

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

Permit Number: R10T5090000
Issued: DRAFT
Effective: DRAFT
Expiration: five years from issue
AFS Plant I.D. Number: 16-009-00001

Statement of Basis

Title V Air Quality Operating Permit Initial Permit

Permit Writer: Dan Meyer

PotlatchDeltic Land and Lumber, LLC – St. Maries Complex

Coeur d'Alene Reservation
St. Maries, 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 five 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 PotlatchDeltic Land and Lumber, LLC – St. Maries Complex (referred to herein as PotlatchDeltic, the SMC, 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 comply with 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.

Abbreviations & Symbols.....	4
1. EPA Authority to Issue Title V Permits	6
2. Facility Information.....	6
2.1 Location.....	6
2.2 Coeur d’Alene Reservation	6
2.3 Local Air Quality and Attainment Status	6
2.4 Facility Description.....	7
2.5 Identification of Emission Generating Activities.....	10
2.6 Permitting, Construction and Compliance History	17
3. Emission Inventory.....	18
3.1 Emission Inventory Basics	18
3.2 Potential to Emit (PTE).....	18
3.3 Actual Emissions.....	19
4. Regulatory Analysis	20
4.1 Federal Air Quality Requirements	20
4.2 Other Federal Requirements and Responsibilities	27
5. Permit Content.....	27
6. Public Participation	79
6.1 Public Notice and Comment	79
6.2 Response to Public Comments and Permit Issuance.....	80

Appendices – Appendices are attachments to this Adobe Acrobat document. To access the attachments, you must first download this document Adobe Acrobat file from the internet. Then, open the document in Adobe Acrobat Reader.

Appendix A – St. Maries Operations PTE Emissions Inventory. Open “pd p71 revised draft sob app a.xlsx” using Microsoft Excel.

Appendix B – Applicability of FARR, NSPS and NESHAP Requirements to St. Maries Complex. Open “pd p71 revised draft sob app b.pdf” using Adobe Acrobat Reader.

Appendix C – EPA Calculation of NESHAP Subpart DDDDD Operating Limits Applicable to PB-1 and PB-2 for Boiler Exhaust Opacity and Oxygen Content and Boiler Steam Generating Rate based upon PB-1 and PB-2 Test Results. Open “pd p71 revised draft sob app c.xlsx” using Microsoft Excel.

Appendix D – EPA Lesson 6 – ESP Operation and Maintenance. Open “pd p71 revised draft sob app d.pdf” using Adobe Acrobat Reader.

Appendix E – PB-1 and PB-2 Daily Average Steam Generating Rates. Open “pd p71 revised draft sob app e.xlsx” using Microsoft Excel.

Appendix F – Evaluation of PB-1 and PB-2 Test Results. Open “pd p71 revised draft sob app f.xlsx” using Microsoft Excel.

Appendix G – EPA Calculation of NESHAP Subpart DDDD Minimum Combustion Chamber Temperature Limit for Regenerative Catalytic Oxidizer Serving Veneer Dryers Based upon Performance Testing Conducted 2008 & 2023. Open “pd p71 revised draft sob app g.xlsx” using Microsoft Excel.

Abbreviations & Symbols

APCD	Air pollution control device
ASTM	American Society for Testing and Materials
AVC	Automatic Voltage Controller
BH	Baghouse
Btu	British thermal units
CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CFR	Code of Federal Regulations
CI	Compression ignition
CO	Carbon monoxide
CO _{2e}	Carbon dioxide equivalent
CY	Cyclone
EPA	United States Environmental Protection Agency (also U.S. EPA)
ESP	Electrostatic precipitator
EU	Emission unit
FR	Federal Register
FARR	Federal Air Rules for Reservations
GHG	Greenhouse gases
HAP	Hazardous air pollutant
Hp	Horsepower
IC	Internal combustion
ID	Identification
IDEQ	Idaho Department of Environmental Quality
hr	Hour
lb	Pound
m ³	Cubic meter
µg	Microgram
MACT	Maximum achievable control technology
MC	Multiclone
mmbf	One million board feet
MMBtu	One million Btu
MSDS	Material safety data sheet
MVAC	Motor vehicle air conditioner
NAAQS	National Ambient Air Quality Standards
NSPS	New Source Performance Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen oxides
NSR	New source review
OSHA	Occupational Safety and Health Administration
PCWR	Pneumatic conveyance of wood residue
PCWP	Plywood and composite wood products
PM	Particulate matter
PM _{2.5}	Particulate matter less than or equal to 2.5 micrometers in aerodynamic diameter
PM ₁₀	Particulate matter less than or equal to 10 micrometers in aerodynamic diameter
PSD	Prevention of significant deterioration
PTE	Potential to emit
RICE	Reciprocating Internal Combustion Engine
RM	Reference Method
SI	Spark ignition
SMC	St. Maries Complex

SO ₂	Sulfur dioxide
tpy	Tons per year
ULSD	Ultra low sulfur diesel
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 and have been updated since from time to time.

As described in 40 CFR 71.4(b), EPA will implement and enforce a part 71 operating permitting program in Indian country when an operating permit program which meets the requirements of part 70 has not been granted approval by the Administrator. Unlike States, Indian Tribes are not required to develop operating permit programs, although 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"). EPA may delegate the authority to administer a part 71 operating permit program, in whole or in part, to an Indian Tribe as described in 40 CFR 71.4(j) and 71.10.

2. Facility Information

2.1 Location

The PotlatchDeltic Land and Lumber, LLC (PotlatchDeltic) St. Maries Complex (SMC) is located along the St. Joe River near the intersection of Railroad Avenue and Mill Road in northwest St. Maries, Idaho. 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 71. PotlatchDeltic's Lumber Drying Division (LDD) is located approximately one and one-half miles east of SMC and outside the exterior boundary of the reservation, subject to the jurisdiction of IDEQ. See Section 2.4 of this statement of basis for discussion of the relationship between SMC and LDD.

2.2 Coeur d'Alene Reservation

The Coeur d'Alene Reservation was established by Executive Order in 1873. The reservation is considered to be Indian country, as defined in 40 CFR 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: Brittney Nomee
Air Quality Manager
Coeur d'Alene Tribe
P.O. Box 408, 850 A Street
Plummer, Idaho 83851-0408
Phone: 208.686.8101
Email: brittney.nomee@cdatribe-nsn.gov

2.3 Local Air Quality and Attainment Status

The Coeur d'Alene Indian Reservation, Benewah County and Kootenai County are located in northern Idaho. The area is designated attainment or unclassifiable with the national ambient air quality standards (NAAQS) for all criteria pollutants. An area is unclassifiable when an area cannot be classified on the basis of available information as meeting or not meeting the NAAQS for the pollutant. The area in which the SMC is located is currently designated unclassifiable/attainment for the PM_{2.5}, ozone, CO, NO₂ and SO₂ standards. The area is currently designated unclassifiable for the PM₁₀ and lead standards.

A PM_{2.5} ambient air quality regulatory monitoring station is located just outside the reservation in St. Maries less than one mile southeast of the facility. Ambient monitoring data indicates PM_{2.5}

concentrations are at times near the NAAQS, even when data identified by IDEQ as attributable to exceptional events (i.e., wildfires) are excluded. To reduce PM emissions in the area, the City of St. Maries and the Idaho Department of Environmental Quality are participating in EPA's PM Advance Program¹. The PM Advance control measures focus on increasing public awareness of local air quality and reducing emissions from residential wood heating, open burning, and paved road dust.

2.4 Facility Description

The SMC consists of a sawmill, two lumber dry kilns, planer mill and plywood mill. The LDD (AFS Plant I.D. Number 16-009-00030) is located approximately 1.5 miles from the SMC but outside the reservation within state jurisdiction. At the LDD, PotlatchDeltic operates a biomass boiler to generate steam, and that steam is used to indirectly heat kilns that dry rough green lumber. Some of the rough green lumber produced at the SMC is transported to the nearby LDD where it is kiln dried and then returned to the SMC's planer mill. Hog fuel and shavings from SMC are transported to LDD and burned in a biomass boiler.

Although EPA and IDEQ have recognized the SMC and LDD as a single "major source" since the 1990's, both permitting authorities have recently agreed to discontinue recognizing the two as one source under the Clean Air Act. See discussion in the Response to Comments document for further details.

Sawmill

Logs are transported to the SMC via trucks. Wood species typically consist of hemlock, douglas fir, grand fir and western red cedar. Smaller amounts of lodgepole pine, subalpine fir, Engelmann spruce, ponderosa pine and white pine are also processed. The logs are unloaded from delivery trucks and stacked in the log yard. Sprinklers are used to keep the logs wet during storage.

Logs are transferred from the log yard to the sawmill merchandiser, where the logs are loaded onto one of two decks and "singulated." On one deck, the log is debarked with an A8 22-inch debarker and then cut to length by the #2 cut-off saw. On the other deck, log defects are removed by the #1 cut-off saw, and then the log is debarked with an A5 22-inch debarker and then cut -to-length by the #3 cut-off saw. The logs from both decks are then conveyed into the Sawmill Building. Sawdust and trim from the cut-off saws, along with bark from the debarkers, are routed to an enclosed hog crusher (MK Hog). The resultant hog fuel is conveyed by chain conveyers to the hog fuel bin (FD-5), fuel storage truck bin (FD-23) or ground storage (FD-39).

Logs entering the Sawmill Building are directed to the Chip-and-Saw (CNS) which consists of the following three machine centers: four-sided canter, quad band mill and vertical arbor gang saw. The four-sided canter removes the exterior of the log through a chipping process and produces a profiled log and chips. The quad band mill removes the sideboards of the log and produces a cant, sideboards and sawdust. The vertical arbor gang breaks the cant down into lumber and sawdust.

Sideboards from the quad band mill are conveyed to a chipper edger, which produces squared-end lumber and wood chips. The lumber from the edger and the lumber from the vertical arbor gang are conveyed to trim saws, where they are scanned for defects and trimmed. Lumber is then transferred to the bin sorter and stacked according to size in rough green lumber storage. Trim ends are sent to a chipper. Fine dust from the quad band mill, trimmer, chipping edger and vertical arbor gang is controlled by BH-10. Collected dust goes to the hog fuel storage bin.

Wood chips from CNS, chipper edger and chipper are conveyed to a screener. The screener sorts the incoming material into overs, wood chips and sawdust. Overs are sent back to the chipper. Chips are pneumatically routed to the chip bin through the Sawmill Chip Bin Cyclone (CY-2). Sawdust from the

¹ See <https://www.epa.gov/advance> & <https://www.epa.gov/system/files/documents/2021-09/id-st-maries-2021-path-forward-.pdf>

screen, quad band mill, and vertical arbor gang are pneumatically conveyed to the sawdust truck bin. Sawdust Bin Baghouse (BH-11) controls the bin exhaust.

From rough green lumber storage, the lumber is either planed green in the Planer Mill or dried in one of two lumber dry kilns located at the SMC or in one of four kilns at the LDD. Kiln LK-5 at the SMC has a capacity of 290,000 board feet per charge while the newer kiln LK-6 has a demonstrated capacity of 282,426 board feet per charge. Dry kiln operating temperature and dry time per charge is wood specie dependent. The maximum temperature of air exiting a load of lumber while drying in kiln LK-5 is approximately 245°F, but some wood species (i.e., cedar and ponderosa pine) are dried at lower temperatures. The temperature of air exiting a load of lumber in kiln LK-6 may not exceed 245°F. PotlatchDeltic dries several wood species in their lumber dry kilns, but predominant wood species product groupings are hemfir and douglas fir/larch. Smaller quantities of Engelmann spruce/lodgepole pine and cedar are dried in the lumber dry kilns, and very small quantities of ponderosa pine are dried at the SMC. PotlatchDeltic is prohibited from drying any species other than grand fir, white fir and western hemlock in kiln LK-6.

Planer Mill

As lumber enters the planer mill, a break down hoist “singulates” and transfers the lumber to the pineapple rollers, which feed the rough lumber into the planer. Planer shavings are pneumatically conveyed to the planer shavings bin via cyclone CY-10. Planer Shavings Baghouse (BH-2) receives CY-10 exhaust, and collected dust is transferred to the planer shavings bin. Baghouse 5 and 12 (BH-5 & 12) control the exhaust from the planer shavings bin. The surfaced lumber is graded and trimmed to length. A sorter is used to separate planed lumber by grade and length. The sorted lumber is then stacked, banded and wrapped with paper. Finished units are transferred to surfaced lumber storage until shipment off-site.

Trim ends are sent to a chipper or stored for finger joints. Dust pickups from the breakdown hoist, pineapple rolls, trimmer and chipper are controlled by the Trimmer/Chipper Baghouse (BH-3). Collected dust goes to the planer shavings bin. Chips from the chipper are pneumatically conveyed to the plytrim bin. The Plytrim Truck Bin Baghouse (BH-4) controls the ply trim bin exhaust.

Dust generated by the load out of planer shavings into trucks is captured and pneumatically conveyed to BH-5. Collected dust drops into planer shavings bin.

Plywood Mill

Logs are transferred from the log yard to the plywood mill merchandiser, where the logs are loaded onto one deck and “singulated.” On the deck, the log passes through a 35-inch debarker and is then cut into sheathing block lengths by a 40-inch cut-off saw. Bark, wood block trim ends and sawdust are conveyed to a hog (Lamb Hog) for sizing and then transferred to the fuel storage bin or ground storage. The blocks are sorted into bins and moved to the block conditioning vaults, where hot water is introduced and the blocks are heated until their internal temperature reaches specifications. After the blocks have been conditioned, they are removed from the vaults and transferred to a step feeder.

The conditioned blocks are transferred from the step feeder to the veneer lathe and peeled into veneer. The clipper cuts the green veneer into sheets or strips, and the veneer sheets and strips are stacked and stored before drying. Rejected blocks are sold as short logs or sent to a contract chipper. Cores from the veneer lathe are either sold or transferred to the core chipper. Rejected veneer is transferred to the veneer chipper. Chipped cores, chipped veneer and fines from the veneer clipper are transferred to a screener. Overs from the screener are sent to a chipper and then transferred to the plywood north and south chip truck bins. Correctly-sized material is transferred to the fuel storage bin or ground storage. Fines are pneumatically transferred to the fuel storage bin FD-5 or the sawdust truck bin. Sawdust Bin Baghouse (BH-11) controls the sawdust in the exhaust.

Green veneer is transferred to one of four steam-heated veneer dryers. Waste veneer collected at the veneer infeed is transferred to the veneer chipper. Exhaust from the heated sections of the veneer dryers is

routed to a regenerative catalytic oxidizer (RCO) control system before venting to the atmosphere. The cooling section of the veneer dryers is vented directly to the atmosphere via roof vents. Veneer dryer exhaust can bypass the RCO.

Veneer is monitored for moisture content at the out-feed from each veneer dryer. If the moisture content is too high, veneer is separated and stored before transferring the veneer back to a dryer inlet for redrying. Veneer Dryer #3 is equipped with a refeeding system, including a strip stacker that holds nearly dry veneer until target moisture content is achieved.

Dry veneer is graded, sorted (manually or through the Metra-Guard) and handled by the automated dry veneer stacker. The graded dry veneer can be transferred to storage or one of the following processing lines: Raimann Patch Line, core composers or auto layup line. The Raimann Patch Line upgrades veneer by replacing defects with plugs of clear face veneer. A strip machine is used to make the veneer patches for the Raimann Line. The core composers make the inner section of plywood by clipping and gluing veneer sheets with hot melt and string. The auto layup line sandwiches veneer and glue layers according to product specifications.

From storage, dry veneer can be transferred to any of the processing lines described above.

