readings excluding the portion of the plume that includes uncombined water (droplets). In the vast majority of cases, the likelihood of exceeding the 20% opacity limit due to the presence of uncombined water is very low because an experienced observer would know that he/she should not read that portion of the plume. However, there are meteorological conditions that can prevent uncombined water (droplets) from completely evaporating in a plume (e.g., 100% relative humidity and a saturated plume). The provision in Permit Condition 3.11 addresses that situation. Currently, this facility does not use (and is not required to use) continuous opacity monitoring systems (COMS) to monitor visible emissions.

Because testing, monitoring, recordkeeping and reporting for assuring compliance with the visible emission limit can change based on the emission unit in question, the testing, monitoring, recordkeeping and reporting requirements are contained in the facility-specific requirements in Section 4 of the permit, or in each emission unit-specific section, as appropriate. The general monitoring, recordkeeping and reporting for this requirement is the periodic visible emissions survey (plant walkthrough) specified in Permit Conditions 4.4 through 4.11.

Permit Conditions 3.12 through 3.17 restrict fugitive particulate matter emissions and require a plan be created to assure the use of reasonable precautions to prevent fugitive emissions. The plan is based on a survey of the facility and is updated annually. This annual survey can be accomplished simultaneously with the periodic visible emission survey requirement in Permit Condition 4.4 through 4.11, as long as both requirements are fully complied with.

Permit Condition 3.18 addresses requirements in the Chemical Accident Prevention Program found in 40 CFR Part 68. This program requires sources that use or store regulated substances above a certain threshold to develop plans to prevent accidental releases. Based on information in their application, there are no regulated substances above the threshold quantities in this rule at this facility; therefore, the facility is not currently subject to the requirement to develop and submit a risk management plan. However, this requirement is included in the permit as an applicable requirement because the permittee has an ongoing

responsibility to submit a risk management plan if a listed substance exists at the facility in quantities over the threshold amount, or if the quantity of any regulated substance ever increases above the threshold quantity. Including this term in the permit minimizes the need to reopen the permit if the facility becomes subject to the requirement to submit a risk management plan.

Permit Conditions 3.19 and 3.20 address the Stratospheric Ozone and Climate Protection Program found in 40 CFR Part 82. This program requires sources that handle regulated materials to meet certain procedural and certification requirements. There may be equipment at the facility that uses or contains chlorofluorocarbons (CFCs) or other materials regulated under this program. All air conditioning and refrigeration units must be maintained by certified individuals if they contain regulated materials.

Permit Condition 3.21 addresses asbestos demolition or renovation activity found in 40 CFR Part 61, Subpart M (NESHAP). This program requires sources that handle asbestos-containing materials to follow specific procedures. If the permittee conducts any demolition or renovation activity at their planer mill, they must assure that the project is in compliance with the federal rules governing asbestos, including the requirement to conduct an inspection for the presence of asbestos. This requirement is in the permit to address any demolition or renovation activity that may occur at the facility.

Permit Conditions 3.22 through 3.30 specify the procedures that must be followed whenever the permit requires emissions testing or sampling in an emission unit-specific section of the permit. If there is a conflict between these permit conditions and an emission unit-specific permit condition, the unit-specific permit condition should be followed. Concentration-based emission limits required to be corrected to a specific oxygen concentration in the flue gas often do not contain a protocol to convert measured concentrations to specified oxygen levels. Permit Condition 3.28 provides a protocol for such a conversion.

Permit Condition 3.31 describes general recordkeeping that has been added to the permit using Part 71 authority to assure that there is good documentation for any monitoring that the permittee performs.

Permit Condition 3.32 describes recordkeeping requirements that apply only if the permittee makes off-permit changes. Certain off-permit changes are allowed in Permit Condition 2.15.

Permit Condition 3.33 describe recordkeeping requirements that apply if the permittee performs open burning. The open burning recordkeeping was added using Part 71 authority. Open burning is restricted in Permit Conditions 3.4 through 3.8.

Permit Condition 3.34 includes recordkeeping that applies to fee records including the duration that the records must be maintained. The duration is consistent with that required by Title V (see Permit Condition 3.35).

Permit Condition 3.35 sets the duration that records must be maintained. Both Title V and FARR records must be maintained for 5 years. These two requirements have been combined (streamlined) into one permit condition. If there is ever a conflict between these requirements and a more restrictive emission unit-specific permit condition, the specific permit condition should be followed.

Permit Conditions 3.36 and 3.37 require the permittee to submit or correct submitted information when requested by EPA and as needed. The permittee has an ongoing obligation to assure that all data in its Title V application is correct and to notify EPA of any errors or omissions.

Permit Conditions 3.38 and 3.39 describe reporting requirements that apply only if the permittee makes off-permit changes (Permit Condition 3.38) or section 502(b)(10) changes (Permit Condition 3.39). Certain off-permit changes are allowed in Permit Condition 2.15. Section 502(b)(10) changes are allowed in Permit Conditions 2.16.

Permit Condition 3.40 specifies that all submittals (except for fee payments – see Permit Condition 3.43; and annual FARR registration – see Permit Condition 3.46.2) are to be submitted to EPA electronically via CEDRI unless it contains confidential business information (CBI). Submittals containing CBI are to

be sent hardcopy to the addresses specified. Copies of each document sent to EPA should be sent to the Tribal Air Quality Coordinator except those containing CBI.

Permit Conditions 3.41 through 3.45 require submittal of an annual emission inventory (of actual emissions) and payment of fees for Part 71 purposes. These requirements refer to Permit Condition 4.1 for the actual due date by which fees and emissions must be submitted each year. The per-ton fee rate varies each year; the permittee should contact EPA to obtain the current rate. The submittal of the emission inventory is timed to coincide with the payment of fees because annual Title V fees are based on actual emissions generated during the previous calendar year. Appendix A to this statement of basis documents the methods, techniques, and assumptions that EPA believes provide the most accurate basis for estimating actual emissions for this facility. As explained in Section 3.2 of this statement of basis, the emission estimation techniques listed in this statement of basis should be used to calculate the annual emissions inventory, unless the permittee has other information showing why another technique more accurately represents emissions. Also note that the actual emission estimates differ from the facility's PTE because actual emissions are calculated based on actual operations, not maximum operational capacity.

Permit Condition 3.46 requires submittal of an annual emission inventory (of actual emissions) for FARR registration purposes. Appendix A to this statement of basis documents the methods, techniques, and assumptions that EPA believes provide the most accurate basis for estimating actual emissions for this facility. As explained in Section 3.2 of this statement of basis, the emission estimation techniques listed in this statement of basis should be used to calculate the annual emissions inventory, unless the permittee has other information showing why another technique more accurately represents emissions. Also note that the actual emission estimates differ from the facility's PTE because actual emission are calculated based on actual operations, not maximum operational capacity.

Note that the FARR emission inventory is required to be submitted to EPA electronically via FORS unless it contains CBI. Submittals containing CBI are to be sent hardcopy to the addresses specified in Condition 3.40. Copies of each document sent to EPA should be sent to the Tribal Air Quality Coordinator except those containing CBI.

Permit Conditions 3.47 and 3.48 require semi-annual monitoring reports and prompt deviation reports. Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit. Failure to meet any permit term or permit condition, including emission standards, is considered a deviation. Other credible evidence (including any evidence admissible under the federal rules of evidence) must be considered by the source and EPA in such determinations. The timing for reporting deviations, as well as other data collected, depends on the circumstances, as explained in these permit conditions.

Permit Condition 3.49 requires an annual compliance certification. The permittee must certify compliance with the permit conditions in sections 3 through 9. The permittee does not need to annually certify compliance with the provisions in permit sections 1 or 2. Consistent with Permit Condition 2.6, however, if a permittee is aware of any information that indicates noncompliance, that information must be included in the annual compliance certification. In a year when the permit is renewed or revised, the permittee must address each permit for the time that permit was in effect. Forms for the annual compliance certifications may be obtained on the internet at <https://www.epa.gov/title-v-operating-permits/epa-issued-operating-permits>.

Permit Condition 3.50 requires the permittee to certify the truth, accuracy and completeness of all documents (notices, reports, data, and etc) submitted to EPA. The certification must be signed by a responsible official as defined in 40 CFR 71.2. CFI's responsible official is listed on the first page of the permit. The permittee should request an administrative amendment of the permit if the responsible official for the facility changes.