Assembled plywood panels are conveyed to the pre-press area, where the panels are cold pressed. The panels are then transferred into one of two hot presses. Product specifications determine the pressure cycles applied to the panels. A building vent to atmosphere is located above each hot press.

Panels leaving the hot presses are transferred to storage, the patch line or the trim saw line. The patch line removes defects from the panel and repairs the area with a synthetic patch. The trim saw line squares and grades the plywood panel. After the synthetic patch line and the trim saw line, panels are transferred to either auto stencil and branding or the Kimwood Sander. Finished panels go to auto stencil and branding before transferring to on-site storage and shipping. The Kimwood Sander sands and grades the panel. Panels leaving the Kimwood Sander can be transferred to the following: storage and shipping as finished products, touch sanding/T&G line, oil and edge-seal line, scarf line or synthetic patch line. At the touch sanding/T&G line, panels are sanded and/or have tongue and groove connections cut into the panel. At the oil and edge-seal line, panels are treated for concrete casting requirements. At the scarf line, two plywood panels are joined using beveled edges, glue and pressure to create a longer plywood panel. At the synthetic patch line, defects are removed.

Dry veneer waste from dryer out-feed, core composers, lay-up line, synthetic patch lines and trim saw line is transferred to the dry veneer chipper. Chips are transferred to the intermediate storage bin through the Plytrim Cyclone (CY-4) and then transferred to either the plytrim bin or the fuel storage bin. Dust pickups from the dry veneer stacker, core composers 1, 2 and 3, pre-press bandsaws 1 and 2, synthetic patch lines, the trim saw line and air from CY-4 are all routed to the Plytrim Baghouse (BH-9). Fines collected by BH-9 are directed to the intermediate storage bin.

Dust and fines from the Kimwood Sander are transferred to the Sander Cyclone (CY-3). Sander Cyclone exhaust is controlled by BH-6. Dust collected by BH-6 goes to cyclone CY-7 or CY-8. Baghouse BH-7 controls the exhaust from CY-7 and the exhaust from truck bin vent. Dust collected by BH-7 goes to the truck bin. Dust and fines from the Raimann line, the touch sander/T&G line, the scarf line, and the strip machine are transferred to the Sander Dust Burner Surge Bin through CY-8. The Sander Dust Burner Baghouse (BH-8) controls the exhaust from CY-8. The dust collected by the baghouse is recirculated back to CY-8.

Steam Generating Plant

PotlatchDeltic operates two biomass boilers at the SMC to provide steam for block conditioning vaults, veneer dryers, plywood presses, the lumber dry kiln and building heat. Heat for the CE boiler (PB-1) is provided by two Wellons fuel cells, which are controlled by a multiclone and a two-cell PPC dry electrostatic precipitator (ESP). The CE boiler's demonstrated heat input capacity is 58 mmbtu/hr and

produces up to 43,034 pounds of steam per hour. The Riley boiler (PB-2) is controlled by a multiclone and a three-cell PPC dry ESP. The Riley boiler's demonstrated heat input capacity is 131 mmbtu/hr and produces up to 98,000 pounds of steam per hour. The Riley boiler is also capable of burning sander dust generated from dry-end plywood operations. Fly ash from both the CE and Riley boilers is re-injected into the Riley boiler.

Emergency Engines

PotlatchDeltic operates two diesel CI fire water pumps and nine propane-fired SI emergency generators at the SMC.

2.5 Identification of Emission Generating Activities

The air pollution emission units and control devices at the SMC are listed in Tables 2-1 and 2-2 below by emission unit identification (EU ID) and categorized as either generating fugitive or non-fugitive emissions.² Installation dates (if known) 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. Those control devices that are required by rule or this permit are so noted.

Table 2-1: Non-fugitive Emission Units & Air Pollution Control Devices

EU ID	Emission Unit Description	Air Pollution Control Device
EU-1	PB-1: CE Boiler. Biomass boiler manufactured by Combustion Engineering Company, Inc. Model: EC2-S-CI-VESSEL. Serial number: 8045. Furnace is comprised of two fuel cells. 43,034 lb/hr maximum daily average steam generating rate observed 2016-2017. This equates to 58 mmBtu/hr using FHSOR of 1.342 mmBtu/mlb steam measured during February 24, 2016 NESHAP DDDDD testing at a steam generating rate of 34,211 lb/hr. Furnace combusts wet biomass (greater than 20% moisture content, wet basis) comprised of SMC wood residuals. Dry biomass combusted during startup. Fly ash collected and screened, but not reinjected into PB-1. Boiler installed July 1964. In 1979, dutch oven firebox replaced with fuel cells.	Multiclone MC-1 installed March 1979, is followed by a two-field dry ESP DESP-1 manufactured by PPC Industries, Model S-1212 installed April 12, 1995.
	PB-2: Riley Boiler. Biomass boiler manufactured by Riley Power, Inc. Serial number: 23433. Spreader stoker. 98,000 lb/hr maximum daily average steam generating rate observed 2016-2017. This equates to 131 mmBtu/hr using FHSOR of 1.335 mmBtu/mlb steam measured during February 23, 2016 NESHAP DDDDD testing at a steam generating rate of 90,101 lb/hr. Furnace combusts wet biomass (greater than 20% moisture content, wet basis) comprised of SMC wood residuals. Dry biomass combusted during startup. Fly ash collected from PB-1 and PB-2	Multiclone MC-2 installed October 1987 is followed by a three-field dry ESP DESP-2 manufactured by PPC Industries, Model 11R-1328-3712S installed June 24, 1995.

² Emission generating activities collectively identified as a single emission unit in Tables 2-1 and 2-2 may not necessarily constitute a single emission unit outside of the title V permit program. For instance, Region 10 has chosen to identify PB-1 and PB-2 together as emission unit EU-1 in this title V permit as permissible pursuant to the definition of *emissions unit* in 40 CFR 71.2. The boilers, however, are separate emission units for purposes of the NSR permit program. Undertaking a modification (physical or operational change) to one boiler does not constitute a modification to the other.

EU ID	Emission Unit Description	Air Pollution Control Device
	reinjecting into PB-2 after screening out inorganics. Boiler installed 1966.	
EU-2	<p>VD-1, VD-2, VD-3 and VD-4: veneer dryers No. 1 through 4. Each dryer has a heating section, cooling section and experiences leaks. Pacific Northwest softwood is processed at about 380°F. Depending on the wood species and veneer thickness, the residence time in a dryer varies from 4 to 25 minutes.</p> <p>VD-1: manual feed longitudinal dryer processing green strips and re-dry veneer. Moore dryer constructed in February 1964 with two heating sections. Production rate of 7.5 msf (3/8")/hr observed September 2008 during PCWP MACT testing.</p> <p>VD-2: manual feed longitudinal dryer processing veneer strips. Moore dryer constructed in February 1964 with four heating sections. Production rate of 7.2 msf (3/8")/hr observed September 2008 during PCWP MACT testing.</p> <p>VD-3: continuous feed Prentice dryer processing full sheets. E.V. Preutire dryer constructed in July 1967 with one heating section. Production rate of 16.2 msf (3/8")/hr observed September 2008 during PCWP MACT testing.</p> <p>VD-4: continuous feed longitudinal dryer processing full sheets. Moore dryer constructed in September 1980 with four heating sections. Production rate of 15.8 msf (3/8")/hr observed September 2008 during PCWP MACT testing.</p>	Heating Section: Two-chamber regenerative catalytic oxidizer (RCO) manufactured July 2008 by Geoenergy. The GeoCat RCO uses two 4 MMBtu/hr Maxon Kinemax propane burners.
	VDHS-1, VDHS-2, VDHS-3 and VDHS-4: heating sections of veneer dryers no.'s 1 through 4. Green softwood veneer sheets are dried. Re-drying is also accomplished. Emissions are collected and pulled by a variable speed drive ID fan to a two-can RCO rated at 82,204 acfm. Each dryer is equipped with its own bypass stacks for those instances when collected emissions are diverted to atmosphere.	RCO
	VDL-1, VDL-2, VDL-3 and VDL-4: leaks from veneer dryers no.'s 1 through 4. Leaks from doors and as veneer enters and exits dryers. Emissions exhaust to atmosphere without assistance of a fan through a vent along the length of the dryer in the roof of the building.	None
	VDCS-1, VDCS-2, VDCS-3 and VDCS-4: cooling sections of veneer dryers no.'s 1 through 4. Cool air is swept across the veneer sheets exiting the heating section. After cooling the veneer, the air is vented to atmosphere via a stack.	None
EU-3	PCWP MACT Group 1 miscellaneous coating operations.	

EU ID	Emission Unit Description	Air Pollution Control Device																											
	ES: applying non-HAP surface coating to edges of plywood panels. Activity occurs at the Oil and Edge Seal Line within the Specialty Machine Center.	None																											
	PW: applying non-HAP wood putty to plywood panel defects.																												
	SCL: applying non-HAP surface coating logos to plywood panels.																												
EU-4	IC-1 and IC-2: internal combustion engines no.'s 1 and 2. Each six-cylinder four-stroke ULSD-fired compression ignition engine supplies mechanical work to water pump for fire suppression in the event facility loses electricity in an emergency. Engine displacement of each is 9.0 liters. IC-1 constructed 2019 and pumps water out of the mill's surge pond, and IC-2 constructed 2019 and pumps water out of St. Joe River. Each engine has a power output rating of 327 hp.	None																											
EU-5	<p>IC-3, IC-4, IC-5, IC-6, IC-7, IC-8, IC-9, IC-10 and IC-11: internal combustion engines no.'s 3 thru 11. Each nonhandheld four-stroke spark ignition propane-fired generator set supplies electricity in the event facility loses grid-supplied electricity in an emergency. IC-4 and IC-5 are lean burn engines while the rest are rich burn engines. Engine displacement of each is greater than or equal to 225 cm³. IC-3, IC-7, IC-8, IC-10 and IC-11 are certified by the manufacturer to EPA Phase 3, Class II nonhandheld nonroad engine emission standards for propane fuel in 40 CFR 1054. Engines IC-6 and IC-9 are certified by the manufacturer to EPA Phase 1, Class II nonroad engine emission standards for propane fuel in 40 CFR 1054, appendix I. IC-4 and IC-5 are certified by the manufacturer to the standards applicable to emergency engines in Table 1 to 40 CFR 60, Subpart JJJJ.</p> <table border="1"> <thead> <tr> <th>Engine</th><th>Engine Power Output Rating (horsepower)</th><th>Year Installed</th></tr> </thead> <tbody> <tr> <td>IC-3</td><td>23</td><td>2015</td></tr> <tr> <td>IC-4</td><td>40</td><td>2022</td></tr> <tr> <td>IC-5</td><td>40</td><td>2022</td></tr> <tr> <td>IC-6</td><td>31</td><td>2018</td></tr> <tr> <td>IC-7</td><td>23</td><td>2013</td></tr> <tr> <td>IC-8</td><td>23</td><td>2015</td></tr> <tr> <td>IC-9</td><td>34</td><td>2017</td></tr> <tr> <td>IC-10</td><td>13</td><td>2013</td></tr> </tbody> </table>	Engine	Engine Power Output Rating (horsepower)	Year Installed	IC-3	23	2015	IC-4	40	2022	IC-5	40	2022	IC-6	31	2018	IC-7	23	2013	IC-8	23	2015	IC-9	34	2017	IC-10	13	2013	None
Engine	Engine Power Output Rating (horsepower)	Year Installed																											
IC-3	23	2015																											
IC-4	40	2022																											
IC-5	40	2022																											
IC-6	31	2018																											
IC-7	23	2013																											
IC-8	23	2015																											
IC-9	34	2017																											
IC-10	13	2013																											

EU ID	Emission Unit Description				Air Pollution Control Device
	IC-11	21	2018		
EU-6	<p>LK-5: lumber kiln no. 5. Indirect steam-heated dual-track lumber drying kiln manufactured by Wellons. Model number: DT104-HPW. Annual capacity of 158 million board feet (mmbf). Predominant wood species dried are hemfir and douglas fir/larch. Smaller quantities of Engelmann spruce/lodgepole pine and cedar are dried, and very small quantities of ponderosa pine. Kiln constructed February 2006.</p> <p>LK-6: lumber dry kiln no. 6. Indirect steam-heated dual-track lumber drying kiln manufactured by Wellons. Capacity of 282,426 board foot of lumber per charge. Only White fir, grand fir and western hemlock are dried in this kiln. Operation began October 2019.</p>				None
EU-7	Pneumatic Conveyance and Dust Capture Systems. Sawmill, planer mill and plywood mill dust capture systems and pneumatic conveyance systems associated with the following emission generating activities:				See specific descriptions below.
	PCWR-PM-SH: Pneumatic conveyance of planer shavings from the planer to planer shavings bin via cyclone CY-10 installed circa 2020.				Baghouse BH-2. Donaldson/Torit 276-RF10 controlling cyclone exhaust installed 1996. Collected dust is transferred to the planer shavings bin.
	PCWR-PM-SD: Dust capture from planed lumber trimmer, trim ends chipper, breakdown hoist and infeed rolls.				Baghouse BH-3. Donaldson/Torit 276-RF10; with cyclone precleaner design, installed 1996. Collected dust is transferred to the planer shavings bin.
	PCWR-PWM-PTB: Pneumatic conveyance of Plywood Mill dry veneer chips and fines to ply trim bin.				Baghouse BH-4. PM Hagel R9 installed 1997.
	PCWR-PM-PTB: Pneumatic conveyance of Planer Mill trim ends chips to ply trim bin.				Collected dust drops into the ply trim bin.
	PCWR-PM-PSB: Transfer of planer trimmer shavings from BH-3 (receiving material from planer trimmer) to planer shavings bin.				Baghouse BH-5 and baghouse BH-12. Collected dust drops into planer shavings bin.
	PCWR-PM-PSB: Transfer of collected dust from baghouse BH-2 to planer shavings bin.				Baghouse BH-5: Clarke Industrial installed 2022.
	PCWR-PM-PSB: Transfer of collected shavings from cyclone CY-10 to planer shavings bin.				Baghouse BH-12: Clarke Industrial 25-1.5M installed 2020.

EU ID	Emission Unit Description	Air Pollution Control Device
	PCWR-PM-TBLO: Dust capture from truck bin load out of planer shavings.	Baghouse BH-5. Collected dust drops into planer shavings bin.
	PCWR-SM-SD: Dust capture from vertical arbor gang, vertical arbor gang trimmer, quad band mill and edger.	Baghouse BH-10. Clarke PAF95-20 with cyclone pre-cleaner design, installed 2008. Collected dust is transferred to the hog fuel storage bin.
	PCWR-SM-SDB: Pneumatic conveyance of sawdust from vertical arbor gang and hog fuel screen to sawdust bin.	Baghouse BH-11. Hagel installed 2001. Collected dust drops into the sawdust bin.
	PCWR-SM-CH: Pneumatic conveyance of green chips from sawmill chipper screen to chip bin via cyclone CY-2.	None
	PCWR-PWM-H: Pneumatic conveyance of green wood residue to hopper via veneer dryer no. 3 in-feed cyclone CY-5.	None
	PCMR-FR-MDF: Pneumatic conveyance of metal dust and filings from filing room to cyclone CY-9.	None
	PCWR-CS-SD: Pneumatic conveyance carpenter shop dust from shop to cyclone CY-11.	Baghouse BH-1.
	PCWR-PWM-SDD: Pneumatic conveyance of sanderdust from Kimwood sander to CY-3.	Baghouse BH-6. MAC Environmental 144-CF-361 installed 1996. Dust collected in BH-6 is pneumatically conveyed to the truck bin via CY-7 or surge bin via CY-8.
	PCWR-PWM-TB: Pneumatic conveyance of sanderdust from CY-3 to the truck bin via CY-7.	Baghouse BH-7. Collected dust drops into the truck bin.
	PCWR-PWM-SB: Pneumatic conveyance of sanderdust from CY-3 to the surge bin via CY-8.	Baghouse BH-8. MAC Environmental 144-CF-361 installed 1970. Collected dust is pneumatically conveyed to CY-8.
	PCWR-PWM-SB: Pneumatic conveyance of fines and dust from the raimann patchline waste veneer hog to the surge bin via CY-8.	
	PCWR-PWM-SB: Pneumatic conveyance of fines and dust from the specialty machine center to the surge bin via CY-8.	

EU ID	Emission Unit Description	Air Pollution Control Device
	PCWR-PWM-ISB: Pneumatic conveyance of chips from dry veneer chipper to intermediate storage bin via CY-4.	Baghouse BH-9. MAC Environmental 144-CF-361 installed 1998. Collected dust drops into the intermediate storage bin.
	PCWR-PWM-ISB: Dust capture from the synthetic patching lines and trim saw line.	
	PCWR-PWM-ISB: Sawdust and dust capture from dry veneer stacker, composer saws and pre-press saws.	
EU-8	PV-1 and PV-2: heated plywood presses no.'s 1 and 2. The presses make plywood from 0.25 to 1.125 inches in thickness. Pre-pressed veneer sheets glued together with phenol-formaldehyde resin are hot-pressed. Depending on the plywood thickness, the press cycle lasts from 2 to 13 minutes, and the steam heated press is maintained at about 320°F to promote curing of the glue. Plywood Press No. 1 holds 32 panels, was constructed in February 1964 and has a design capacity of 20 msf (3/8'')/hr. Plywood Press No. 2 holds 40 panels, was constructed in February 1974 and has a design capacity of 20 msf (3/8'')/hr. Emissions exhaust to atmosphere without assistance of a fan through vents in the roof of the building in the vicinity of the presses.	None
EU-9	PT: plant traffic. Also identified as FD-1. Both paved and unpaved areas.	For PT related to lumber manufacturing: Paved areas: sweeping and watering. Unpaved areas: watering and 15 mph speed
EU-10	Miscellaneous non-fugitive activities as follows:	None
	CA: Compressed air drying agent system.	
	BV-1 through 4: building vents exhaust emissions from miscellaneous indoor activities within four buildings.	
	LS-1: Log steaming vault.	
	PP: Two plywood panel synthetic patch lines	
	Resin, lube oil and fuel tanks	
EU-11	Miscellaneous fugitive activities as follows:	None
	COS: Log bucking (three cut-off saws).	
	DB: Log debarking (two 22-inch debarkers A-8 and A5).	
	HFP: Wind erosion of outdoor hog fuel pile.	
	MTDP: Material transfer drops onto outdoor piles.	
	WRD-SH, CH, SD, HF: Wood residue drops of various types of wood residue into trucks and/or fuel bin.	

Table 2-2: Fugitive Emission Units & Air Pollution Control Practices

EU-ID	Description	Air Pollution Control Practices
Roadways, Log Yard & Hog Fuel Storage		
FD-1	Paved Roads	Applying water and sweeping

EU-ID	Description	Air Pollution Control Practices
FD-1	Unpaved Roads and Log Yard	Applying water, chemical soil stabilizer or chemical dust suppressant
FD-3	Log Yard Debris Storage Pile	None
FD-4	Log Yard Recycle Pile	None
FD-39	Hog Fuel Pile	Sheltering from wind by locating pile between log decks and main production building
Sawmill & Planer Mill		
FD-6	No. 1 Cutoff Saw	None
FD-7	No. 2 Cutoff Saw	None
FD-8	No. 3 Cutoff Saw	None
FD-77	MK Hog	Water spray while processing cedar
FD-81	Merchandizing Conveyors	None
FD-82	Planer Trim Chipper	None
FD-91	A8 22" Debarker	Partial enclosure
FD-92	A5 22" Debarker	Partial enclosure
Plywood Mill		
FD-9	40" Cutoff Saw	None
FD-45	40" Debarker	Partial enclosure
FD-79	Lamb Hog	None
Steam Generating Plant		
FD-36	Boiler Ash Houses	Partial enclosure, applying water

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 two tons per year of any regulated air pollutant excluding HAPs [40 CFR 71.5(c)(11)(ii)(A)] and less than 1,000 pounds per year of any HAP or the de minimis HAP level established under Section 112(g), whichever is lower [40 CFR 71.5(c)(11)(ii)(B)]. The emission units listed in Table 2-3 below have been identified by PotlatchDeltic as IEUs on the basis that each unit's potential to emit (PTE) for any individual regulated air pollutant (excluding HAPs) does not exceed two tons per year.

Table 2-3: Insignificant Emission Units

Number of Units	Emission Unit Description
1	BH-1 (Carpenter Shop Baghouse)
1	BH-5 (Planer Shaving Truck Bin Baghouse)
1	BH-7 (Sander Dust Truck Bin Baghouse)
1	BV-2 (Sawmill Building Vents)
1	BV-3 (Boilerhouse Building Vents)

Number of Units	Emission Unit Description
1	BV-4 (Planer Building Vents)
2	IC-1 & IC-2 (Diesel Firewater Pump Engines)
8	IC-3 – IC-11 (Propane Emergency Generators)
5	Diesel Storage Tanks
1	Gasoline Storage Tanks
3	Propane Storage Tanks
4	Caustic and Phenolic Resin Tanks
1	Hydraulic Oil Tanks
1	Lube Oil Tanks
1	Parts Washing

2.6 Permitting, Construction and Compliance History

PotlatchDeltic submitted a timely initial Part 71 air operating permit application to EPA for SMC on October 6, 1999; and PotlatchDeltic submitted multiple application updates to EPA between 2000 and 2011. In response to requests for additional information in late 2014, PotlatchDeltic submitted a new application on March 25, 2015 to wholly replace all previously submitted materials. PotlatchDeltic has subsequently provided EPA with additional information upon request. The application has been administratively deemed complete. EPA provided PotlatchDeltic several pre-draft versions of the permit and statement of basis and considered PotlatchDeltic's verbal and written comments on these pre-drafts prior to issuing the permit for public comment.

The plywood mill was originally built in 1963, and PotlatchDeltic purchased it in 1964. The mill was converted from a traditional half-inch three-ply CDX sheathing mill to a sanded specialty operation in 1997. The sawmill was built in 1974, and the planer was added in 1983. In 1993, PotlatchDeltic purchased the lumber drying operations at what is now referred to as LDD. The planer was rebuilt in 1997. PotlatchDeltic has undertaken a number of changes at the mill as chronicled in its Title V application updates submitted to EPA over the years. For example, PotlatchDeltic installed the Metra-Guard dry veneer sorter at the plywood mill circa 2003. Around 2005, the sawmill's A8 22" debarker was installed and vertical single arbor edger replaced. Also circa 2005, the lathe charger was installed at the plywood mill. Lumber Kiln No. 5 was installed in February 2006, and the Oil and Edge Seal Line was relocated from LDD to SMC in June 2006. Circa 2007, PotlatchDeltic completed a project enabling the Riley Boiler to combust sanderdust generated by the plywood mill. Circa 2011, the plywood mill's Scarf Line was added. Lumber Kiln No. 6 began operating in October 2019 after EPA issued PSD and minor NSR permits in June 2019 authorizing its construction.

Region 10, or the Coeur d'Alene Tribe on EPA's behalf, have inspected SMC several times for compliance with CAA requirements. Records indicate that CAA inspections of the mill have been conducted approximately every other year beginning around 2003. In August 2022, EPA and PotlatchDeltic entered into a Consent Agreement and Final Order, resolving EPA claims that PotlatchDeltic failed to timely perform testing for the CE Boiler under the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters at Major Sources, 40 CFR part 63, subpart DDDDD.

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 = pollutant emissions in tons/year

EF = emission factor (see Appendix A to this statement of basis)

OP = operational rate (or capacity for PTE)

K = 1 ton/2000 lb for conversion from pounds per year to tons per year

3.2 Potential to Emit (PTE)

As part of its Title V permit application for the SMC, PotlatchDeltic submitted detailed emission calculations for all emission units. Appendix C of the application lists both actual and potential SMC emissions. EPA reviewed those annual emission inventories, and EPA has documented PTE in Appendix A to this statement of basis. In some instances, EPA revised the emission estimates provided by the Permittee to more accurately reflect the best estimate of potential emissions from the source. A summary of SMC’s PTE is presented in Table 3-1 below. Note that fugitive emissions are not included for non-HAP pollutants, because for sawmills and plywood mills, fugitive emissions are not considered to determine program applicability as explained in more detail in Section 4.1 of this statement of basis. For HAPs, both fugitive and non-fugitive emissions are considered in determining applicability for MACT purposes.

Table 3-1: SMC’s Potential to Emit (tpy)¹

Pollutant	Total
CO	949
NO _x	172

Pollutant	Total
PM	230
PM10	208
PM2.5	155
SO ₂	8
VOC	443
GHG (CO ₂ e) ²	178,017
Methanol	76
Acetaldehyde	19
Hydrogen chloride	18
Total HAP	139

¹ Fugitive emissions are not included in this table (except for HAPs) because fugitives are not used in applicability determinations for this source type (see Section 4.1). For fugitive emission estimates, see Appendix A.

² GHG emissions are not considered in determining Title V applicability. Calculations of GHG emissions are presented in this document for informational purposes only.

Table 3-2 below illustrates the contribution of certain emission generating activities toward SMC PTE reported in Table 3-1. As stated previously for HAP, both fugitive and non-fugitive emissions are considered. For non-HAP pollutants, only non-fugitive emissions are considered.

Table 3-2: SMC's Potential to Emit (tpy)¹

Pollutants	Emission Units							Total
	EU-1	EU-2	EU-3	EU-6	EU-7	EU-8	Other	
CO	936	1					12	949
NO _x	171	1					1	172
PM	26	9		3.2	167	21	4	230
PM10	6	18		7	139	36	4	208
PM2.5	6	18		7	86	36	4	155
SO ₂	8	1						8
VOC	6	25	21	172	159	18	41	443
GHG (CO ₂ e)	173,090	4,876					50	178,017
Methanol (highest-emitting HAP)		4		54	8	10	1	76
Total HAP	33	20		63	10	11	2	139

¹ Fugitive emissions are not included in this table (except for HAPs) because fugitives are not used in applicability determinations for this source type (see Section 4.1). For fugitive emission estimates, see Appendix A.

² GHG emissions are not considered in determining Title V applicability. Calculations of GHG emissions are presented in this document for informational purposes only.

PotlatchDeltic is expected to use the emission factors and calculation methods presented in Appendix A unless PotlatchDeltic demonstrates that another emission factor or calculation method is appropriate (e.g., results of more recent source testing or sampling, revised emission factors published in AP-42, etc.). It is important to emphasize that to the extent PotlatchDeltic 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.

3.3 Actual Emissions

PotlatchDeltic is required to pay fees annually based on an inventory of its actual emissions for the preceding calendar year (see Permit Conditions 3.41 through 3.45). Table 3-3 summarizes PotlatchDeltic's reported actual emissions generated in calendar year 2022. Unlike Tables 3-1 and 3-2 above, Table 3-3 includes fugitive PM10 emissions.

Table 3-3: SMC's Actual Emissions (tons) for Calendar Year 2022

Pollutants	Emission Units							Total
	EU-1	EU-2	EU-3	EU-6	EU-7	EU-8	Other	
NO _x	97.7	0.2					0.6	98.5
PM10	3.6	2.2		2.4	24.8	13.3	12.6	58.9
SO ₂	10.6						0	10.6
VOC	8.0	8.3	0.2	74.8	24.3	6.4	5.4	127.4
Methanol highest-emitting HAP)		1.1		19.8	2.2	2.8	0.6	26.5
Total HAP	7.1	2.8		23.7	2.8	2.9	1.0	40.3

4. Regulatory Analysis

The 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 SMC is subject to federal air quality regulations, and is not subject to state air quality regulations. The Tribe has not requested or received EPA approval of air quality regulations as a “Tribal Implementation Plan” under the CAA. Therefore, Tribal air quality regulations, if any, do not meet the definition of “applicable requirement” under part 71 and are not included in the SMC Title V permit.

The EPA relied on information provided in PotlatchDeltic’s Title V permit application to determine the requirements that are applicable to the SMC. Future modifications to the facility could result in additional requirements.

4.1 Federal Air Quality Requirements

Title V Operating Permit Program. Title V of the CAA and the implementing regulation found in 40 CFR part 71 require major sources (as well as specified non-major sources) of air pollution to obtain operating permits and provide the legal bases for this permit. As discussed above in Section 2.4, the EPA and IDEQ recognize SMC and LDD as separate stationary sources. A source is major if it has the potential to emit 100 tons per year or more of any air pollutant subject to regulation, 25 tons per year or more of HAP (totaled) or 10 tons per year or more of any single HAP (see 40 CFR 71.2). The SMC 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, PM10, PM2.5 and VOC not counting fugitive emissions, more than 10 tons each of the HAPs hydrogen chloride, acetaldehyde and methanol, and more than 25 tons of all HAP combined. See Appendix A to this statement of basis for supporting calculations. Although PM potential emissions also exceed 100 tons per year, the EPA does not consider PM a regulated pollutant for Title V applicability purposes.³

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 with all applicable requirements. Therefore, source-specific testing, monitoring, recordkeeping and reporting have been added where the underlying requirement does not include such requirements or where the permitting authority has determined that additional source-specific testing, monitoring, recordkeeping and reporting is necessary for a particular source to assure compliance with the underlying applicable requirement, as is the case here, as explained in Section 4.3 (Permit Conditions) of this statement of basis below.

³ October 16, 1995 EPA memorandum entitled, “Definition of Regulated Pollutants for Particulate Matter for Purposes of Title V”

New Source Review. The New Source Review (NSR) program requires stationary source owners or operators to obtain a permit before they begin construction of a new source or a modification to an existing source. In other words, facilities are required to obtain NSR permits for the construction of entirely new facilities and for construction projects at existing facilities such as expansions, additions, process changes, and equipment modifications. By requiring sources to meet pre-construction permitting requirements, the NSR program provides a mechanism to improve the air quality in nonattainment areas and to maintain the air quality in attainment areas.

There are three types of NSR permitting programs, each with a different set of requirements. A facility may be required to meet one or more of these sets of permitting requirements when the facility undertakes a modification. The Prevention of Significant Deterioration (PSD) program applies to the construction of a new major source or a major source making a major modification that is located in an attainment area. The PSD program generally applies to facilities that have the potential to emit 250 tons per year (tpy) or 100 tpy or more of any regulated NSR pollutant. The thresholds depend on the type of source and there is a list of 28 source categories for which the 100 tpy threshold applies. The Nonattainment NSR (NA NSR) program applies to the construction of a new major source or a major source making a major modification that is located in a nonattainment area. Generally, the NA NSR program applies to facilities that have the potential to emit 100 tpy or more of a NAAQS pollutant. However, this threshold may be lower depending on the nonattainment severity of the area where the source is or will locate. The Minor NSR program applies to a new minor source and/or a minor modification at both major and minor sources, in both attainment and nonattainment areas. Minor NSR applies for those regulated NSR pollutants that are emitted at or above the minor NSR thresholds specified in the Tribal minor NSR rule (Table 1 to 40 CFR 49.153) but below the major source thresholds.