Permit Conditions 3.51 through 3.52 require the permittee to submit an application for renewal and describe some of the information that must be included in the application. As explained in Permit Conditions 2.12 through 2.14, failure to submit a complete application on time terminates the permittee's right to operate. The expiration date of the permit is listed on the top right-hand corner of the front page of the permit.

Permit Section 4 - Facility-Specific Requirements

This permit section includes applicable requirements and related testing, monitoring, recordkeeping and reporting that apply either to multiple emission units or on a facility-specific basis. Unless otherwise specified, emission units are subject to the facility-specific requirements in Section 4 of the permit as well as the general and unit-specific requirements in Sections 3 and 5 through 9 of the permit.

Permit Condition 4.1 lists the due date for the annual fees and emission reports required in Permit Conditions 3.41 through 3.46.

Permit Conditions 4.2 and 4.3 limit the sulfur content of the solid fuel burned in any combustion device and specifies the method for determining compliance. The facility currently burns only wood waste, but Region 10 is approving the facility's request to also burn agricultural-derived biomass in the boiler. For wood waste, the underlying rule allows the permittee to simply keep records showing that only wood waste is burned because the naturally occurring sulfur content of wood waste is normally much less than the limit of 2% by weight. Wood waste at the facility was measured to contain 0.09% sulfur by weight. Because the naturally occurring sulfur content of agricultural-derived biomass is similarly small, Region 10 is waiving the requirement to track the sulfur content in the fuel and requiring only that the Permittee keep records showing that only agricultural-derived biomass is burned in addition to wood.

Permit Conditions 4.4 through 4.11 require a quarterly survey (also called a plant walkthrough) for visible and fugitive emissions as well as specific follow-up steps (investigation, corrective action, RM9 observation and additional recordkeeping and reporting) if visible or fugitive emissions are observed. If observed visible or fugitive emissions can not be eliminated within 24 hours, a tiered sequence of RM9 opacity observations must be performed. Observations of visible or fugitive emissions during a survey are not considered deviations; however, any resulting RM9 readings above 20% opacity are considered permit deviations pursuant to Permit Conditions 3.47 and 3.48. The annual fugitive particulate matter survey required in Permit Condition 3.13 can be accomplished simultaneously with a quarterly survey required in this permit condition as long as both requirements are fully complied with. This permit condition serves as the general periodic monitoring for several fugitive and particulate matter limits found in the permit. This requirement applies to emission sources that normally do not exhibit visible or fugitive emissions. If the permittee prefers a specific periodic monitoring approach for any emission sources subject to this requirement, the permittee can propose a new approach as a permit modification (see the boiler periodic monitoring in Permit Conditions 5.19 for example).

Permit Conditions 4.12 and 4.13 limit HAP emissions to below the major source thresholds of 10 tons per year for any individual HAP and 25 tons per year for all HAP totaled. These limits, often called synthetic minor limits, were originally created in the 2006 Title V permit as 9.5 and 24.5 tons per year. The 2007 Non-Title V permit issued to Stimson lowered the limits to what they are today: 9 tons per year for a single HAP and 24 tons per year for all HAPs totaled. Given rounding conventions, the limits effectively remain at 9.5 and 24.5 tpy. Concurrent with issuance of the 2020 Title V renewal permit, the Non-Title V permit is being revised to make the emission limits enforceable as practicable matter. The facility will be treated as a minor source for NESHAP/MACT reasons as long as it complies with the limits. Because the limits are facility-wide, compliance with the limits will be determined based on actual emission estimates using actual production data and emission factors (or the methods to derive them) specified in the permit for boiler EU-1, kilns EU-2, sawmill EU-3 and planer mill EU-4.

Permit Condition 4.14 helps assure that default and test-derived factors do not underreport emissions. Stimson and EPA Region 10 are relying upon EF to be representative of emissions. Condition 4.14 assures that emission units and control devices are maintained so that effectiveness does not diminish from the levels achieved during boiler EU-1 source testing (when FHISOR, EF and RF are established).

Permit Condition 4.15 requires the permittee by the 10th of the month (beginning the month after the month Permit No. R10NT501001 becomes effective) to calculate and record facility-wide 12-month rolling HAP emissions. For the month in which Permit No. R10NT501001 becomes effective and the eleven preceding months, emissions generated by boiler EU-1 and kilns EU-2 are required to be quantified. Emissions from sawmill EU-3 and planer mill EU-4 must also be quantified but starting at a later date within six months after the month Permit No. R10NT501001 becomes effective.

Permit Condition 4.16 requires emission calculations and supporting data to be kept for 5 years, consistent with the Non-Title V permit and the Part 71 data maintenance requirements.

Permit Condition 4.17 requires certain monitoring equipment required by this permit to meet certain performance, operational and maintenance criteria to assure the generated data is valid and representative. Both CAM and Permit No. R10NT501001 are cited as the authority for the provisions of this permit condition. Conditions 5.19 and 5.20 (except 5.20.1.1 and 5.20.6) are CAM requirements. Permit No. R10NT501001 is underlying authority for Conditions 5.17, 5.18, 5.20, 5.26, 6.7, 6.9, 6.11, 7.3 and 8.3.

Permit Condition 4.18 requires permittee to develop a monitoring plan that demonstrates that monitoring carried out by the permittee to satisfy Permit No. R10NT501001 complies with Condition 4.17.

Permit Condition 4.19 specifies submittal dates for plans required to be developed and implemented to satisfy Permit No. R10NT501001 provisions. The plans must be reviewed annually by the permittee and updated as needed or required by EPA.

Permit Condition 4.20 requires the permittee to report HAP emissions annually and sets a reporting deadline that is common to the deadline for submitting the FARR registration and the deadline for submitting the part 71 annual emission report and fee calculation worksheet. This allows all of the emission reporting to be done simultaneously for the facility.

Permit Conditions 4.21 and 4.22. The PSD regulation applicability test for modifications was changed in December 2002. The rule change resulted in a new applicable requirement for PSD major sources. Since the facility is a PSD major source, this term is included in the operating permit. In summary, when the permittee considers a plant modification project to be exempt from PSD via the method specified in 40 CFR 52.21(b)(41)(ii)(a-c) and there is a reasonable possibility that there will be a significant emissions increase resulting from the project, then the permittee must fulfill specified requirements related to documentation, monitoring, and notification. This term will be relevant only when the permittee is contemplating making physical or operational changes to the facility. In those instances it is strongly recommended that the permittee contact EPA to discuss their plans and verify their assumptions.

Permit Section 5 - Unit-Specific Requirements - EU-1 (Hog Fuel-fired Boiler)

Permit Condition 5.1 limits the particulate matter (PM) emissions from the boiler to 0.2 gr/dscf at 7% O₂ while exclusively combusting wood and to 0.1 gr/dscf at 7% O₂ at all other times. The permit condition also describes the emission testing method for determining compliance.

Permit Condition 5.2 limits the sulfur dioxide (SO₂) emissions from the boiler and describes the emission testing methods for determining compliance. As the boiler only uses wood waste and agricultural-derived biomass as fuel, SO₂ emissions are expected to be well below the emission limit.

Permit Condition 5.3 restricts the permittee to firing resinated and non-resinated wood residue and wood products, logging residues and agricultural-derived biomass. It is Region 10's understanding that boiler EU-1 generally combusts only hogged bark and wood residue generated at a mill and that, on an annual basis, less than 1% of the fuel combusted in boiler EU-1 is something other than hogged bark and wood

residue generated at a mill. The EU-1 boiler emission factors specified in the permit reflect emissions resulting from the combustion of bark or wood.⁶ If the amount of agricultural-derived biomass burned remains less than 1%, requiring testing while burning agricultural-derived biomass is not needed in the absence of other information. On an annual basis, these emissions factors are representative of boiler EU-1's annual emissions given our understanding that Stimson generally combusts only bark and wood residue.