Because the area in which SMC is located is not classified non-attainment for any pollutant, the NA NSR program is not currently relevant. Based upon our knowledge of the facility and understanding of its potential emissions, SMC is a PSD major source considering potential to emit CO and VOC. A modification to an existing major source for a particular pollutant is subject to PSD review for each such pollutant with an emissions increase greater than defined PSD significance level for that pollutant. A modification to an existing major source for a particular pollutant is subject to minor NSR for each such pollutant with an emissions increase greater than the defined minor NSR significance level but less than the defined PSD significance level. Whereas the minor NSR program became effective August 30, 2011, the PSD program first became effective in the late 1970's. In its Title V application updates submitted to EPA over the years through March 2015, PotlatchDeltic has chronicled a number of construction projects it has completed at SMC through that date. PotlatchDeltic has not requested, and EPA has not issued any pre-construction permits to PotlatchDeltic for any of these projects. More recently, PotlatchDeltic did request PSD (VOC) and minor NSR (CO, NO_x, PM, PM₁₀ and PM_{2.5}) permits for the construction of kiln LK-6. Region 10 issued permits authorizing that project with conditions on June 21, 2019, which permits have since been amended on several occasions. The PSD permit is Permit No. R10PSD00103; the minor NSR permit is Permit No. R10TNSR01804.

New Source Performance Standards. The EPA considered the applicability of four combustion-related NSPS standards to boilers PB-1 and PB-2 at SMC, each a steam generating unit: 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). NSPS Subparts D and Da do not apply to either PB-1 or PB-2 because each boiler's heat input capacity is less than one-half the applicability threshold of 250 MMBtu/hr. PB-2's heat input capacity of 113 MMBtu/hr is within the applicability range of 100 MMBtu/hr to 250 MMBtu/hr of NSPS Subpart Db. But given that PB-2 was constructed in 1966 before the June 19, 1984 applicability date, and because it has not been modified or reconstructed since that date based on information provided by PotlatchDeltic, NSPS Db does not apply. PB-1's heat input capacity of 43 MMBtu/hr is within the applicability range of 10 MMBtu/hr and 100 MMBtu/hr of NSPS Dc. But given that PB-1 was

constructed in 1964 before the June 9, 1989 applicability date, and because it has not been modified or reconstructed since that date based on information provided by PotlatchDeltic, NSPS Dc does not apply. According to PotlatchDeltic's application, PB-1 was last modified in 1979 when the Wellons firing system was installed.

The five diesel fuel storage tanks and one gasoline fuel storage tank, dates of construction unknown, are not subject to 40 CFR Part 60, Subparts K, Ka and Kb because each tank's storage capacity is less than the subpart K and Ka threshold of 40,000 gallons and less than the subpart Kb threshold of 75 cubic meters (19,813 gallons). The three propane fuel tanks, storage capacity and date of construction unknown, are not subject to 40 CFR Part 60, Subparts K, Ka and Kb because each tank is a pressure vessel designed to operate in excess of 204.9 kPa with no emission to the atmosphere. The vapor pressure of propane is about 102 psi or 703 kPa.

EPA considered the applicability of 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines), a combustion-related NSPS, to the two CI engines at SMC that provide mechanical energy for water pumps used solely for fire suppression, emergency fire pump engines IC-1 and IC-2. For certified National Fire Protection Agency fire pump engines (as is the case for IC-1 and IC-2), NSPS IIII applies to the owner or operator if the engine was ordered after July 11, 2005, and the engine was manufactured after July 1, 2006. NSPS Subpart IIII therefore applies to the two CI engines installed at SMC. Compliance was required upon startup.

40 CFR 60, Subpart IIII requirements that do not apply to SMC for engines IC-1 and IC-2 are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Because 40 CFR 60, Subpart IIII applies to engines IC-1 and IC-2, Subpart A of Part 60 (the general provisions) also applies, as explained in 40 CFR 60.1(a). NSPS Subpart A requirements that do not apply to SMC are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Applicable requirements in 40 CFR 60, Subparts IIII and A with specific requirements have been included in Section 8 of the permit. Appendix B to this statement of basis contains tables that cross reference the applicable requirements in Subparts IIII and A to conditions in Section 8 of the permit.

Another combustion-related NSPS standard considered for applicability to the nine SI engines at SMC that are stationed throughout the mill to serve nine separate generators that supply electricity to different activities only when electricity from the grid is unavailable, emergency engines IC-3 to IC-11, is 40 CFR 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines). For engines with maximum power less than 25 hp (as is the case for IC-3, IC-7 and IC-8, and IC-10 and IC-11), NSPS JJJJ applies to the owner or operator if the engine was ordered after June 12, 2006, and the engine was manufactured on or after July 1, 2008. For emergency engines with maximum power greater than 25 hp (as is the case for IC-4 through IC-6 and IC-9), NSPS JJJJ applies to the owner or operator if the engine was ordered after June 12, 2006, and the engine was manufactured on or after January 1, 2009. NSPS Subpart JJJJ applies to all the SI engines installed at SMC. Compliance was required upon startup.

40 CFR 60, Subpart JJJJ requirements that do not apply to SMC for engines IC-3 to IC-11 are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Because 40 CFR 60, Subpart JJJJ applies to engines IC-3 to IC-11, Subpart A of Part 60 (the general provisions) also applies, as explained in 40 CFR 60.1(a). NSPS Subpart A requirements that do not apply to SMC are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are

incorporated by reference into the permit. Applicable requirements in 40 CFR 60, Subparts JJJJ and A with specific requirements have been included in Section 9 of the permit. Appendix B to this statement of basis contains tables that cross reference the applicable requirements in Subparts JJJJ and A to conditions in Section 9 of the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP). Certain NESHAP standards promulgated under 40 CFR Part 63 apply only to “major sources” of HAP. Section 112(a)(1) and 40 CFR 63.2 define a “major source” as a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP. SMC is a major source of HAP emissions.

EPA considered the applicability of several major source NESHAP standards. NESHAP Subparts DDDDD (Industrial, Commercial and Institutional Boilers and Process Heaters at Major Sources) applies to biomass boilers and DDDD (Plywood and Composite Wood Products Manufacture) applies to veneer dryers, miscellaneous coating operations and lumber kilns. Both standards apply to activities at SMC. The compliance dates for the NESHAP standards are January 31, 2016 for Subpart DDDDD and October 1, 2007 for Subpart DDDD. EPA granted PotlatchDeltic’s request to extend the NESHAP Subpart DDDD compliance date to October 1, 2008 to provide the mill an additional 12 months to install control equipment to reduce veneer dryer heating section HAP emissions. Because each of SMC’s two synthetic patch lines (PP) is an existing affected source (and not new), neither line is a Group 1 Miscellaneous Coating Operation under NESHAP Subpart DDDD. Therefore, the use of non-HAP coatings is not required of PotlatchDeltic for PP.

40 CFR 63, Subpart DDDDD requirements that do not apply to SMC for PB-1 and PB-2 are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Because 40 CFR 63, Subpart DDDDD applies to PB-1 and PB-2, Subpart A of Part 63 (the general provisions) also applies, as explained in 40 CFR 63.1(a)(4). NESHAP Subpart A requirements that do not apply to SMC are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Applicable requirements in 40 CFR 63, Subparts DDDDD and A with specific requirements have been included in Section 5 of the permit. Appendix B to this statement of basis contains tables that cross reference the applicable requirements in Subparts DDDDD and A to conditions in Section 5 of the permit.

Permit Conditions 5.6.1 (NESHAP DDDDD boiler tune-up requirement) and 5.7.2 (NESHAP DDDDD minimum oxygen operating limit) apply to PB-1 and PB-2. Both conditions provide alternative compliance options in the event PotlatchDeltic chooses to install and operate an oxygen trim system (as that term is defined in 40 CFR 63.7575) that maintains an optimum air to fuel ratio. For instance, if an oxygen trim system is installed and operated, instead of being required to conduct a tune-up of the boiler every year, a tune-up is required every 5 years. See 40 CFR 63.7540(a)(12). The 30-day rolling oxygen operating limit is replaced with the requirement to operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test. See 40 CFR 63.7525(a)(7) and Row 9 to Table 8 of NESHAP DDDDD. “Lowest hourly average” in 40 CFR 63.7525(a)(7) means the lowest test-run average.⁴ PB-1 underwent performance testing to demonstrate compliance with the applicable CO emission limit most recently on June 12, 2024, and the lowest hourly (i.e., test-run) average oxygen content was 7.3%, wet. PB-2 underwent performance

⁴ See discussion of intent for similar provision expressed by EPA’s OAQPS in a January 11, 2017 email correspondence, document 7j in the administrative record for this permit action. Lowest hourly average means lowest test-run average.

testing to demonstrate compliance with the applicable CO emission limit most recently on June 11, 2024, and the lowest hourly (i.e., test-run) average oxygen content was 5.9%, wet. These requirements (different from the ones in the permit) become applicable at the conclusion of tuning period for the oxygen trim system.

40 CFR 63, Subpart DDDD requirements that do not apply to SMC for VD-1 to VD-4, RCO, ES, WP, SCL, LK-5 and LK-6 are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Because 40 CFR 63, Subpart DDDD applies to VD-1 to VD-4, RCO, ES, WP, SCL, LK-5 and LK-6, Subpart A of Part 63 (the general provisions) also applies, as explained in 40 CFR 63.1(a)(4). NESHAP Subpart A requirements that do not apply to SMC are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Applicable requirements in 40 CFR 63, Subparts DDDD and A with specific requirements have been included in Sections 6 and 7 of the permit. Appendix B to this statement of basis contains tables that cross reference the applicable requirements in Subparts DDDD and A to conditions in Sections 6 and 7 of the permit. Because LK-5 and LK-6 are not subject to any NESHAP Subpart A and DDDD requirements other than the requirement (now obsolete) to submit an initial notification pursuant to 40 CFR 63.2252, Section 10 neither includes nor incorporates any NESHAP Subpart A or DDDD requirements.

A third NESHAP standard, Subpart ZZZZ (Reciprocating Internal Combustion Engines) applies to certain engines regardless of whether the source is major for HAP. All eleven of the emergency engines at SMC are subject to NESHAP ZZZZ. Engines IC-1 thru IC-11 are considered “new” pursuant to 40 CFR 63.6590(a)(2)(ii). Engines IC-1 and IC-2 comply with Engine NESHAP by complying with NSPS IIII (with no additional substantive NESHAP ZZZZ requirements) pursuant to 40 CFR 63.6590(c)(7). Engines IC-3 through IC-11 comply with the Engine NESHAP by complying with NSPS JJJJ (with no additional substantive NESHAP ZZZZ requirements) pursuant to 40 CFR 63.6590(c)(4).

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 SMC. Biomass 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, the EPA promulgated a Federal Implementation Plan (FIP) for Reservations in Idaho, Oregon and Washington, commonly referred to as the Federal Air Rules for Reservations (FARR). The 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 apply on the Coeur d’Alene Reservation (Sections 123, 124, 125, 126, 129, 130, 131, 135, 137, 138 and 139) are identified at 40 CFR 49.9926 and codified into the FIP at 40 CFR 49.9930. Notably, 40 CFR 49.128 (Rule for limiting particulate matter emissions from wood products industry sources) does not currently apply on the Coeur d’Alene Reservation. FARR requirements that do not apply to SMC are not included in the permit. Requirements that apply generally to all subject sources but do not create specific requirements for PotlatchDeltic (e.g., applicability provisions, definitions, provisions regarding delegation) are incorporated by reference into the permit. Applicable requirements in the FARR with specific requirements have been included in Sections 3 through 13 of the permit. Appendix B to this statement of basis contains tables that cross reference the applicable requirements in the FARR to conditions in the permit.

Compliance Assurance Monitoring. CAM applies at time of initial Title V permit issuance for emission units that (a) are subject to an emission limit, (b) use a control device to comply with the limit, and (c) have post-control PTE equal to or greater than the major source threshold defined in Title V (generally, 100 tons per year). See 40 CFR Part 64.5(a). Table 4-1 below illustrates the results of an applicability

analysis for those emission units that use a control device to comply with a CAM-eligible emission limit.⁵ In no instance is an emission unit's PM, PM10 or PM2.5 PTE greater than the 100 tpy applicability threshold value. Therefore, CAM does not apply to any underlying emission limits for this initial Title V permitting action. See Appendix A of this statement of basis for the calculations supporting post-control PTE values appearing in Table 4-1.

Table 4-1: CAM Applicability at Time of Initial Title V Permit

EU ID	Pollutant	Control Device	CAM-Eligible Emission Limit	Post-Control PTE (tpy)	Does CAM Apply for Initial Title V Permit?
EU-1: PB-1	PM, PM10, PM2.5	MC-1 & DESP-1	VE ≤ 20% opacity, 6-min avg	PM: 5.1 PM10/2.5: 1.97	No
			PM ≤ 0.2 gr/dscf @ 7% O ₂ , 3-hr avg		
			PM2.5 ≤ 11.09 lb/day		
			PM2.5 ≤ 1.97 tpy		
EU-1: PB-2	PM, PM10, PM2.5	MC-2 & DESP-2	VE ≤ 20% opacity, 6-min avg	PM: 21.2 PM10/2.5: 3.59	No
			PM ≤ 0.2 gr/dscf @ 7% O ₂ , 3-hr avg		
			PM2.5 ≤ 20.63 lb/day		
			PM2.5 ≤ 3.59 tpy		
EU-2: VDHS-1	PM, PM10, PM2.5	RCO	VE ≤ 20% opacity, 6-min avg	PM: 0.5 PM10/2.5: 1.0	No
PM ≤ 0.1 gr/dscf, 3-hr avg					
EU-2: VDHS-2	PM, PM10, PM2.5		VE ≤ 20% opacity, 6-min avg	PM: 0.4 PM10/2.5: 0.9	No
PM ≤ 0.1 gr/dscf, 3-hr avg					
EU-2: VDHS-3	PM, PM10, PM2.5		VE ≤ 20% opacity, 6-min avg	PM: 1.0 PM10/2.5: 2.1	No
PM ≤ 0.1 gr/dscf, 3-hr avg					
EU-2: VDHS-4	PM, PM10, PM2.5		VE ≤ 20% opacity, 6-min avg	PM: 1.0 PM10/2.5: 2.0	No
PM ≤ 0.1 gr/dscf, 3-hr avg					
EU-7: PCWR-CS-SD	PM, PM10, PM2.5	BH-1	VE ≤ 20% opacity, 6-min avg	PM: 1.1 PM10/2.5: 1.1	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
EU-7: PCWR-PM-SH	PM, PM10, PM2.5	BH-2	VE ≤ 20% opacity, 6-min avg	PM: 11.3 PM10/2.5: 1.19	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM2.5 ≤ 6.53 lb/day		
			PM2.5 ≤ 1.19 tpy		
EU-7: PCWR-PM-SD	PM, PM10, PM2.5	BH-3	VE ≤ 20% opacity, 6-min avg	PM: 10.1 PM10/2.5: 1.05	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM2.5 ≤ 5.77 lb/day		
			PM2.5 ≤ 1.05 tpy		
EU-7: PCWR-PWM-PTB	PM, PM10, PM2.5	BH-4	VE ≤ 20% opacity, 6-min avg	PM: 2.3	No
			PM ≤ 0.1 gr/dscf, 3-hr avg	PM10/2.5: 2.3	No
EU-7: PCWR-PM-PTB	PM, PM10, PM2.5	BH-4	VE ≤ 20% opacity, 6-min avg	PM: 2.3 PM10/2.5: 0.62	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM2.5 ≤ 3.95 lb/day		

⁵ Pursuant to 40 CFR 64.2(b)(1)(i), neither NESHAP Subpart DDDDD (for PB-1 and PB-2) nor NESHAP Subpart DDDD (for VD-1, VD-2, VD-3 and VD-4) are CAM-eligible emission limits because each is a post-1990 NESHAP.

EU ID	Pollutant	Control Device	CAM-Eligible Emission Limit	Post-Control PTE (tpy)	Does CAM Apply for Initial Title V Permit?
			PM _{2.5} ≤ 0.62 tpy		
EU-7: PCWR-PM-PSB	PM, PM ₁₀ , PM _{2.5}	BH-5	VE ≤ 20% opacity, 6-min avg	PM: 2.3 PM ₁₀ /2.5: 0.62	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM _{2.5} ≤ 3.95 lb/day		
			PM _{2.5} ≤ 0.62 tpy		
EU-7: PCWR-PWM-SDD	PM, PM ₁₀ , PM _{2.5}	BH-6	VE ≤ 20% opacity, 6-min avg	PM: 24.4 PM ₁₀ /2.5: 24.4	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
EU-7: PCWR-PWM-TB	PM, PM ₁₀ , PM _{2.5}	BH-7	VE ≤ 20% opacity, 6-min avg	PM: 1.5 PM ₁₀ /2.5: 1.5	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
EU-7: PCWR-PWM-SB	PM, PM ₁₀ , PM _{2.5}	BH-8	VE ≤ 20% opacity, 6-min avg	PM: 11.6 PM ₁₀ /2.5: 11.6	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
EU-7: PCWR-PWM-ISB	PM, PM ₁₀ , PM _{2.5}	BH-9	VE ≤ 20% opacity, 6-min avg	PM: 16.0 PM ₁₀ /2.5: 16.0	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
EU-7: PCWR-SM-SD	PM, PM ₁₀ , PM _{2.5}	BH-10	VE ≤ 20% opacity, 6-min avg	PM: 18.2 PM ₁₀ /2.5: 4.97	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM _{2.5} ≤ 31.87 lb/day		
			PM _{2.5} ≤ 4.97 tpy		
EU-7: PCWR-SM-SDB	PM, PM ₁₀ , PM _{2.5}	BH-11	VE ≤ 20% opacity, 6-min avg	PM: 4.0 PM ₁₀ /2.5: 1.09	No
			PM ≤ 0.1 gr/dscf, 3-hr avg		
			PM _{2.5} ≤ 6.98 lb/day		
			PM _{2.5} ≤ 1.09 tpy		
EU-7: PCWR-PM-PSB	PM, PM ₁₀ , PM _{2.5}	BH-12	VE ≤ 20% opacity, 6-min avg		No
			PM ≤ 0.1 gr/dscf, 3-hr avg		

At the time of Title V permit renewal, or sooner in the case of a significant permit modification (emission unit-specific), CAM will apply based upon whether the emission unit's pre-control PTE is greater than the relevant threshold value pursuant to 40 CFR 64.5(b).

Chemical Accident Release Program. PotlatchDeltic has not reported storing a regulated substance above the threshold quantity. The permit contains a placeholder provision requiring the Permittee to comply with the chemical accident prevention provisions in 40 CFR part 68 in a timely manner if it becomes subject.

Protection of Stratospheric Ozone. The provisions of 40 CFR part 82, subparts B and F apply to facilities that handle ozone depleting substances (e.g. refrigerants). The permit contains conditions that require the Permittee to manage ozone depleting substances and maintain records according to these subparts.

Acid Rain Program. Title IV of the CAA authorizes 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 electricity. Neither of the two boilers at the SMC are a "unit" or an "affected unit" as defined in 40 CFR 72.2 because neither boiler produces electricity.

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 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 source 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 source to determine applicability to part 98 and to comply, if required.

4.2 Other Federal Requirements and Responsibilities

EPA Trust Responsibility. As part of the EPA Region 10's direct federal implementation and oversight responsibilities, EPA 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 1873 Executive Order and subsequent series of treaty agreements. In general terms, EPA is charged with considering the interest of tribes in planning and decision making processes. Each office within 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. EPA Region 10's Air and Radiation Division has contacted the Coeur d'Alene Tribe to invite consultation on the SMC Title V operating permit application.

Endangered Species Act (ESA). Under section 7(a)(2) of the ESA, federal agencies are required to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed, threatened, or endangered species, or destroy or adversely modify the designated critical habitat of such species. 16 U.S.C. § 1536(a)(2). The U.S. Fish and Wildlife Service and National Marine Fisheries Service have promulgated ESA implementing regulations at 50 CFR Part 402.

The CAA title V permit program requires the EPA to issue a permit specifically describing the permittee's existing pollution control obligations under the CAA. A title V permit does not generally create any new substantive requirements, but rather simply incorporates all existing CAA requirements, called "applicable requirements," into a single unified operating permit applicable to a particular facility. The title V permit EPA is issuing to PotlatchDeltic does not authorize the construction of new emission units, or emission increases from existing units, nor does it otherwise authorize any physical modifications to the facility or its operations. The EPA has concluded that the permit appropriately incorporates all existing CAA requirements applicable to the facility. The EPA lacks discretion in this title V permitting decision to take action that could inure to the benefit of any listed species or their critical habitat. The EPA has concluded that issuance of this permit will have no effect on any listed species or their critical habitat. Accordingly, this permit action is consistent with the requirements of ESA section 7.

National Environmental Policy Act (NEPA). Under Section 793(c) of the Energy Supply and Environmental Coordination Act of 1974, no action taken under the CAA 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 CAA 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. Consequently, no adverse effects are expected, and further review under NHPA is not required.

5. Permit Content

This Title V operating permit compiles all of the applicable requirements that apply to the Permittee.

Additional monitoring, recordkeeping and reporting requirements have been included where Region 10 has determined it is necessary for this source to assure compliance. In general, each permit condition in the permit is explained below. Certain permit conditions are self-explanatory, and thus are not further discussed. The permit is organized into the following fourteen 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 – Emission Unit #1 (EU-1) – PB-1 CE Boiler and PB-2 Riley Boiler
- Permit Section 6: Unit-Specific Requirements – Emission Unit #2 (EU-2) – Veneer Dryers VD-1, VD-2, VD-3 and VD-4
- Permit Section 7: Unit-Specific Requirements – Emission Unit #3 (EU-3) – Oil and Edge Seal Line (ES), Wood Putty Patching (WP) and Surface Coating Logos (SCL)
- Permit Section 8: Unit-Specific Requirements – Emission Unit #4 (EU-4) – Compression Ignition Internal Combustion Engines IC-1 and IC-2
- Permit Section 9: Unit-Specific Requirements – Emission Unit #5 (EU-5) – Spark Ignition Internal Combustion Engines IC-3, IC-4, IC-5, IC-6, IC-7, IC-8, IC-9, IC-10 and IC-11
- Permit Section 10: Unit-Specific Requirements – Emission Unit #6 (EU-6) – Lumber Drying Kiln LK-5 and Lumber Drying Kiln LK-6
- Permit Section 11: Unit-Specific Requirements – Emission Unit #7 (EU-7) – Pneumatic Conveyance and Dust Capture Systems
- Permit Section 12: Unit-Specific Requirements – Emission Unit #8 (EU-8) – Plywood Presses PV-1 and PV-2
- Permit Section 13: Unit-Specific Requirements – Emission Unit #9 (EU-9) – Plant Traffic (PT)
- Permit Appendix: NESHAP Subpart A Requirements Applicable to EU-1, EU-2 and EU-3

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.

Permit Condition 2.1 makes clear that the language in the underlying regulations takes precedence over paraphrased language in the permit. Where there is a difference between the language in the permit and an underlying regulation, the wording in the underlying regulation governs except as noted in Condition 2.1. This permit condition also notes some underlying authorities that may have been used to impose additional requirements in this permit. For instance, 40 CFR 71.6(a)(3)(i)(B) provides authority to include monitoring requirements when an applicable underlying emission limitation is not accompanied by monitoring. In addition, 40 CFR 71.6(c)(1) provides authority to include additional monitoring requirements when an applicable underlying emission limitation is accompanied by monitoring that is not sufficient to assure compliance with the limitation.⁶

Permit Condition 2.2 explains the obligations of complying with all conditions of the part 71 permit and

⁶ In the Matter of BP Amoco Chemical Company, Texas City Chemical Plant, Galveston County, Texas, Order on Petition No. VI-2017-6 (July 20, 2021). See page 29 of the order. Permitting authorities must incorporate applicable monitoring requirements into the Title V permit, add monitoring when no underlying monitoring exists, and supplement existing monitoring that is not sufficient to assure compliance with permit terms and conditions.

any noncompliance with the permit constitutes a violation of the CAA.

Permit Condition 2.3 explains that need to halt or reduce activity is not a defense to maintain compliance with the conditions of 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 Condition 2.6 incorporates the credible evidence rule as reflected in the various applicable requirements cited as authority for this condition. It makes clear that language in the permit stating “compliance is determined with” or “demonstrate compliance by” does not preclude the use of other credible evidence to demonstrate that the Permittee is not in compliance with an applicable requirement.

Permit Conditions 2.7 and 2.8 incorporate the Part 71 provisions regarding permit modification, revocation, reopening, reissuance, and termination for cause.

Permit Conditions 2.9 through 2.11 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 2.12 through 2.14 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 implementing requirements generally applicable to all facilities. In some cases, facility-specific testing, monitoring, recordkeeping and reporting requirements for these permit conditions are included 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 13.

Permit Conditions 3.1 and 3.2 are general compliance schedule requirements. Because EPA has not determined that the Permittee is in non-compliance with any applicable requirements at the time of permit issuance, nor is the company subject to an administrative order or consent decree containing compliance actions, there is no issue-specific compliance schedule in the permit. In Conditions 5.5.4 and 5.5.6, the permit includes revised NESHAP DDDDD CO and PM emission limits for which compliance must be achieved on and after October 6, 2025.

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. 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 RM9 or a continuous opacity monitoring system (COMS) for determining compliance with the limit, and provide exceptions to the rule. RM9 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 a certified reader 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.

Because the facility does use (and is required to use pursuant to NESHAP Subpart DDDDD) a COMS to monitor visible emissions generated by boilers PB-1 and PB-2, the exception in Condition 3.11.2 does apply to these boilers, but only with respect to the FARR limit. The exception for start-up, soot blowing, and grate cleaning does not extend to the NESHAP Subpart DDDDD visible emissions operating limit.

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 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 4.8 through 4.13. These general requirements, however, do not apply to the boilers as noted in Condition 4.14 given the use of a COMS. Emergency engines IC-1 thru IC-11 are also exempt from the monthly survey given their infrequent use. The Permittee is required to observe their emissions annually. The monthly (quarterly for those activities that qualify) walkthrough requirement is also not applicable to visible emissions exhausted from veneer dryer heating section bypass stacks. Bypass stack emissions must be observed upon each occurrence.

Permit Conditions 3.12 through 3.17 restrict fugitive particulate matter emissions and require a plan 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 Conditions 4.8 through 4.13, as long as both requirements are fully complied with. Permit Conditions 3.12 through 3.17 reflect requirements in the FARR that apply facility-wide. Those same requirements were included in Permit No. R10TNSR01804 (conditions 3.14.1 through 3.14.8 and 4.16 through 4.20 of that permit) regulating certain components of the facility. The requirements have been combined into one set of permit conditions applicable facility-wide.

Permit Condition 3.17 contains paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that citations to the regulation have been replaced with citations to the applicable conditions in the permit. Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 49.126(c)) takes precedence over paraphrasing in the permit condition.

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 substance is listed that the facility has in quantities over the threshold amount, or if the facility ever increases the amount of any regulated substance 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 requirements 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 facility, 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, unless stated otherwise. For instance, only Condition 3.27 applies to testing required by Condition 5.9 (NESHAP Subpart DDDDD) applicable to PB-1 and PB-2. Applying this condition to testing required by Condition 5.9 is consistent with EPA's authority under 40 CFR 63.7520(a) to specify the conditions of performance tests conducted pursuant to NESHAP Subpart DDDDD. The general testing requirements also satisfy the requirement in 40 CFR 71.6(c)(1) to include testing, monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement. These permit conditions are standard across Region 10 Part 71 permits (as well as other Regions' Part 71 permits) and reflect a determination of the conditions under which performance tests must be conducted in order to be representative. If there is a conflict between these permit conditions and an emission unit-specific permit condition, the specific permit condition governs. 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.

Reference to "regular operating staff" in Condition 3.27 means PotlatchDeltic employees under the supervision of the Boiler Supervisor regularly tasked with operating the boiler. Reference to "consultation" in Condition 3.27 means communication about emissions (e.g., concentration of CO measured in the exhaust stack) and boiler operator actions that influence emissions (e.g., increase or decrease to the rate at which combustion air is introduced to firebox). Consultation does not include communication necessary to coordinate performance testing (e.g., announcements about readiness to begin a source test run).

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 2.12. Permit Condition 3.32 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 3.32 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

3.32. Off-Permit Change Records. The Permittee shall keep a record describing changes made at the source under Condition 2.12 that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. [40 CFR 71.6(a)(12)(iv)]

40 CFR 71.6(a)(12)(iv): The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 71.6(a)(12)(iv)) takes precedence over paraphrasing in the permit condition.

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.

Permit Condition 3.35 sets the duration that records must be maintained. Title V, the FARR and Permit No. R10PSD00103 (condition 4.4 of that permit) and R10TNSR01804 (condition 4.8 of that permit) require that records must be maintained for five years. The Title V recordkeeping requirement in 40 CFR 71.6(a)(3)(ii) is broad in scope while the recordkeeping requirements in the underlying FARR provisions and construction permits apply narrowly to certain emission units for specified records. The requirements have been combined into a single permit condition that applies facility-wide. If there is ever a conflict between the resultant requirements and a more restrictive emission unit-specific permit condition, the specific permit condition applies.

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. This includes, but is not limited to, notifying Region 10 if the application no longer reflects the type of fuel actually being fired in a combustion unit.

Permit Condition 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 2.12. Section 502(b)(10) changes are allowed in Permit Conditions 2.13.

Permit Condition 3.39 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 3.39 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

3.39. The Permittee is required to send a notice to EPA at least seven days in advance of any section 502(b)(10) change allowed to be made under Condition 2.13. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. [40 CFR 71.6(a)(13)(i)(A)]

40 CFR 71.6(a)(13)(i)(A): For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 71.6(a)(13)(i)(A)) takes precedence over paraphrasing in the permit condition.

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 the submittal contains confidential business information (CBI). This requirement supersedes reporting required in Permit No.'s R10PSD00103 and R10TNSR01804. Submittals containing CBI must be sent hardcopy to the addresses specified or electronically. If the reporting form specific to NESHAP Subpart DDDDD is not available in CEDRI, Region 10 is requesting the Permittee to submit the report to the Administrator at the address listed in Condition 3.40 rather than the address in 40 CFR 63.13 for Region 10 because the address in 40 CFR 63.13 is not current. See explanation for paraphrasing in Permit Condition 5.25 for more information.