Permit Condition 5.4 limits the monthly amount of agricultural-derived biomass (i.e., crop residue) Stimson is allowed to combust in boiler EU-1 to assure the EF (lb/mmBtu) prescribed in the permit (based on the combustion of wood) remain representative of emissions. Region 10 is not aware of any EF having been developed for combustion of crop residue in a boiler. Wood and crop residues are forms of biomass. Region 10 anticipates that the emission factors for combustion in a boiler for the two categories of biomass will generally be similar. Wheat chaff, a crop residue Stimson has identified as a potential fuel, has a heat content similar to or higher than wood.⁷ In other words, compared to wood, combustion of wheat chaff generates more heat per pound. All other factors being equal, the heat content factor suggests EF for combustion of wheat chaff would be lower than EF for combustion of wood.

Permit Condition 5.5 requires the boiler exhaust to be vented to the multiclone and scrubber at all times. While there is no testing to confirm it, it can be assumed that both control devices are needed for the boiler to comply (under all operating conditions) with the particulate matter and visible emission limits.⁸ The EF for trace metal compounds reflect control through multiclone and wet scrubber (hydrogen halides too). For the EF to remain representative, the permittee is required to employ these air pollution control devices at all times boiler EU-1 operates. This requirement ensures the emission control device is used and will be considered when estimating PTE for the boiler.

Permit Condition 5.6 requires Stimson to develop and implement an O&M plan for boiler EU-1 and its air pollution control equipment to minimize emissions. The permittee is employing, in part, test-derived EF, RF and FHSOR to determine its emissions. EPA is relying upon boiler EU-1 and its multiclone and scrubber to perform like they did during testing to maintain the representativeness of the test-derived RF. EPA is relying upon Stimson to maintain good combustion in the firebox to maintain representativeness of the test-derived EF. As stated in Condition 4.19.2, if EPA determines that the plan does not achieve the goal of good air pollution control and efficient operation, then EPA will notify the permittee of the specified deficiencies, and the permittee shall submit a revised plan to EPA within 30 days.

Permit Condition 5.7 provides the fundamental calculation to determine boiler EU-1's monthly emissions for an individual HAP based upon the mass of steam generated (mlb), the boiler's FHSOR (mmBtu/mlb steam) and an EF (lb/mmBtu).

Permit Condition 5.8 specifies the calculation of boiler EU-1's emissions for the eleven months prior to the month Permit No. R10NT501001 becomes effective plus the month in which the permit becomes effective. For these first twelve months, this permit specifies a methodology for calculating emissions that was not, in some instances, precisely specified in the current part 71 permit. For instance, no EF were specified in the part 71 permit other than HCl for boiler based upon quarterly fuel sampling and analysis.

⁶ In developing boiler EU-1 EF listed in Appendix B to the permit, EPA screened out emissions data resulting from combustion of resinated wood residue given Region 10's understanding that this type of fuel constitutes less than 1% of the fuel fired in Stimson's boiler.

⁷ The Cost of Using Crop Residues in Direct Combustion Applications. Solar Energy Research Institute. SERI/TR-353-513. March 1980. <https://www.nrel.gov/docs/legosti/old/513.pdf>

⁸ AP-42 (Table 1.6-1, September 2003) RM5 PM EF for combusting bark alone is 0.54 lb/mmBtu. The FARR 0.2 gr/dscf @ 7% O2 RM5 PM emission limit for "wood" combustion is equivalent to 0.412 lb/mmBtu when assuming combustion of bark alone. See page 3 (EF Reference 4, Option 6) of May 8, 2014 EPA memorandum entitled, "Non-HAP Potential to Emit Emission Factors for Biomass Boilers Located in Pacific Northwest Indian Country" at https://www.epa.gov/sites/production/files/2016-09/documents/bbnonhappteef_memo.pdf

The part 71 permit's SOB, however, did present a PTE EI as an appendix, and the EF used in that part 71 permit's PTE EI for boiler EU-1 and kilns EU-2 are specified in Appendix A to this permit for use in calculating HAP emissions for the 11 months prior to the permit becoming effective and the month in which the permit becomes effective. Note that trace metal compound EF have not been adjusted to account for RM29 shortcoming because it is not reasonable to require permittee to calculate emissions in this manner without notice through this permitting action. The trace metal EF in Appendix B to this permit are adjusted, as appropriate, going forward beginning the month after the month Permit No. R10NT501001 becomes effective.

Condition 5.8 specifies a FHSOR of 1.768 mmBtu/mlb steam based upon three source tests (and associated fuel sampling and analysis) conducted of boiler EU-1 in October 2012 (1.667), October 2014 (1.632) and October 2018 (2.004). The use of an average value seems fair given no knowledge of a physical or operational change having taken place over those stretch of years that would result in a less efficient boiler. As FHSOR increases, calculated emissions increase. If the test-derived FHSOR trend continues upward as evidenced through new testing required by this permit, then EPA Region 10 will need to consider re-evaluating the strategy for using a multi-year average FHSOR for calculating emissions as the boiler becomes less efficient. Because FHSOR may be influenced by the moisture content of the fuel being combusted, EPA Region 10 is requiring FHSOR testing be conducted twice; once during a typically wet time of year (December through March) and then again during a typically dry time of year (July through September). See Condition 5.13.

Condition 5.8 refers to Appendix A for the boiler EU-1's EF's, except for HCl. Quarterly HCl EF's are based upon fuel sampling and analysis previously conducted pursuant to former part 71 permit R10T5020101 Condition 5.15 and calculations consistent with Appendix D of this permit and an assumed ratio of HCl EF to chlorine fuel content of 0.15. Steam, also used in the calculation of emissions, would have been determined pursuant to former part 71 permit R10T5020101 Condition 5.9.1.

Permit Condition 5.9 specifies how to calculate boiler EU-1's emissions beginning the month after the month in which Permit No. R10NT501001 becomes effective. The methodology for calculating emissions for the months immediately preceding and proceeding the month in which the permit becomes effective is generally the same, including FHSOR. The methodology to calculate the HCl EF continues to be based upon quarterly fuel sampling results, but FC is calculated using the most recent eight quarterly sampling results (not just the most recent one). EF for all other HAP are new and presented in Appendix B to the permit. The EF are tailored to spreader stoker boilers combusting wet hog fuel and employing multiclone and wet scrubber. But like the EF in Appendix A, the EF in Appendix B continue to be based upon average underlying source test values. The derivation of the EF in Appendix B to the permit are presented in Appendix A to the Statement of Basis.

Permit Condition 5.10 specifies how to calculate emissions after EPA approves two rounds of testing (and fuel sampling and analysis) for boiler EU-1 to determine FHSOR, EF and RF (equal to EF/FC). Table 5-1 lists the HAP for which EF or RF shall be determined.

Table 5-1: Identification of HAP for Which EF Shall Be Determined through Source Testing

Organic Compounds	Halogen and Hydrogen Halide Compounds	Trace Metal Compounds
1. Acetaldehyde	1. Chlorine	1. Lead compounds
2. Acrolein	2. Hydrogen chloride	2. Manganese compounds
3. Benzene	3. Hydrogen flouride	3. Phosphorus
4. Formaldehyde		
5. Hexane	For halogen, hydrogen halide compounds and trace metals compounds listed in these two columns, RF shall also be determined through simultaneous fuel sampling and source testing.	
6. Methanol		
7. Methyl isobutyl ketone		

Organic Compounds	Halogen and Hydrogen Halide Compounds	Trace Metal Compounds
8. Methylene chloride		
9. Propionaldehyde		
10. Styrene		
11. Toluene		

Upon submitting the second of the two source test reports, Stimson is required to use two-test average EF and RF values to calculate boiler EU-1 emissions calculations. For FHISOR, the permittee is required to average five values; three existing test-derived values from October 2012, 2014 and 2018 and two test-derived values from the two rounds of testing required by this permit. See discussion of Condition 5.13 below for an explanation of the requirement for two source tests during different parts of the year.