Permit Conditions 3.41 through 3.44 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; 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 based on current information. As explained in Section 3.2 of this statement of basis, Region 10 expects the emission estimation techniques listed in this statement of basis to be used to calculate the annual actual 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 3.42.1 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 3.42.1 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

3.42.1. The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all regulated pollutants (for fee calculation) emitted from the source, including fugitive emissions by the presumptive emission fee (in dollars/ton) in effect at the time of calculation. Add any GHG fee adjustment required under 40 CFR 71.9(c)(8). [40 CFR 71.9(c)(1), (c)(1)(i), and (c)(1)(ii)]

40 CFR 71.9(c)(1), (c)(1)(i), (c)(1)(ii): For part 71 programs that are administered by EPA, each part 71 source shall pay an annual fee which is the sum of: (i) \$32 per ton (as adjusted pursuant to the criteria set forth in paragraph (n)(1) of this section) times the total tons of the actual emissions of each regulated pollutant (for fee calculation) emitted from the source, including fugitive emissions; and (ii) Any GHG fee adjustment required under paragraph (c)(8) of this section.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 71.9(c)(1), (c)(1)(i), and (c)(1)(ii)) takes precedence over paraphrasing in the permit condition.

Permit Condition 3.45 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, Region 10 expects the emission estimation techniques listed in this statement of basis to 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.

Note that the FARR emission inventory is required to be submitted to EPA electronically via FORS unless it contains CBI. The requirement was added to satisfy the requirement in 40 CFR 71.6(c)(1) to include monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement. Submittals containing CBI must be sent in hardcopy to the addresses specified or electronically.

Permit Conditions 3.46 and 3.47 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 No. R10PSD00103 (conditions 5.2 and 5.3 of that permit) and R10TNSR01804 (conditions 5.4 and 5.5 of that permit) require annual monitoring reports and prompt deviation reports. The requirements have been combined into a single permit condition that applies facility-wide with more timely and frequent reporting of monitoring performed. Prompt deviation reporting via CEDRI (not by telephone as specified in the underlying permits) is required.

Permit Condition 3.46.1 requires the Permittee to, upon EPA's request, include in its semi-annual monitoring report required by Condition 3.46 the following records of required monitoring pursuant to 40 CFR 71.6(a)(3)(iii)(A): hourly boiler steam records generated pursuant to Condition 5.12.1 and hourly ESP parameter records generated pursuant to 5.12.4 through 5.12.6. The records must be presented in an excel workbook. The ESP, and associated automatic voltage control, is a dynamic control device. Through use of the AVC, the ESP reacts to various conditions to achieve sufficient PM collection. While no single ESP parameter (voltage, current, spark rate, etc.) is necessarily determinative of ESP function, tracking each of these parameters (in conjunction with ESP maintenance records and boiler steam records) over time provides necessary information regarding ESP performance, including ESP degradation. See explanation of Condition 5.12 for additional explanation.

Permit Condition 3.48 requires an annual compliance certification. The Permittee must certify compliance with the permit conditions. Consistent with Permit Condition 2.6, however, if the Permittee is aware of any information that indicates noncompliance, that information must be included in the annual compliance certification. For 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 3.49 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. The facility's responsible officials are listed on the first page of the permit. The Permittee must request an administrative amendment of the permit if the responsible official for the facility changes. The requirement to certify "any document" submitted to the EPA as opposed to "any application form, report or compliance certification" was added to satisfy the requirement in 40 CFR 71.6(c)(1) to include monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement.

Permit Conditions 3.50 and 3.51 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 2.9 through 2.11, 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 13 of the permit.

Permit Conditions 4.1 lists the due date for the annual fees and emission reports required in Permit Conditions 3.41 through 3.45.

Permit Conditions 4.2 and 4.5 limit the sulfur content of the solid fuel burned in any combustion device, specify the method for determining compliance and specify the monitoring and recordkeeping. The facility burns only wood residue in the two boilers. To demonstrate compliance, the underlying rule requires the Permittee to keep records showing that only wood residue is burned. The naturally occurring sulfur content of wood waste is normally much less than the limit of 2 percent by weight. An upper bound

estimate for the sulfur content of bark is 0.2 percent by weight (dry).⁷ PB-1 and PB-2 are the only emission units at SMC that combust solid fuel.

Permit Conditions 4.3 and 4.6 limit the sulfur content of the diesel fuel burned in any combustion device, specify the method for determining compliance and specify the monitoring and recordkeeping. Under NSPS subpart IIII, the two engines may only burn ULSD fuel. The underlying FARR rule allows the Permittee to keep vendor records showing that the sulfur content of the diesel fuel is below the limit of 0.3 percent by weight (3,000 ppm) for No. 1 diesel and 0.5 percent by weight (5,000 ppm) for No. 2 diesel. Because ULSD fuel has a maximum sulfur content of 15 ppm, the Permittee can satisfy the requirement by having vendor records that document that only ULSD fuel is delivered. IC-1 and IC-2 are the only emission units at SMC that combust liquid fuel.

Permit Conditions 4.4 and 4.7 limit the sulfur content of the propane fuel burned in any combustion device, specify the method for determining compliance and specify the monitoring and recordkeeping. The facility burns only propane in the eight SI internal combustion engines. The underlying rule allows the Permittee to keep vendor records showing that the sulfur content of the propane is below the FARR limit of 1.1 g/dscm

A concentration of 1.1 g/dscm limit is equivalent to 918 ppmw as illustrated through the following calculation based upon an equation in a table entitled, “Conversion Factors for Common Air Pollution Measurements: Atmospheric Gases” on page A-27 of Appendix A to AP-42: $918 \text{ ppmw} = (1.1 \text{ g/m}^3) \times (1000 \text{ mg/g}) \times (0.8347)$. Per the GPA Liquefied Petroleum Gas (LPG) Specifications Standard 2140-97, commercial propane is allowed to have the highest sulfur content among the four liquefied petroleum gas products (the other three being commercial butane, commercial b-p mixtures and propane HD-5).

Commercial propane is limited to 185 ppmw, so the Permittee can satisfy the requirement to have vendor records by documenting that any of the four GPA-designated LPG products is burned. RCO, IC-3, IC-4, IC-5, IC-6, IC-7, IC-8, IC-9 IC-10 and IC-11 are the only emission units at SMC that combust gaseous fuel. Permit Condition 3.37 requires PotlatchDeltic to notify Region 10 in the event the mill decides to combust gaseous fuel other than propane in RCO and emergency SI engines

Permit Conditions 4.8 through 4.13 require a monthly survey (also referred to as 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 cannot be eliminated within 24 hours, a tiered sequence of RM9 opacity determinations must be performed beginning with an initial 30-minute period of readings every 15 seconds. The frequency (e.g., daily) for conducting follow-up RM9 opacity readings is based upon whether any 6-minute average opacity exceeds 20%. Observations of visible or fugitive emissions during a survey are not considered deviations; however, any resulting RM9 6-minute average opacity determination above 20% is considered a permit deviation pursuant to Permit Conditions 3.46 and 3.47. The annual fugitive particulate matter survey required in Permit Condition 3.13 can be accomplished simultaneously with a monthly survey required in this permit condition as long as both requirements are fully complied with. Permit Condition 4.9 relaxes survey frequency from monthly to quarterly for those activities documented to have not been generating visible or fugitive emissions for three consecutive monthly surveys. This opportunity for reduced monitoring frequency is not available to those activities using an air pollution control device or applying a fugitive dust suppressant. The Permittee is required to maintain a list of the potential sources of fugitive dust or visible particulate emissions for which it is conducting surveys, and the list must identify the monitoring frequency (monthly or quarterly) for each activity. Note that not every emission generating activity is a potential source of fugitive dust or visible particulate emissions. For example, PotlatchDeltic is not required to conduct a visual survey of liquid or

⁷ H. S. Oglesby & R. O. Blosser (1980) Information on the Sulfur Content of Bark and its Contribution to SO₂ Emissions when Burned as a Fuel, Journal of the Air Pollution Control Association, 30:7, 769-772, DOI:10.1080/00022470.1980.10465107

gaseous fuel storage tanks because the tanks are not potential sources of fugitive dust or visible particulate emissions.

These permit conditions were included in Permit No. R10TNSR01804 (conditions 4.9 through 4.15) authorizing construction of kiln LK-6 and regulating certain components of the facility. At the time Region 10 issued the initial minor NSR permit and as explained on page 24 of the June 2019 Permit Analysis, EPA determined that the walkthroughs adequately assure compliance with the daily and annual PM_{2.5} emission limits applicable to EU-7's PCWR-PM-SH, PCWR-PM-SD, PCWR-PM-PTB, PCWR-PM-PSB, PCWR-SM-SD, PCWR-SM-SDB and PCWR-SM-CH. Since June 2019 and as required by the minor NSR permit, the Permittee conducted performance testing of PCWR-PM-SH and PCWR-PM-SD (PM/PM₁₀/PM_{2.5} emissions controlled by their respective baghouses) to measure PM_{2.5} emissions. For each of the two emission units, RM201A testing reported PM_{2.5} emissions much less than the emission factor in the 2019 permit. Both the emission factors and emission limits for these two emission units were reduced in a March 18, 2021 revision to the minor NSR permit to reflect test results. At this time for the EU-7 units associated with LK-6 minor NSR permit, Region 10 is not requiring additional baghouse performance monitoring beyond that prescribed in the underlying minor NSR permit (i.e., monthly plant walkthrough) to assure representativeness of the PM_{2.5} emission factors and to assure compliance with corresponding limits.

These minor NSR monitoring permit conditions, combined and applicable here facility-wide, serve as the monitoring for several fugitive and particulate matter limits found in the permit. These minor NSR requirements were made applicable facility-wide to satisfy the requirement in 40 CFR 71.6(c)(1) to include monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement. These requirements apply to emission sources that normally do not exhibit visible or fugitive emissions. If the Permittee prefers a specific monitoring approach for any emission sources subject to this requirement, the Permittee can propose a new approach as a permit modification. See Permit Condition 4.14 for emission units that are exempted from these requirements.

Permit Condition 4.14 states that the monthly plant walkthrough requirement is not applicable to PB-1, PB-2, IC-1 through IC-11, and veneer dryer heating section bypass stacks. COMS on the exhaust stacks of PB-1 and PB-2 continuously monitor the boilers' visible emissions. PotlatchDeltic is not required to conduct visible emission surveys on infrequently operated propane-fired emergency engines EU-5's IC-3 through IC-11 (required to comply with NSPS JJJJ & NESHAP ZZZZ) as compliance with the applicable NSPS and NESHAP requirements assures compliance with the FARR visible emissions limit. For EU-4's diesel-fired emergency fire pump engines IC-1 and IC-2 and EU-2's veneer dryer heating section bypass stacks, see unit-specific sections for monitoring determinations for these emission generating activities.

Permit Conditions 4.15 and 4.16 have been included in the permit because a December 2002 change to the PSD regulation applicability test for modifications resulted in a new applicable requirement for PSD major sources. 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) through (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 requirement will be relevant to the facility only when the Permittee is contemplating making physical or operational changes to the facility. In those instances, Region 10 recommends that the Permittee contact the Region to discuss their plans and verify their assumptions.

Permit Conditions 4.17 through 4.22 contain requirements from Permit No. R10TNSR01804 and R10PSD00103. See permit analysis for Permit No. R10TNSR01800 (original "version" of R10TNSR01804) and fact sheet for Permit No. R10PSD00100 (original "version" of R10PSD00103) for further detail.

Permit Conditions 4.23 incorporates FARR requirements by reference into the permit. See Appendix B to this statement of basis for details.

Permit Section 5 – Unit-Specific Requirements for EU-1 – CE Boiler (PB-1) and Riley Boiler (PB-2)

Permit Condition 5.1 limits the PM emissions from the boiler to 0.2 gr/dscf at 7% O₂ and describes the method for determining compliance. The limit applies at all times. Emissions from each boiler are controlled by a multiclone and dry ESP. The FARR PM limit converts to approximately 0.4 lb/MMBtu. See Region 10's May 8, 2014 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 for the calculation to convert the FARR PM grain loading limit into units of "lb/MMBtu."

June 2024 performance testing of each boiler operating near maximum steam generating rate (high load) indicates actual PM emissions of 0.0043 lb/MMBtu (PB-1) and 0.0107 lb/MMBtu (PB-2), well below the FARR PM limit. At low load (1/3rd of maximum steam generating capacity), PB-1 emits 0.008 lb/mmBtu (April 2022 test) while PB-2 emits 0.003 – 0.038 lb PM/MMBtu (April 2022, July 2022, April 2023 and April 2024 tests), also below the FARR PM limit. Each boiler is also subject to a more stringent NESHAP Subpart DDDDD PM emissions limit of 0.020 lb/mmBtu for PB-1 and 0.037 lb/MMBtu (0.034 lb/MMBtu on or after October 6, 2025) for PB-2. Compliance with the FARR PM limit will be assured by assuring compliance with the more stringent NESHAP PM limit.

PotlatchDeltic has indicated that it may at some point choose to no longer demonstrate compliance with the NESHAP Subpart DDDDD PM emission limit (PM is a surrogate for total select metals or "TSM") through periodic performance testing and with the corresponding visible emission and secondary ESP power operating limits/monitoring requirements. Pursuant to Permit Condition 5.27, the NESHAP DDDDD PM monitoring/testing requirements no longer apply if PotlatchDeltic chooses to demonstrate compliance with the TSM limit through some other means. Should that happen, Region 10 will consider (at that time) reopening this permit pursuant to Permit Condition 2.7 to require monitoring and testing as necessary to assure compliance with the FARR PM limit.

Permit Condition 5.2 limits the sulfur dioxide (SO₂) emissions from the boiler to 500 ppm_{dv} at 7% O₂ and describes the methods for determining compliance. The limit applies at all times. Because the boiler only uses wood waste as fuel, SO₂ emissions are expected to be well below the emission limit. For example, see the calculation below.

$$\begin{aligned}\text{SO}_2 \text{ concentration} &= \frac{(\text{fuel S}) \times (\text{SO}_2 \text{ conversion}) \times (\text{SO}_2 \text{ molar volume}) \times (1 \times 10^6) \times (1 \times 10^6)}{(\text{f-factor}) \times (\text{fuel heat content}) \times \text{SO}_2 \text{ molar weight}} \\ &= \frac{0.00134 \times 2 \times 385 \times 1 \times 10^6 \times 1 \times 10^6}{9700 \times 8700 \times 64} \\ &= 191 \text{ ppm}_{dv} \text{ at } 0\% \text{ O}_2\end{aligned}$$

where:

expected fuel S =	0.134% by weight, dry basis. Basis for value is article entitled, "Information on the Sulfur Content of Bark and its Contribution to SO ₂ Emissions when Burned as a Fuel." Journal of the Air Pollution Control Association, 30:7, 769-772)
SO ₂ conversion =	2 lb SO ₂ /lb S
SO ₂ molar volume =	385 dscf/lbm
f-factor =	9700 dscf/MMBtu at 0% O ₂ . Value from 40 CFR 60, Appendix A, RM19, Table 19-2. 9700 dscf/MMBtu is a typical value and is from February 2015 PB-1 and PB-2 stack test and corresponding hog fuel analysis.
fuel heat content =	8700 Btu/lb, dry basis. This typical value is from February 2015 PB-1 and PB-2 hog fuel analysis.
SO ₂ molar weight =	64 lb SO ₂ /lbm

Btu conversion = 1×10^6 Btu per MMBtu
ppm conversion factor = 1×10^6 parts per million parts

Using the worst-case sulfur content of bark from the cited technical journal article, and assuming all sulfur in the wood is emitted as SO₂, the concentration will be around 191 ppm at 0% O₂. The limit of 500 ppm SO₂ at 7% O₂ generally corresponds to a 1.2 lb/MMBtu emission factor. See May 8, 2014 Region 10 document 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/bbnonhappteeef_memo.pdf for calculation. The actual emissions rate forecast by AP-42 (Table 1.6-2, September 2003) is 0.025 lb/MMBtu. In other words, actual SO₂ emissions are expected to be less than 10% of the FARR limit. To demonstrate compliance with the exhaust gas SO₂ limit in Permit Condition 5.2, the Permittee must document that only wood waste fuel is used (see Permit Condition 4.5). The monitoring in Permit Condition 4.5 along with the NESHAP DDDDD fuel monitoring in Condition 5.19.5 serve as the monitoring to assure compliance with Condition 5.2.