For the organic HAP in Table 5-1 of the Statement of Basis (Table 5-2 of the permit), a test-derived EF (as opposed to Appendix B EF) is required to be used to calculate monthly emissions going forward. For halogen, hydrogen halide and trace metal HAP compounds in Statement of Basis Table 5-1, emissions are dependent upon the concentration of pollutant in the fuel along with a complex set of factors that result in only a fraction of the pollutants being exhausted to atmosphere. A portion of the pollutants are captured in the boiler's bottom ash, the multiclone's fly ash and in the wet scrubber's dirty water. The test-derived release factor or "RF" is required to be used to calculate monthly emissions going forward. As explained in Condition 5.13.5, "RF" is the ratio of post-control EF to FC measured during testing. With (1) test-derived knowledge of RF, and (2) quarterly sampling and analysis of halogens chlorine and fluorine along with trace metals over eight quarters, the permittee is required to calculate quarterly EF pursuant to Equations 5-3 and 5-4 of the permit. Note that for trace metals lead and manganese, an additional factor is used in the EF calculation. AF or "adjustment factor" is needed (except for phosphorus) to account for the fact that RM29 measures only the trace metal and the not the entire compound the trace metal is a part of. The HAP identified by Congress in Section 112 of the Clean Air Act is trace metal compounds, not just trace metals. The AF in Table 5-1 of the permit account for this shortcoming in testing capability.

Permit Condition 5.11 requires the permittee, after completion of boiler EU-1 FHISOR testing required by Conditions 5.15 and 5.16, to use an updated FHISOR in boiler EU-1 emissions calculations. To update FHISOR after having conducted such a test, the permittee is required to average at least six values; three existing test-derived values from October 2012, 2014 and 2018, two test-derived values from the two rounds of testing required by Condition 5.13, and all subsequent test-derived values resulting from testing required by Conditions 5.15 and 5.16.

Permit Condition 5.12 requires the permittee to calculate boiler EU-1's emissions while not generating steam by tracking the volume of fuel fired (wet) and converting that volume to heat input, which is then used with the EF listed in Appendix B to the permit to calculate emissions. The 0.227 mmBtu/ft³ conversion factor is calculated as follows:

mmBtu/ft3 fuel = fuel density [lb/ft3] * higher heating value [Btu/lb] * (mmBtu/1,000,000 Btu)			
mmBtu/ft3 fuel = (48.7 lb/ft3) * (4655 Btu/lb) * (mmBtu/1,000,000 Btu)			
mmBtu/ft3 fuel = 0.227			
<u>Fuel Density</u>			
Species	Idaho 2015 Timber Harvest of Saw and Veneer Logs ^a , (mbf)	Average Green Weight of Wood & Bark ^b , (lb/ft3)	
True Fir (Grand Fir)	376,811	52	
Douglas Fir	300,871	47	
Western Red Cedar	59,110	31	
Ponderosa Pine	89,307	52	
Western Larch	70,197	53	
Western Hemlock	53,638	51	
Lodgepole Pine	37,942	42	
Engelmann Spruce	18,689	45	
Western White Pine	8,386	42	
Weighted average:		48.7	

^a University of Montana Bureau of Business and Economic Research document entitled, "Idaho's Forest Products Industry and Timber Harvest, 2015." August 2, 2017. Table 5.

^b USDA Forest Service, Northern Research Station, Research Note NRS-38 entitled, "Specific Gravity and Other Properties of Wood and Bark for 156 Tree Species Found in North America." October 2009. Table 1B. https://www.nrs.fs.fed.us/pubs/rn/rn_nrs38.pdf

<u>Fuel Higher Heating Value</u>			
Year of Fuel Sampling & Analysis at Stimson	Test/Sample Number	Higher Heating Value (as fired, ie. wet basis), (Btu/lb)	Average
2018	1	5183	5048
	2	5045	
	3	4917	
2014	1	4060	3847
	2	3800	
	3	3680	
2012	1	5640	5069
	2	4713	
	3	5273	
	4	4650	
		3-Test Average:	4655

Permit Condition 5.13 requires Stimson to perform two rounds of source testing and concurrent fuel sampling/analysis to determine FHSOR, EF and RF in accordance with specified methods for boiler EU-1. The amount of moisture in the fuel may influence FHSOR and EF. Boiler EU-1’s fuel moisture content varies by time of year because it is stored outside and only a fraction is protected from weather conditions. The company has suggested that the outside ambient temperature (which influences combustion air temperature) may also influence FHSOR. To mitigate the possibility that FHSOR and HAP emissions may be influenced by seasonal environmental conditions (although not evidenced for FHSOR by the fuel moisture content data in Appendix D), EPA Region 10 is requiring testing be conducted twice; once during a typically cold and wet time of year (December through March) and then again during a typically warm and dry time of year (July through September). See Figure 5-1 for monthly average rainfall totals for Plummer, Idaho.

Figure 5-1: Average Monthly Rainfall in Plummer, Idaho⁹



Permit Condition 5.13.1 imposes different testing conditions as opposed to standard conditions. A constant demand for steam exists as the boiler serves a steam generator providing electricity for sale to Avista Utilities, and Stimson operates the boiler to provide as much steam/electricity as possible. For those periods when the fuel is relatively dry, the boiler operates at higher steaming rates. For those periods when the fuel is relatively wet, the boiler operates at lower steaming rates. This permit term assures that the steam generating rate at which testing is conducted is representative of rate normally generated during the time of year the testing is conducted.

Permit Condition 5.13.2 establishes minimum sampling duration and volume of exhaust gas collected, generally consistent with other EPA regulatory requirements. According to EPA RM29A (Section 13.3.3.1), “a nominal one hour sampling run will collect a stack gas sampling volume of about 1.25 m3.” At that sampling duration and volume, Region 10 expects the concentrations of lead, manganese and phosphorus to be more than three times the RM29A detection limit as illustrated in Appendix E to the TSD supporting Permit No. R10NT501001.

Permit Condition 5.13.7 helps assure that each run’s composite fuel sample (and subsequent analysis that shapes FC, FHSOR, EF and RF) is representative of the fuel combusted during the run. The sample is

⁹ <https://www.weather-us.com/en/idaho-usa/plummer-climate#rainfall>

required to be taken at a location in the fuel delivery system subsequent to all upstream blending. Sampling must be conducted downstream of the location where the three independently controlled streams merge into one. See Appendix F to the TSD supporting Permit No. R10NT501001 for illustration.

Permit Condition 5.13.8 specifies what to do in the event fuel sampling and analysis or source testing generates a “non-detect” measurement of a pollutant. Each of the pollutants is expected to be present in the sample collected/analyzed based upon emissions information supporting the EF in Appendices A and B to the permit. If at least one run detects the pollutant, then it is reasonable to conservatively assume that the pollutant concentration is equal to the method detection limit (MDL) for non-detect runs. If no runs detect the pollutant, then it is reasonable to assume that the pollutant concentration is half-way between 0 and the MDL. With respect to source testing, the permittee can reduce the level of the MDL by extending the duration of the test run.

Condition 5.13.8 is more stringent than Appendix B (Procedures for Handling Test Data That are Below the Method Detection Limits) to EPA’s Draft Final August 2013 “Recommended Procedures for Development of Emission Factors and Use of the WebFIRE Database,” EPA-453/D-13-001. The referenced document recommends (1) no EF be assigned when all measurements are below the method detection limit, and (2) measurements below the method detection limit be assigned a value of one-half the method detection limit when at least one other run measures the pollutant at a concentration above the method detection limit. Condition 5.13.8 is less stringent than EPA Boiler MACT regulations at 40 CFR 63.7520(f) which requires that all measurement results below the method detection limit be assumed equal to the method detection limit.

Permit Condition 5.14.1 requires that monitoring be performed during source testing that the permittee is already required to perform at all times the boiler is operating pursuant to Condition 4.17.4 and 5.20.

Permit Condition 5.14.2 requires that monitoring be performed to document the character of the fuel fired in boiler EU-1 during testing to determine EF, RF and FHISOR.

Permit Conditions 5.15 and 5.16 require measurement of particulate matter emissions. Test results over the years (see summary in Appendix A to this Statement of Basis) show PM emissions to be comfortably below the applicable 0.2 gr/dscf @ 7% O₂ FARR PM emission limit. Given that the last test was performed in October 2018, and that PM was measured to be less than 75% of the applicable FARR PM limit, the next test must be performed between December 1, 2021 and March 31, 2022. The schedule for additional testing after that depends on the results of that next test. During each test, visible emissions must be measured and all required periodic and compliance assurance monitoring required by the permit must be recorded. A heat-input-to-steam-output ratio must be developed during each particulate matter test, and that value must be considered along with the existing test-derived values to calculate an average ratio. The ratio is used to convert tracked steam production into heat input for calculating boiler emissions. PM testing is required to be performed during winter months to hopefully capture worst-case emissions due to wetter fuel and higher steam demand. Because the permittee prefers to measure and track steam output rather than fuel input, during each emission test a ratio of heat input to steam output must be determined using procedures found in Appendix C to the permit. The ratio is then used to convert measured steam flows (mlb/hr) to heat input (mmBtu/hr) which can be applied to emission factors that are normally in terms of heat input (lb/mmBtu). The general emission testing requirements in Permit Conditions 3.22 through 3.30 apply to all emissions testing; except, periodic visible emission testing is only required to meet 3.27 (emission unit operation), 3.29 (records during tests) and 3.30 (test reports) of the general requirements as well as the recordkeeping required in Condition 5.15.2 (note that all particulate matter testing must follow all of Condition 5.15).

Permit Condition 5.17 requires the permittee to develop and implement a plan to document the mass of fuel, by category, combusted in boiler EU-1 each month. The condition is needed to generate records documenting that no more than 1% of the fuel burned in boiler EU-1 is agricultural-derived biomass.

Region 10 is uncertain as to the representativeness of the emission factors specified in the permit (or derived through testing specified in the permit) for combustion of agricultural-derived biomass. The restriction on the amount of agricultural-derived biomass combusted in boiler EU-1 helps ensure the test-derived EF, RF and FHISOR continue to be representative of boiler EU-1 emissions.

Permit Condition 5.18 requires permittee to determine monthly the percentage of fuel combusted in boiler EU-1 consisting of agricultural-derived biomass. This information provides a check on whether the test-derived EF, RF and FHISOR continue to be representative of boiler EU-1 emissions. Condition 5.18 also requires the permittee to collect information to enable the calculation of emissions when no steam is being generated.

Permit Condition 5.19 requires routine visible emission monitoring to satisfy compliance assurance monitoring for the visible emission limit and provides additional indication of compliance with the particulate matter limit. The frequency for each observation depends on the results of the previous observation.

Permit Condition 5.20 is monitoring required of boiler EU-1, multiclone and scrubber. A 90% minimum monthly data capture (recording) requirement applies to five parameters (steam, O₂, scrubber Δp, scrubber H₂O flow and scrubber H₂O pressure) needed to calculate emissions (tracking steam) or assure representativeness of the EF (tracking O₂, scrubber Δp, scrubber H₂O flow and scrubber H₂O pressure). This requirement is in addition to the requirement in Condition 4.17.4 to operate the monitoring equipment at all times the boiler is operating except during specified periods. The 90% minimum monthly data capture (recording) requirement means that the number of “absent” recordings (excused or not) cannot exceed 10% of the total recordings required of the monitor for the month.

As stated previously in Section 5.1 of this document, boiler/multiclone/scrubber CAM and periodic monitoring requirement (for FARR PM and visible emissions limits) from the prior Title V renewal permit have been streamlined in light of more stringent monitoring from the revised non-Title V permit to assure compliance with 9/24 tpy single and total HAP emission limits. In the renewed permit, the underlying CAM and periodic monitoring authority for the streamlined requirements together with the revised non-Title V permit are cited as the basis for the new permit conditions.

Table 5-2: Summary of Streamlining of Boiler EU-1 CAM Requirements

Condition / Brief Description	CAM Requirement from Expiring Title V Permit	Streamlining?
5.20.1 – continuously measure/display steam flow with totalizer and record hourly and monthly, 90% minimum data capture	Measure steam flow (mass) and record once per hour	Yes – CAM does not require use of a totalizer
5.20.1.1 – steam flow missing data routine	None	No – no CAM requirement
5.20.2 – calculate/display rolling 60-minute average of exhaust gas O ₂ concentration at least every 15 minutes, record hourly average, 90% minimum data capture	Continuously measure/display exhaust gas O ₂ concentration, record <u>daily</u> , 90% minimum data capture	Yes – CAM does not require calculating and displaying 60-minute average or hourly recording
5.20.3 – continuously measure/display Δp across multiclone, record daily	Continuously measure/display Δp across multiclone, record <u>monthly</u>	Yes – CAM does not require daily recording

Condition / Brief Description	CAM Requirement from Expiring Title V Permit	Streamlining?
5.20.4 – calculate/display rolling 60-minute average of Δp across the scrubber at least every 15 minutes, record hourly average, 90% minimum data capture	Continuously measure/display Δp across the scrubber, record <u>daily</u> , 90% minimum data capture	Yes – CAM does not require calculating and displaying 60-minute average or hourly recording
5.20.5 – calculate/display rolling 60-minute average of H ₂ O flow to the scrubber at least every 15 minutes, record hourly average, 90% minimum data capture	Continuously measure/display H ₂ O flow to the scrubber, record <u>daily</u> , 90% minimum data capture	Yes – CAM does not require calculating and displaying 60-minute average or hourly recording
5.20.6 – calculate/display rolling 60-minute average pressure in each line supplying H ₂ O to the scrubber at least every 15 minutes, record hourly average, 90% minimum data capture	None	No – no CAM requirement

Permit Condition 5.20.1.1 requires Stimson to use a totalizer to track steam production. The mill operates a steam totalizer, and an employee records manually once an hour the instantaneous steam production rate (lb/hr) appearing on the totalizer's display positioned on the wall of the boiler control room. When calculating monthly emissions using these hourly recordings, the mill assumes each instantaneous recording is an accurate reflection of that hour's steam production. Condition 5.20.1 requires Stimson to direct a totalizer (the one currently in use or another) to consider all of the mass flow measurements performed over an hour in calculating the amount of steam produced during that hour. Stimson must begin determining hourly steam production in this manner the day the permit becomes effective.

Permit Condition 5.20.1.2 requires the use of a missing data procedure to generate an artificial steam production rate for those periods when the totalizer fails to record a steam production rate for a one-hour period (or longer). Measuring or substituting for steam production is necessary to calculate the emissions generated during an hour.

Permit Condition 5.20.2 requires an hourly average exhaust gas %O₂ wet be calculated and recorded based on measurements performed at least every 15 minutes. This provision provides for a more representative measure/recording of O₂ concentration than the 2015 part 71 permit which required an instantaneous O₂ measurement be recorded once per day. Exhaust gas O₂ provides an indication of boiler performance because much lower oxygen levels may lead to incomplete combustion and much higher oxygen levels could cause the combustion chamber to be too cool. A description for the location of the monitoring equipment is provided for clarity.

Permit Condition 5.20.3 requires recording of multiclone Δp once per day. The 2015 part 71 permit required recording of this parameter once per month. Pressure drop across the multiclone is generally related to control device performance (plugging or corrosion).

Permit Conditions 5.20.4 and 5.20.5 requires an hourly average scrubber Δp and water flow to the scrubber be calculated and recorded based on measurements performed at least every 15 minutes. This provision provides for a more representative measure/recording of scrubber Δp and water flow than the 2015 part 71 permit which required an instantaneous Δp and water flow measurement be recorded once per day. Scrubber pressure drop and water flow are real-time indicators of scrubber performance.

Permit Condition 5.20.6 requires an hourly average H₂O pressure in the dedicated water supply distribution lines be calculated and recorded based on measurements performed at least every 15 minutes. The 2015 part 71 permit did not require monitoring of this parameter. The deadline to purchase, install, calibrate and to begin operating the monitoring equipment by the first boiler EU-1 source test provides the permittee time necessary to achieve compliance. Pressure in the dedicated scrubber water supply lines (supplying the water to spray through four nozzles into the exhaust exiting the scrubber) is a real-time indicator of scrubber performance. The integrity of the nozzles is key to achieving the spray of water into the scrubber exhaust, and it is technically sound to assume a portion of boiler EU-1 HAP (halogen-based and trace metals) is reduced by spraying the water into the scrubber exhaust rather than simply pouring or pumping water into the scrubber tank. In meetings with Region 10 during the fall and winter of 2020, Stimson stated that corrosion or pluggage to a single nozzle can be detected by monitoring pressure in the upstream pipe supplying water to all four nozzles.