Permit Conditions 5.3 and 5.4 establish allowable daily and annual emission limits that reflect the emission rates modeled to protect the PM_{2.5} NAAQS in support of minor NSR permit authorizing construction of LK-6. These permit conditions specify the emission factors (lb PM_{2.5}/mlb steam) and daily and annual operational rates (mlb steam/hr, day, yr from Condition 5.12.1) to use in calculating daily and annual PM_{2.5} emissions for determining compliance. The emission factors and calculated daily and annual emissions reflect the use of multiclone and ESP required in Permit No. R10TNSR01804. See Condition 5.12 for monitoring to assure representativeness of the emission factors and compliance with the emission limits.

On March 21, 2025, PotlatchDeltic requested an administrative revision to minor NSR permit No. R10TNSR01803 to increase the daily PM_{2.5} emission limit applicable to PB-2 from 20.63 to 22.17 lb/day. On April 10, 2025, Region 10 issued an administrative revision to the minor NSR permit as requested. Condition 5.3 of the title V permit reflects the revised PM_{2.5} daily emission limit in the minor NSR permit now identified as No. R10TNSR01804.

Permit Condition 5.5 limits HCl, Hg, CO and PM emissions from PB-1 and PB-2 at all times, except startup and shutdown. PB-1’s firebox is a fuel cell, and the boiler fits within NESHAP DDDDD subcategory entitled, “fuel cell designed to burn biomass/bio-based solid.” PB-2’s firebox is a spreader stoker, and the boiler fits within NESHAP DDDDD subcategory entitled, “stokers/sloped grate/other units designed to burn wet biomass/bio-based solid.” Because the HCl and Hg limits are dependent upon fuel type and not firebox design, the HCl and Hg limits for PB-1 are the same for PB-2. Because the limits for CO and PM are dependent upon firebox design, the CO and PM limits for PB-1 are not the same for PB-2. The CO and PM limits for stokers combusting wet biomass (appearing in the permit) are different from the CO and PM limits for stokers combusting kiln dried biomass. PB-2 fits in the “stokers/sloped grate/other units designed to burn wet biomass” so long as the biomass fuel combusted in the boiler exceeds 20% moisture, wet basis, on an annual heat input basis. The NESHAP provides the Permittee the option to demonstrate compliance with the heat input-based (or as a concentration by volume for CO) or steam output-based emission limits. It is the Permittee’s choice whether to demonstrate compliance with the heat input-based (or as a concentration by volume for CO) or steam output-based emission limits. On October 6, 2022 EPA revised certain NESHAP DDDDD emission limits, some of which apply to PB-1 and PB-2. Compliance with the revised limits is required beginning three years after final rule promulgation in the Federal Register. For details, see final rulemaking at <https://www.govinfo.gov/content/pkg/FR-2022-10-06/pdf/2022-19612.pdf>.

Permit Condition 5.6 prescribes the NESHAP DDDDD work practice standards, including startup and shutdown requirements. Although PotlatchDeltic states that it combusts only clean dry biomass during startup, the NESHAP DDDDD allows combustion of additional clean fuels, including liquid and gaseous fuels. Neither PB-1 nor PB-2, however, is physically capable of combusting liquid or gaseous fuels. If

PotlatchDeltic installs and uses an oxygen trim system on a boiler, the required tune-up frequency is reduced from once every 13 months to once every five years. The NESHAP general provisions' operation and maintenance requirements at 40 CFR 63.6(e)(1) do not apply, and neither does the requirement to develop and implement a startup, shutdown and malfunction plan at 40 CFR 63.6(e)(3). See applicability of NESHAP general provisions in Table 10 to 40 CFR 63, Subpart DDDDD. However, PotlatchDeltic is required to develop a startup and shutdown plan for those startups during which PotlatchDeltic chooses to comply with the emission limitation using definition (2) of "startup" presented in Condition 5.5 and 40 CFR 63.7575. See 40 CFR 63.7505(e) and row 5.c.2 of Table 3 to NESHAP Subpart DDDDD.

Permit Condition 5.6.1 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), a portion of Permit Condition 5.6.1 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

5.6.1 For the following work practice: Tune-up. The Permittee must meet the following requirements. The Permittee must complete a subsequent tune-up by following the procedures described in Condition 5.6.4 and the schedule described immediately below for units that are not operating at the time of their scheduled tune-up. [40 CFR 63.7515(g)]

40 CFR 63.7515(g): You must complete a subsequent tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) and the schedule described in § 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7515(g)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.6.4 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.6.4 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Condition 5.6.1 specifies tune-up frequency of (a) every five years for units with continuous oxygen trim systems that maintain an optimum air to fuel ratio, or (b) annually no more than 13 months after the previous tune-up.

5.6.4. NESHAP Subpart DDDDD Boiler Tune-up. For each boiler tune-up required by Condition 5.6.1, conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up as follows:

40 CFR 63.7540(a)(10): If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. This frequency does not apply to limited-use boilers and process heaters, as defined in § 63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7540(a)(10)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.7 limits the boilers' (a) exhaust gas opacity, (b) exhaust gas oxygen content, and (c) steam generating rate at all times except startup, shutdown and during NESHAP DDDDD performance testing. Tracking these parameters provides a measure of the degree to which the boiler and control device are continuing to operate within the range they did while demonstrating compliance during

NESHAP DDDDD performance testing. See Condition 5.11, below, for a discussion of recordkeeping for NESHAP DDDDD PM emission limit. For NESHAP DDDDD, opacity is the operating parameter associated with the PM limit, oxygen is the operating parameter associated with the CO limit, and steam generating rate is the operating parameter associated with PM, CO, HCl and Hg limits.

The opacity, oxygen and steaming rate limits presented in tables 5-5, 5-6 and 5-7 of the permit are based upon monitoring performed by PotlatchDeltic during NESHAP DDDDD performance testing between 2016 and 2024. Because the highest test run average exhaust gas visible emissions measured during performance testing was less than the default 10% opacity for each boiler, the daily block average visible emissions operating limit is 10% opacity. See Appendix C to the statement of basis for EPA's determination of operating limits to assure compliance with the applicable emission limits based upon measurements presented in the performance test reports. If PotlatchDeltic installs and uses an oxygen trim system on a boiler, PotlatchDeltic then has the opportunity to comply with Condition 5.7.2 (oxygen operating limit) by operating the oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test.

Permit Condition 5.8 requires PotlatchDeltic to minimize emissions generated by PB-1 and PB-2 at all times. A similar provision in the NESHAP general provisions at 40 CFR 63.6(e)(1) is not applicable.

Permit Condition 5.9 establishes the NESHAP DDDDD HCl, Hg, PM and CO performance testing schedule for PB-1 and PB-2. See documents 7iii and 7jjj in the administrative record for the performance testing schedule for the immediate future.

Permit Condition 5.9.5 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.9.5 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

5.9.5. *If the boiler has not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the Permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the boiler and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 to 40 CFR 63, Subpart DDDDD. [40 CFR 63.7515(g)]*

40 CFR 63.7515(g): *For affected sources (as defined in § 63.7490) that have not operated since the previous compliance demonstration and more than 1 year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Table 1 or 2 or Tables 11 through 15 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in § 63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in § 63.7540(a)(10)(i) through (vi) and the schedule described in § 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7515(g)) takes precedence over paraphrasing in the permit condition.

The tune-up requirement in 40 CFR 63.7515(g) is included in Condition 5.6.1.

Permit Condition 5.10 establishes NESHAP DDDDD performance testing requirements. Performance testing is conducted to demonstrate compliance with the emission limits and to confirm or reestablish operating limits. The permittee is required to conduct all performance tests under such conditions as Region 10 specifies based on the representative performance of each boiler as provided in 40 CFR 63.7520(a). One performance test per pollutant per year (or every three years if the boiler qualifies for skip testing) is adequate for the PotlatchDeltic boilers to demonstrate compliance.

Permit Condition 5.10.2 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.10.2 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

5.10.2. The Permittee must conduct each performance test according to the requirements in Table 5 to 40 CFR 63 subpart DDDDD. Table 5-8 below reflects only that portion of Table 5 to 40 CFR 63 subpart DDDDD that is applicable given the compliance demonstrations the Permittee has completed to date (e.g., demonstrating compliance with HCl, Hg, CO and PM emission limits, in part, through performance testing). [40 CFR 63.7520(b)]

40 CFR 63.7520(b): You must conduct each performance test according to the requirements in Table 5 to this subpart.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7520(b)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.10.3 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.10.3 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

5.10.3. The Permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 to 40 CFR 63 subpart DDDDD. Tables 5-8 (above) and 5-9 (below) reflect only that portion of Tables 5 and 7 to 40 CFR 63 subpart DDDDD, respectively, that is applicable given the compliance demonstrations the Permittee has completed to date. The Permittee must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if the Permittee is opting to comply with the TSM alternative standard and the Permittee must demonstrate initial compliance and establish the Permittee's operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the Permittee must comply with the operating limit for operating load conditions specified in Table 4 to 40 CFR subpart DDDDD. The operating load limit at time of permit issuance is specified in Condition 5.7.3. [40 CFR 63.7520(c)]

40 CFR 63.7520(c): You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7520(c)) takes precedence over paraphrasing in the permit condition.

Under Condition 5.10.3, EPA will determine the representative operating load conditions at which the Permittee must conduct performance tests on a case-by-case basis after review of the Permittee's source test plan required under Condition 5.10.1. If the Permittee expresses intent to reestablish (i.e., increase) steam generating rate operating limit (with respect to pollutants HCl, Hg, PM and CO) in the source test

plan, that factor will be influential as the two-fold purpose of performance testing is to demonstrate compliance and reestablish or confirm operating limits. Whether unsafe conditions would result from boiler operation at a particular steam generating rate would also be an element of the case-specific review. With respect to representative operating loads, Region 10 notes the following historical information related to PB-1 and PB-2: Based upon Region 10 review of recent hourly and daily average steaming rates, PotlatchDeltic's boilers PB-1 and PB-2 operate over a range of different steam generating rates. Region 10 has reviewed PB-1 steaming rates for the periods March 2019 – February 2020 (daily avg), August 2020 – July 2021 (daily avg), and March 2021 – April 2023 (hourly avg). Region 10 has reviewed PB-2 steaming rates for the periods August 2020 – July 2021 (daily avg) and March 2021 – April 2023 (hourly avg). PB-1 and PB-2 6-hour block average steam generating rates for period March 2021 – April 2023 are summarized below in Figures 5-1 and 5-2 (excerpts from Appendix E to this SOB). For the CE Boiler (PB-1), the absolute daily operating range during the 26-month period was 2,500 to 41,000 lb/hr. As a function of approximate 43,000 lb/hr capacity, the daily operating range over that period was 6% $((2500/43000) \times 100)$ to 95% $((41000/43000) \times 100)$ of maximum steam generating capacity. For the Riley Boiler (PB-2), the absolute daily operating range during the 26-month period was 20,000 to 93,000 lb/hr. As a function of approximate 98,000 lb/hr capacity, the daily operating range over that period was 20% $((20000/98000) \times 100)$ to 95% $((93000/98000) \times 100)$ of maximum steam generating capacity. However, the operating range during a particular season of the year is considerably less. During summer, the daily operating range is between approximately 25,000 and 70,000 lb/hr. During winter, the daily operating range is between approximately 40,000 and 85,000 lb/hr.

Figure 5-1: PB-1 Daily Average Steam Generating Rate March 2021 – April 2023

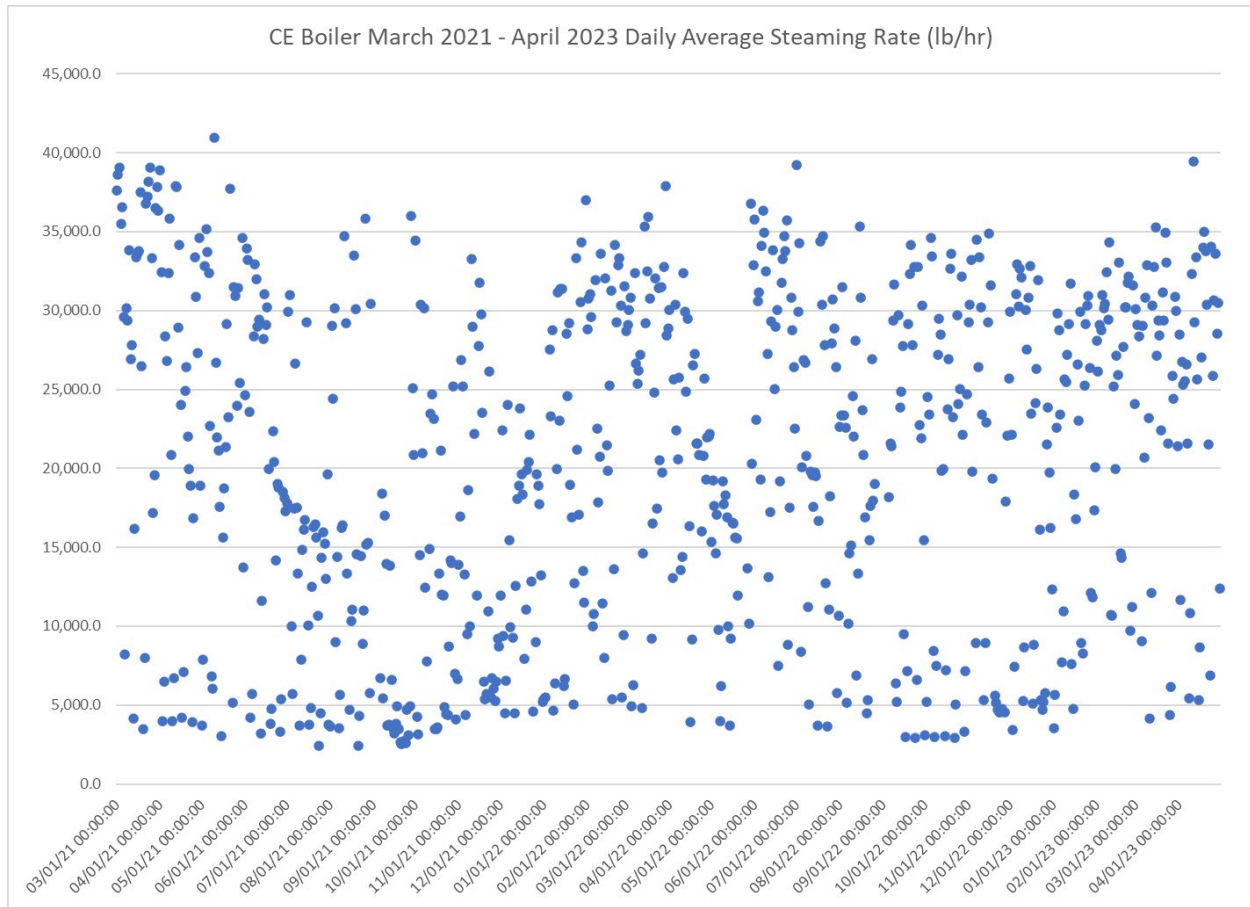
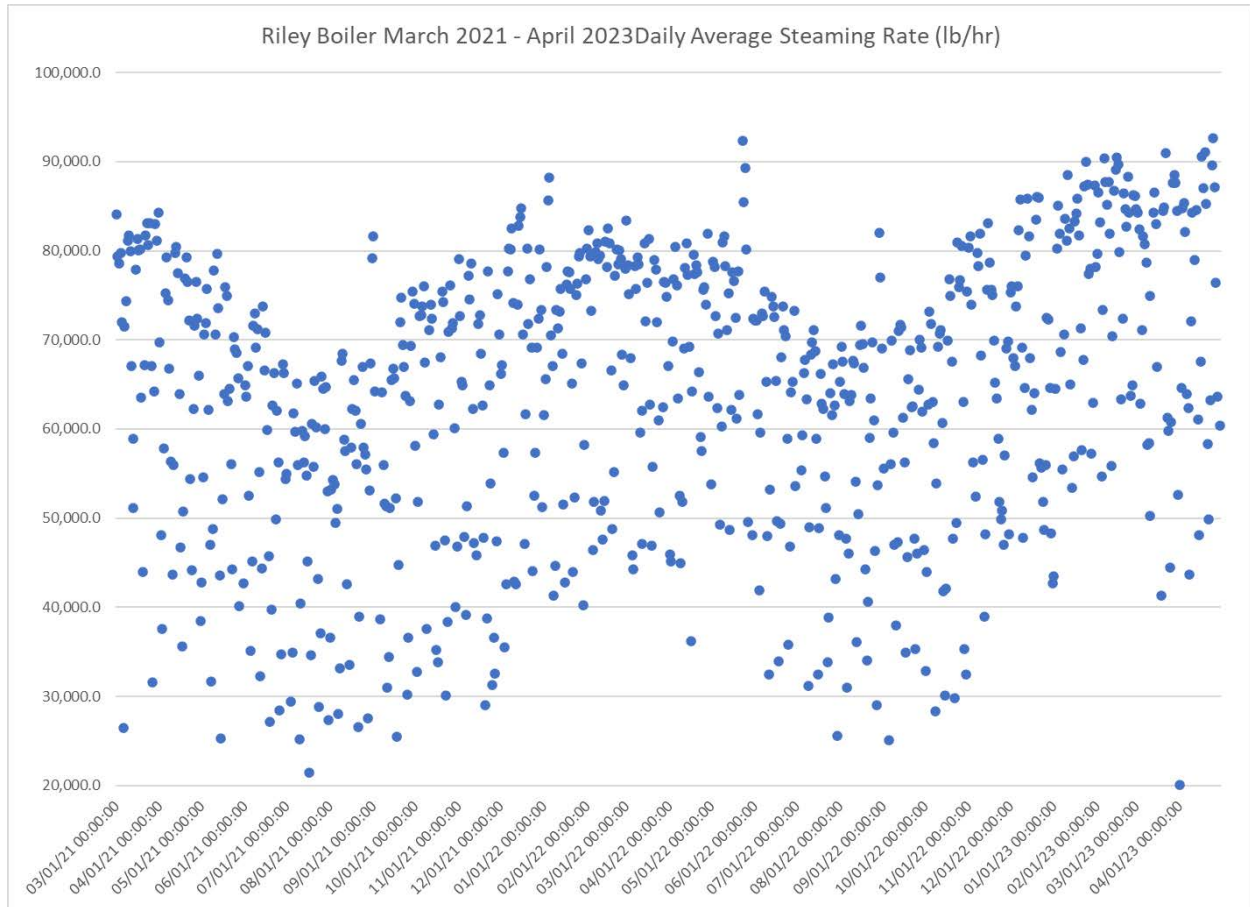