Permit Condition 5.21 requires Stimson, upon discovery of an indicator out of range, to expeditiously restore operation of boiler EU-1 and wet scrubber such that the indicator is no longer outside the range established in Condition 5.21.1. While failing to expeditiously restore boiler EU-1 or scrubber operations to normal or usual manner of operation (characterized by indicators operating within the acceptable range) is a permit deviation, an indicator out-of-range is not a permit deviation. Stimson is required to report each indicator out-of-range occurrence and its resolution in the semi-annual monitoring report required pursuant to Condition 3.47. Operating out of range indicates that EF (used to calculate emissions) may not have been representative of emissions generated for the period.

Permit Condition 5.22 requires Stimson, upon discovery of an indicator excursion, to expeditiously restore operation of boiler EU-1 and wet scrubber such that the indicator is no longer outside the range established in Condition 5.22.1. Permit Condition 5.22.1 specifies scrubber Δp , scrubber H₂O flow, and opacity CAM excursion thresholds based upon observations during December 2010 testing demonstrating compliance with FARR PM (40% of the 0.2 gr/dscf @ 7%O₂) and opacity limits. The lowest Δp during a single run was 3.4" H₂O. The lowest scrubber H₂O flow during a single run was 35 gallons per minute (gpm). Opacity was recorded as zero, so the threshold for an excursion has been set well below the opacity limit of 20%. See January 14, 2011 letter from Stimson to EPA. Condition 5.22.2 provides for the scrubber pressure drop and scrubber waterflow rate excursion thresholds to automatically update if certain conditions are met as provided for in 40 CFR 64.6(c)(2).

Permit Condition 5.23 simply states EPA's option to require a quality improvement plan (QIP); this condition becomes a requirement only in the event EPA informs the permittee that a QIP is required.

Permit Condition 5.24 serves as a safeguard against incorrectly set excursion/exceedance thresholds by requiring the redefinition of the thresholds as needed.

Permit Condition 5.25 requires, consistent with Permit Condition 3.35, the maintenance of all records and supporting information.

Permit Condition 5.26.1 requires quarterly fuel sampling and analysis to determine FC for chlorine, fluorine and three trace metals. Because the permit establishes a default HCl EF methodology largely consistent with 2015 part 71 permit based upon chlorine content in the fuel and default RF, quarterly sampling and analysis for chlorine is required to continue upon Permit No. R10NT501001 becoming effective. Although the default EF for Cl₂, HF and three trace metal HAP are constants (not variable EF based upon pollutant concentration in the fuel) in the absence of a default RF, fuel sampling and analysis is required of fluorine and trace metals beginning the quarter Permit No. R10NT501001 becomes effective in order to begin building an inventory of FC values contributing to eight-quarter rolling averages used in the emission calculations.

Permit Condition 5.26.2. See explanation for Condition 5.13.7.

Permit Condition 5.27 is Condition 4.28 of the former part 71 permit and reflects certain NESHAP Subpart 63, Subpart JJJJJ requirements related to recording of boiler EU-1 (and control device) malfunctions and associated actions to return operation to normal. This requirement serves as monitoring to assure compliance with Condition 4.14.

Permit Conditions 5.28 and 5.29 requires a test plan be submitted before testing and a test report submitted after testing is completed. Monthly average steaming rate (for the month in which testing is to be performed) is required to be submitted so that Region 10 can review and approve the conditions under which testing is to be conducted.

Permit Condition 5.30 requires reporting from Part 64 to be combined with the Part 71 semi-annual and deviation reports required in Permit Conditions 3.47 and 3.48.

Permit Condition 5.31 requires reporting of boiler EU-1 and scrubber indicators out of range.

Permit Condition 5.32. Existing biomass boilers are subject to periodic tune-up management practices for PM (surrogate for urban metal HAP) and CO (surrogate for urban organic HAP) based upon finding that periodic tune-ups represent generally available control technology (GACT), (78 FR 7489, February 1, 2013). An oxygen trim system, according to 40 CFR 63.11237, is a system of monitors that is used to maintain excess air at the desired level in a combustion device. Boiler EU-1 does not employ an oxygen trim system, so it is required to undergo a tune-up once every 2 years rather than every 5 years for boilers employing said system. The NESHAP Subpart JJJJJ tune-up requirements at 40 CFR 63.11223(b)(1) and (2) related to inspection of burner and flame pattern do not apply to boiler EU-1 because the boiler does not employ any burners. Burners are typically employed to combust gas and liquid fuels along with pulverized coal. In contrast, the facility employs a solid fuel feed system to introduce biomass into boiler EU-1.

Permit Conditions 5.32 – 5.33. The facility combusts in boiler EU-1 only material satisfying the definition of biomass as that term is defined at 40 CFR 63.11237. Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste as that term is defined at 40 CFR § 241.2. Because boiler EU-1 combusts only biomass, it is in the NESHAP Subpart JJJJJ biomass subcategory of boilers pursuant to 40 CFR 63.11200(b). It is with this in mind that EPA Region 10 created permit terms reflecting NESHAP Subpart JJJJJ requirements.

Permit Condition 5.33. The following sentence appears in Condition 5.33, “The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved.” Because boiler EU-1 is not subject to an emission limitation, there is no “level” to which emissions can be reduced. Achieving compliance with general duty to minimize emissions goes beyond complying with tune-up and energy assessment requirements of the previous permit’s renewal #1 Conditions 4.22 through 4.24. Compliance with this requirement will be determined, in part, based upon inspection of records created and maintained by the permittee to comply with 40 CFR 63.10(b)(2)(iii), 63.11223(b)(6) and 63.11225(c)(4) and (5).

Permit Conditions 5.34 – 5.37. The facility is required to conduct monitoring and maintain records to document compliance with GACT work practice standards and emission reduction measures. The facility is also required to document that when it combusts biomass that is considered a non-hazardous secondary material as that term is defined at 40 CFR 241.2, that it is combusting a fuel and not a solid waste.¹⁰

¹⁰ When EPA refers to secondary materials in this context, EPA means any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial

Permit Condition 5.34. The requirement to measure and record boiler EU-1 exhaust stack CO concentration is satisfied if measurements are taken before and after the performance tune-up. It is not necessary to take measurements between interim tasks in the tune-up process.

Permit Condition 5.35. Should the permittee choose to operate in accordance with an energy management program requires Stimson to, among other things, maintain records that document their energy management program and how it is compatible with ISO 50001.

Permit Condition 5.37. The following background about the different biomass streams combusted in boiler EU-1 provides some context for Condition 5.37. A majority of the biomass combusted in boiler EU-1 is hogged bark. This bark is generated on-site by the de-barking of logs prior to further processing into lumber. This clean cellulosic biomass is considered a traditional fuel as those terms are defined at 40 CFR 241.2.

Permit Conditions 5.37.1 and 5.37.2. These permit conditions refer to legitimacy criteria that must be satisfied in order to consider non-hazardous secondary material to be a fuel.

Permit Condition 5.37.2. This permit condition refers to the term processing, and that term has the meaning given to it by EPA at 40 CFR 241.2. Processing means any operations that transform discarded non-hazardous secondary material into a non-waste fuel or non-waste ingredient product. Processing includes, but is not limited to, operations necessary to: Remove or destroy contaminants; significantly improve the fuel characteristics of the material, e.g., sizing or drying the material in combination with other operations; chemically improve the as-fired energy content; or improve the ingredient characteristics. Minimal operations that result only in modifying the size of the material by shredding do not constitute processing for purposes of this definition.

Permit Condition 5.37.3. This permit condition refers to a petition process whereby the Regional Administrator may grant a non-waste determination that a non-hazardous secondary material that is used as a fuel, which is not managed within the control of the generator, is not discarded and is not a solid waste when combusted pursuant to 40 CFR 241.3(c).

Permit Condition 5.37.4. The facility does not combust any of the materials that EPA has listed as non-waste under 40 CFR 241.4(a). The current list of EPA-designated non-waste materials are as follows:

- Scrap tires that are not discarded and are managed under the oversight of established tire collection programs, including tires removed from vehicles and off-specification tires;
- Resinated wood;
- Coal refuse that has been recovered from legacy piles and processed in the same manner as currently-generated coal refuse; and
- Dewatered pulp and paper sludges that are not discarded and are generated and burned on-site by pulp and paper mills that burn a significant portion of such materials where such dewatered residuals are managed in a manner that preserves the meaningful heating value of the materials.

Permit Condition 5.38. The underlying NESHAP Subpart JJJJJ requirement at 40 CFR 63.11223(b)(6) requires the permittee to track certain tune-up related information and to submit it to the EPA if requested by the Administrator. EPA is taking this opportunity to require the permittee to submit certain tune-up related information as part of notification of compliance status and annual compliance certification. The requirement in 40 CFR 63.11223(b)(6)(iii) to track the type and amount of fuel used over the 12 months prior to the tune-up would have appeared as an element of Permit Condition 5.38, but the requirement

chemical products or manufacturing chemical intermediates, post-industrial material, and scrap. A non-hazardous secondary material is a secondary material that, when discarded, would not be identified as a hazardous waste under 40 CFR 261.

does not apply to boiler EU-1 because it combusts only biomass. It is not physically capable of using any other type of fuel listed at 40 CFR 63.11200.

Permit Condition 5.39. EPA is utilizing its discretion, as granted through 40 CFR 63.11225(b), to require the permittee to submit a NESHAP Subpart JJJJJJ compliance certification report to EPA each year by March 15 for the previous year's operations. EPA is unable to require this report be submitted by February 28 as part of the annual compliance certification report required by Condition 3.49 because the underlying NESHAP Subpart JJJJJJ reporting provision specifies a submittal date no sooner than March 15.

Permit Condition 5.40. This permit condition refers to the Permittee submitting notice to the Agency prior to combustion of solid waste and that the notice contain the elements found in the underlying rule pursuant to 40 CFR 63.11225(f).

Permit Condition 5.41. This permit condition refers to the Permittee submitting notice to the Agency prior to combustion of switched fuel, physical change or permit limit pursuant to 40 CFR 63.11225(g).

Permit Section 6 - Unit-Specific Requirements - EU-2 (Lumber Drying Kilns)

Permit Conditions 6.1 limits particulate matter emissions and describes the test method for determining compliance. The visible and fugitive emission monitoring required in Permit Conditions 4.4 through 4.10 will serve as the periodic monitoring to assure compliance for this unit.

Permit Condition 6.2 prohibits permittee from drying lumber for a species of wood if the species is not a Pacific Northwest softwood. The Pacific Northwest refers to the states and territories of Washington, Oregon, Northern California, Idaho, Montana, Wyoming and British Columbia.

Permit Condition 6.3 requires Stimson to develop and implement an O&M plan for kilns EU-2 to minimize emissions. The permit allows Stimson to employ best-fit-curve and average EF based upon small-scale kiln testing to determine kilns EU-2 emissions without follow-up source testing for the reasons explained in the technical support document to the underlying non-Title V permit. Compliance with this condition assures that drying will be carried out uniformly across the kiln so as to discourage the creation of "hot spots" that unnecessarily generate greater emissions. Compliance with this condition helps assure that use of the prescribed EF do not underreport kilns EU-2 emissions.

Permit Condition 6.4 requires kilns EU-2 emissions be determined monthly by calculating emissions attributable to drying lumber of each wood species and then calculating the sum across all wood species. Species-specific emissions are calculated by multiplying lumber throughput (mbf/month) by EF (lb/mbf).

Permit Condition 6.5 specifies, for the twelve months prior to and including the calendar month in which Permit No. R10NT501001 becomes effective, the methodology to determine species-specific lumber volumes and EF to be used in Condition 6.1's Equation 6-1. Stimson is required to have measured product-specific lumber volumes for all charges, and Appendix E provides the methodology for estimating monthly species-specific kilns EU-2 lumber throughput. The following calculations explain how the fractions of lumber product volumes by species were derived:

Species	Idaho 2015 Timber Harvest of Saw & Veneer Logs (mbf)	Estimated Fraction of Product Volume by Species		
		WW	FL	IHFIR
Douglas Fir	300,871	0.296	0.811	
Engelmann Spruce	18,689	0.018		
Lodgepole Pine	37,942	0.037		
Ponderosa Pine	89,307	0.088		
Western Hemlock	53,638	0.053		0.125
Western Larch	70,197	0.069	0.189	
Western Red Cedar	59,110	0.058		
Western True Firs	376,811	0.371		0.875
• Alpine Fir (component of Western True Firs)	not specified			
Western White Pine	8,386	0.008		
Total	1,014,951	1	1	1

Estimated fraction of product volume by species is calculated by dividing 2015 Idaho harvest of the species by 2015 Idaho harvest of all species in the product.

Example calculation: fraction of Douglas Fir in WW product is calculated as follows:
 $0.296 = 300,871 / (300,871 + 18,689 + 37,942 + 89,307 + 53,638 + 70,197 + 59,110 + 376,811 + 8,386)$.

For product ESLPAF containing species Englemann Spruce, Lodgepole Pine, Alpine Fir and Western White Pine, the estimated fraction of each could not be calculated using the University of Montana’s document entitled, “Idaho’s Forest Products Industry and Timber Harvest, 2015” because the document does not provide a timber harvest total for Alpine Fir (part of larger Western True Firs category). For ESLPAF, the species fractions in Appendix E to the permit were provided by Stimson and reflect on-site scaling data (species-specific # of logs received, not mbf by species) between February and November 2020. Beginning in February 2020, Stimson began scaling a fraction of incoming log trucks on a daily basis.

Species-specific EF for five HAP are specified in Appendix F to the permit. Appendix F is EPA Region 10’s November 2012 EF. Stimson is required to have recorded the maximum set point “entering air” temperature for each charge and determine a species-specific monthly maximum to determine species-specific monthly formaldehyde and methanol EF via Appendix F. Appendix F reflects two sets of fixed EF for formaldehyde and methanol; one for maximum temperatures less than or equal to 200°F and the other for maximum temperatures greater than 200°F.

Permit Condition 6.6 specifies, for time period beginning the month after the month Permit No. R10NT501001 becomes effective, the methodology to determine species-specific lumber volumes and EF to be used in Condition 6.1’s Equation 6-1. Stimson is required to have measured product-specific lumber volumes for all charges and scaled a portion of incoming truckloads for the preceding six-month period to estimate monthly species-specific kilns EU-2 lumber throughputs.

Species-specific EF for five HAP are specified in Appendix G to the permit. Appendix G is EPA Region 10’s January 2021 EF. Stimson is required to have recorded for each charge (1) the maximum set point “entering air” temperature and (2) all measured/calculated kiln-wide average “entering air” temperatures. The recorded set point information (plus 4°F) is needed to determine a species-specific monthly maximum to determine species-specific monthly formaldehyde and methanol EF via Appendix G. Appendix G reflects best-fit linear equations for formaldehyde and methanol.

It is not uncommon for kiln-wide average instantaneous temperatures to spike above the maximum set point temperature. Because Stimson does not currently have an automated system in place to calculate kiln-wide 60-minute average “entering air” temperatures, Region 10 is requiring Stimson to use drying schedule maximum temperatures plus 4°F to calculate methanol and formaldehyde EF. 4°F is approximately two times the 1.8°F maximum temperature differential (between set point and one-hour average kiln-wide “entering air” temperature) observed over seven May 2021 charges (information

provided during public comment period) in which Stimson was isolating “entering air” temperature measurements and manually calculating one-hour average values.

Permit Condition 6.7 requires the permittee to track various parameters for each batch of lumber dried in kilns EU-2. Table 5-3 summarizes the information to be recorded and what the information is used for:

Table 5-3 – Kilns EU-2 Recording of Operations and Associated Emission Limitation

Monitoring Provision		Emission Limitation Provision	
Permit Condition...	Summary of Information Recorded about a Batch	Permit Conditions...	Summary of Emission Limitation
6.7.1	Identity of products and associated wood species present	4.12 and 4.13	9/24 tpy facility-wide HAP limit. Identity and volume of product is needed to calculate monthly volume of lumber dried by product. (Additional information outside the scope of Condition 6.7 monitoring needed to determine monthly volume of lumber dried by species.)
6.7.2	Volume of lumber by product	4.12 and 4.13	
6.7.3	Drying schedule’s maximum set point “entering air” temperature (°F)	4.12 and 4.13	9/24 tpy facility-wide HAP limit. Maximum set point temperature (across all charges containing, in whole or in part, a particular species) is needed to calculate monthly methanol and formaldehyde EF for the species.
6.7.4	At least every 15 minutes, the kiln-wide average dry bulb temperature of heated air that enters a load of lumber	4.12 and 4.13	9/24 tpy facility-wide HAP limit. Measurements/records are needed to check proposition that kiln-wide average temperatures do not exceed 4°F above the charge’s set point.
6.7.5	At least every 15 minutes, the kiln-wide average moisture content of lumber	4.12 and 4.13	9/24 tpy facility-wide HAP limit.

Each of the four kilns houses two side-by-side track systems. The track system is used for moving carts carrying stacks of lumber into and out of the kiln between batch drying cycles. The lumber carried by the carts on a single track inside the kiln is considered one load, so there are two loads (one on each track system) in each batch (i.e., charge) of lumber dried. A batch drying cycle duration can range from about one day to several days depending upon several factors. Kilns 1 and 2 are designed with four heating zones wherein the drying process can be separately controlled. The length of the kiln is segmented into two cross-sectional areas. The top of each is one zone, and the bottom another. Kilns 3 and 4 are designed with six heating zones with the length of the kiln segmented into three cross-sectional areas. Again, the top of each is one zone, and the bottom another. For all kilns, a minimum of four thermocouples are employed per zone, and at any one time at least two thermocouples are measuring the temperature of the air entering the loads (at least one thermocouple per load) and at least two more are measuring the temperature of the air exiting the loads (at least one thermocouple per load).

Permit Condition 6.8 requires Stimson to review monthly the information required to be monitored in Condition 6.7, and (a) record the species-specific maximum “entering air” set point temperatures, and (2) calculate and record the product-specific volume of lumber dried.

Permit Condition 6.9 requires Stimson to conduct daily monitoring to determine monthly and 6-month rolling totals of the number of logs received by species for a subset of all the logs received on-site. This information will be used to estimate the relative species make-up of each lumber product dried in kilns

EU-2. Stimson has proposed to estimate the relative volume of each species based on the 6-month rolling relative number of logs received by species. In other words, if the most recent 6-month rolling ratio of logs received by species (determined by scaling a small subset of logs received on-site) between Western True Fir and Western Hemlock is 85/15, then this month's volume (mbf) of IHFIR product is 85% Western True Fir and 15% Western Hemlock. Based on currently available information and given the facility's past actual HAP emissions in comparison to the limits in the permit, EPA Region 10 concludes that Stimson's proposed method of estimating the relative species make-up of each lumber product dried in kilns EU-2 provides an adequate assurance of compliance. Tracking the relative 6-month rolling volume of logs received (rather than number of logs received), a more time-consuming and costly process, may become necessary should the margin of compliance be reduced or other information become available indicating that Stimson's proposed estimation method does not accurately reflect the relative species make-up of each lumber product dried in kilns EU-2.

Permit Condition 6.10 is the calculation to determine monthly lumber volume dried by species beginning the month after the month Permit No. R10NT501001 becomes effective. Monthly product volume and relative break-down by species (estimated using ratio of relative number of logs received for subset of logs scaled) must be known to perform the calculation.

Permit Condition 6.11 requires Stimson to develop and implement a plan to estimate (in a manner that produces a representative result) the six-month rolling relative fraction of logs received at the facility, by species. The estimate is used to calculate kilns EU-2 emissions.

Permit Condition 6.12 requires semi-annual reporting of kiln charges with lumber moisture content less than 13%.

Permit Section 7 - Unit-Specific Requirements - EU-3 (Sawmill)

Permit Condition 7.1 limits particulate matter emissions and describes the test method for determining compliance. The visible and fugitive emission monitoring required in Permit Conditions 4.4 through 4.10 will serve as the periodic monitoring to assure compliance for this unit.

Permit Condition 7.2 specifies the methodology for calculating the emissions resulting from the pneumatic conveyance of green wood residue. Green wood residue includes chips, shavings, hogged trim ends, sawdust, planer shavings, but not hogged bark. We suspect that pneumatic conveyance of kiln-dried wood residue generates some amount of HAP, but EPA is not aware of an EF for this emission generating activity. EPA is not requiring Stimson to conduct source testing to determine an EF for pneumatic conveyance for kiln-dried wood residue because this activity's emissions are expected to be relatively small. Its EF and throughput would be a fraction of those of green wood residue.

Permit Condition 7.3 requires permittee to develop a plan to determine monthly the mass of green wood residue pneumatically conveyed on an equipment-specific basis.

Permit Condition 7.4 requires the plan to determine sawmill EU-3's GWR_{EQP} be submitted to EPA for approval by the end of the sixth calendar month after the month in which Permit No. R10NT501001 becomes effective.

Permit Section 8 - Unit-Specific Requirements - EU-4 (Planer Mill)

Permit Condition 8.1 limits particulate matter emissions and describes the test method for determining compliance. The visible and fugitive emission monitoring required in Permit Conditions 4.4 through 4.10 will serve as the periodic monitoring to assure compliance for this unit.

Permit Condition 8.2. Explanation for this condition mirrors that for Permit Condition 7.2 above.

Permit Condition 8.3. Explanation for this condition mirrors that for Permit Condition 7.3 above.

Permit Condition 8.4. Explanation for this condition mirrors that for Permit Condition 7.4 above.

Permit Section 9 - Unit-Specific Requirements - EU-5 (Used Oil-Fired Heater)

Permit Conditions 9.1 and 9.2 prohibit operation of heater EU-5 and require the unit be removed.

6. Public Participation

6.1 Public Notice and Comment Period

As required in 40 CFR 71.11(a)(5) and 71.8, all draft operating permits must be publicly noticed and made available for public comment. The public notice of permit actions and public comment period is described in 40 CFR 71.11(d). For the draft permit, the public comment period began on April 21, 2021 and ended on May 21, 2021.

For this permit action, the requirements of 40 CFR 71.11(a)(5) and 71.8 are satisfied as follows:

1. Posting the public notice, draft permit, statement of basis and the draft administrative record (which includes the application and relevant supporting materials) on EPA's website <https://www.epa.gov/publicnotices/notices-search/location/Idaho> for the duration of the public comment period.
2. Providing a copy of the public notice to: the permit applicant, the affected states, the air pollution control agencies of affected states, the Tribal, city and county executives, any comprehensive land use planning agency, any state or federal land manager whose lands may be affected by emissions from the source, the local emergency planning authorities which have jurisdiction over the area where the source is located and all persons who submitted a written request to be included on the EPA's mailing list for Title V permitting actions.

Notice of the draft permit action and opportunities to comment and request a hearing was posted on Region 10's website at <https://www.epa.gov/publicnotices/notices-search/location/Idaho> from April 20, 2021 through May 21, 2021. The administrative record was available to review online over that same time period and at the same website. Region 10 also distributed the public notices to the necessary parties via e-mail. Region 10 announced an opportunity for a public hearing on the draft permit contingent upon public interest. Because no requests were received for a public hearing, none was held.

6.2 Response to Public Comments and Permit Issuance

During the public comment period, Region 10 received comments from the Benewah County Board of Commissioners and Stimson. Region 10 considered all comments received during the public comment period. See Region 10's separate Response to Comments document for a summary of the comments and our responses. As required in 40 CFR 71.11(i), Region 10 will notify (via email) the Permittee and the Benewah County Board of Commissioners of the final permit decision. Region 10 will also provide notice of the final permit decision and make the administrative record available online for a period of 30 days at <https://www.epa.gov/publicnotices/notices-search/location/Idaho> upon issuance of the permit. As provided in 40 CFR 71.11(i)(2), the permit becomes effective August 1, 2021, which is at least 30 days after service of notice of the final permit decision, unless review is requested under the appeal provisions of 40 CFR 71.11(l), in which case the specific terms and conditions of the permit which are the subject of the request for review shall be stayed.

Permit decisions may be appealed under the permit appeal procedures of 40 CFR 124.19. An appeal under paragraph (l)(1) of this section is, under section 307(b) of the Act, a prerequisite to seeking judicial review of the final agency action.

Appendix A: PTE Emissions Inventory

Save file “sob-app-a.xlsx” attached to adobe acrobat document. Open using Microsoft Excel.