Figure 5-2: PB-2 Daily Average Steam Generating Rate March 2021 – April 2023



Utilizing an oxygen trim system while operating a boiler is generally good for the environment as it increases the thermal efficiency of the boiler. Requiring low load testing pursuant to 40 CFR 63.7520(a) of the Boiler MACT discourages (perhaps even prevents) PotlatchDeltic from installing an oxygen trim system. Increasing thermal efficiency means lower mass emissions generated per unit of steam generated. Oxygen exhaust gas content is generally highest at low steam generating rates because more excess air is needed to support combustion at low load. See Appendix C to SOB for summary of O₂ content during Boiler MACT source testing conducted February 2016 through June 2024. Exhaust gas O₂ content observed during a low load test will likely be too high to establish a useful oxygen trim system. The minimum oxygen level will be too high to allow for efficient operation at steaming rates other than low load. Thus, if PotlatchDeltic installs (or intends to install) an oxygen trim system, a technical basis exists to not require testing for CO at low load.

PB-1 and PB-2 NESHAP DDDDD test results (to date) are summarized below in Tables 5-2 and 5-3. Entries in bold indicate tests during which emissions measured to be greater than 75% of the emission limit, thus triggering or continuing annual testing requirement.

Table 5-2: PB-1 NESHAP DDDDD Performance Testing Results

Test Event	Steaming Rate, lb/hr	HCl, lb/MMBtu	% of Limit	Hg, lb/MMBtu	% of Limit	PM, lb/MMBtu	% of Limit	CO, ppm _{dv} @ 3% O ₂	% of Limit
February 2016	34,311	1.89x10 ⁻⁵	0.09	1.30x10 ⁻⁶	22.8	0.00611	30.5	571	51.9

Test Event	Steaming Rate, lb/hr	HCl, lb/MMBtu	% of Limit	Hg, lb/MMBtu	% of Limit	PM, lb/MMBtu	% of Limit	CO, ppm _{dv} @ 3% O ₂	% of Limit
March 2017	24,622	1.79x10 ⁻⁵	0.08	9.08x10 ⁻⁷	15.8	0.00964	48.2	375	34.1
March 2017	10,010	1.89x10 ⁻⁵	0.09	1.02x10 ⁻⁶	17.9	0.00996	49.8	326	29.6
March 2019	25,388	0.0	0.0	1.1x10 ⁻⁶	19.3	0.00233	11.7	624	56.7
March 2019	9,296	0.0	0.0	1.0x10 ⁻⁶	17.5	0.00997	49.8	911	82.8
June 2021	33,568	2.0x10 ⁻⁵	0.09	1.3x10 ⁻⁶	22.8	0.011	55.0	460	41.8
April 2022	9,234	5.1x10 ⁻⁵	0.2	1.1x10 ⁻⁶	18.6	0.008	40.0	717	65.2
April 2023	10,731	Not applicable	-	Not applicable	-	Not applicable	-	837	76.1
April 2024	12,027	Not applicable	-	Not applicable	-	Not applicable	-	248	22.5
June 2024	33,439	1.6x10 ⁻⁵	0.07	1.1x10 ⁻⁶	18.5	0.0043	21.5	590	53.6

Table 5-3: PB-2 NESHAP DDDDD Performance Testing Results

Test Event	Steaming Rate, lb/hr	HCl, lb/MMBtu	% of Limit	Hg, lb/MMBtu	% of Limit	PM, lb/MMBtu	% of Limit	CO, ppm _{dv} @ 3% O ₂	% of Limit
February 2016	90,101	1.54x10 ⁻⁵	0.07	7.80x10 ⁻⁷	13.7	0.00359	9.7	883	58.9
March 2017	90,979	1.26x10 ⁻⁵	0.06	7.29x10 ⁻⁷	12.6	0.00582	15.7	629	41.9
March 2017	79,059	1.33x10 ⁻⁵	0.06	4.95x10 ⁻⁷	8.6	0.00473	12.8	742	49.5
March 2017	29,744	2.28x10 ⁻⁵	0.10	1.63x10 ⁻⁶	28.6	0.0365	98.5	299	19.9
March 2018	30,781	Not applicable	-	Not applicable	-	0.00641	17.3	Not applicable	-
March 2019	82,303	0.0	0.0	8.8x10 ⁻⁷	15.4	0.00560	15.1	614	40.9
March 2019	33,664	0.0	0.0	9.1x10 ⁻⁷	16.0	0.0207	55.9	200	13.3
June 2021	85,671	2.3x10 ⁻⁵	0.10	1.2x10 ⁻⁶	21.1	0.0048	13.0	441	29.4

Test Event	Steaming Rate, lb/hr	HCl, lb/MMBtu	% of Limit	Hg, lb/MMBtu	% of Limit	PM, lb/MMBtu	% of Limit	CO, ppm _{dv} @ 3% O ₂	% of Limit
April 2022	31,430	1.4x10 ⁻⁵	0.06	1.7x10 ⁻⁶	30	0.0383	103.5	1,225	81.7
July 2022	38,100	Not applicable	-	Not applicable	-	0.0030	8.1	Not applicable	-
April 2023	45,610	Not applicable	-	Not applicable	-	0.0087	23.5	1,565	104.3
May 2023	41,878	Not applicable	-	Not applicable	-	Not applicable	-	466	31.0
April 2024	44,927	Not applicable	-	Not applicable	-	0.0054	14.6	988	65.9
June 2024	82,774	1.6x10 ⁻⁵	0.07	1.6x10 ⁻⁶	28.7	0.0107	29.0	985	65.7

The permittee has conducted NESHAP DDDDD performance testing of the boilers extensively between 2016 and 2024. Under 40 CFR 63.7520(a), performance testing must be conducted under such conditions as EPA specifies based on the representative performance of each boiler or process heater for the period being tested. EPA national stack test guidance states⁸:

EPA recommends that performance tests be performed under those representative (normal) conditions that:

- *represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of frequency of the conditions); and*
- *are likely to most challenge the emission control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.*

PB-1 and PB-2: Hg & HCl

Based upon the test results presented in Tables 5-2 and 5-3, it is not a challenge for PotlatchDeltic to comply with HCl and Hg limits for PB-1 and PB-2 given the fuel combusted by the boilers. Neither boiler is served by a control device to reduce either HCl or Hg emissions. There is no compelling reason to require testing at one load compared to another.

PB-1 CE Boiler: PM

Based upon test results presented in Table 5-2 and analysis presented below, PM emissions are somewhat higher at low load for PB-1. Emissions variability is somewhat higher at high load. See Table 5-4 below.

Table 5-4: PB-1 NESHAP DDDDD PM Performance Testing Results

	Load	
	Low	High
# of Test Runs Since February 2016	9	15
Average Source Test Run Emissions (lb/mmBtu)	0.00934	0.00674
Standard Deviation	0.00205	0.00347

⁸ April 27, 2009 EPA memorandum entitled, "Issuance of the Clean Air Act National Stack Testing Guidance."

- Average high load PM emissions are 72% of average low load emissions $[(0.00674/0.00934) \times 100]$.
- Low load PM emissions variability is 3/5th of the variability apparent at high load (0.00205/0.00347).
- Because 3-run average PM emissions have never exceeded 75% of the emission limit at either low or high load, only skip testing is required since becoming eligible.

Riley Boiler PB-2: PM

Based upon test results presented in Table 5-3 and analysis presented below, PM emissions are generally higher and more variable at low load for PB-2. See Table 5-5 below. However, the most recent three low load tests show significant improvement in reducing emissions.

Table 5-5: PB-2 NESHAP DDDDD PM Performance Testing Results

	Load	
	Low	High
# of Test Runs Since February 2016	21	18
Average Source Test Run Emissions (lb/mmBtu)	0.01699	0.00566
Standard Deviation	0.01680	0.00315

- Average high load emissions are 33% of average low load emissions $[(0.00566/0.01699) \times 100]$.
- High load emissions variability is 1/5th of the variability apparent at low load (0.00315/0.01680).
- Because 3-run average PM emissions have never exceeded 75% of the emission limit at high load, only skip testing at high load is required since becoming eligible.
- Because 3-run average PM emissions have exceeded 75% of the emission limit at low load on two occasions (one considered a malfunction by PotlatchDeltic), PotlatchDeltic has conducted annual testing beyond the initial 2-year minimum at low load.
- Since emissions exceeded the emission limit during an April 2022 low load performance test, PotlatchDeltic has demonstrated within a 22-month period over three consecutive low load tests (July 2022, April 2023 and April 2024) average emissions of 15% of the emission limit.

CE Boiler PB-1: CO

Based upon test results presented in Table 5-2 and analysis presented below, CO emissions are somewhat higher and more variable at low load for PB-1. See Table 5-6 below.

Table 5-6: PB-1 NESHAP DDDDD CO Performance Testing Results

	Load	
	Low	High
# of Test Runs Since February 2016	15	15
Average Source Test Run Emissions (ppmdv @ 3% O ₂)	608	524
Standard Deviation	299	109

- Average high load CO emissions are 86% of average low load emissions $[(524/608) \times 100]$.
- High load CO emissions variability is 1/3rd of the variability apparent at low load (109/299).
- Because 3-run average CO emissions have exceeded 75% of the emission limit at low load on two occasions, PotlatchDeltic has conducted annual testing beyond the initial 2-year minimum at low load.

- The most recent (April 2024) low load test measured CO emissions at 23% of the emission limit.

Riley Boiler PB-2: CO

Based upon test results presented in Table 5-3 and analysis presented below, CO emissions are somewhat higher at high load but more variable at low load for PB-2. See Table 5-8 below.

**Table 5-7: PB-2 NESHAP DDDDD CO Performance Testing Results
(including April 2023 “steam leak” test at low load)**

	Load	
	Low	High
# of Test Runs Since February 2016	24	24
Average Source Test Run Emissions (ppmdv @ 3% O ₂)	789	716
Standard Deviation	581	200

**Table 5-8: PB-2 NESHAP DDDDD CO Performance Testing Results
(excluding April 2023 “steam leak” test at low load)**

	Load	
	Low	High
# of Test Runs Since February 2016	21	24
Average Source Test Run Emissions (ppmdv @ 3% O ₂)	634	716
Standard Deviation	458	200

Excluding the April 2023 “steam leak” test,

- Average low load emissions are 89% of average high load emissions $[(634/716) \times 100]$.
- High load CO emissions variability is 2/5th of the variability apparent at low load (200/458).
- Because 3-run average CO emissions have exceeded 75% of the emission limit at low load on one occasion, PotlatchDeltic has conducted annual testing beyond the initial 2-year minimum at low load.
- 3-run average CO emissions exceeded 75% of the revised emission limit at high load during the June 2024 source test.

Permit Condition 5.11 requires the Permittee to record the date and summary of any inspection and maintenance activity conducted on the ESPs serving PB-1 and PB-2. Region 10 established this additional recordkeeping consistent with 40 CFR 71.6(c)(1). The Boiler MACT contains a number of provisions intended to help assure compliance with the PM emission limits applicable to PB-1 CE boiler and PB-2 Riley boiler. This includes, but is not limited to, a requirement for good operation and maintenance of process equipment and emission controls at all times to minimize emissions.⁹ In addition, it requires continuous monitoring of opacity as a surrogate for PM,¹⁰ which is a surrogate for HAP metals. The Boiler MACT also establishes a daily average operating limit (outside of startup and shutdown) for opacity based on test-run average values measured during source test runs in which compliance is demonstrated, or 10% opacity (whichever is greater).¹¹ Lastly, it requires continuous monitoring of steam generating rate and compliance with a source test derived 30-day rolling average steaming rate limit to

⁹ See 40 CFR 63.7500(a)(3) and Condition 5.8.

¹⁰ See 40 CFR 63.7525(c), Rows 1 to Table 8 of Boiler MACT, and Condition 5.13.

¹¹ See 40 CFR 63.7520(c), Rows 1.c to Table 7 of Boiler MACT and Conditions 5.7.1 and 5.10.3.1.

assure compliance with pollutant emission limits (including PM) for which compliance is demonstrated through source testing.¹² The permit includes each of these applicable requirements.

In general, the Boiler MACT requires sources to establish control device operating parameter limits and continuously monitor control device operating parameters to assure compliance with the underlying emission limit.¹³ The requirement to monitor opacity for biomass fired boilers controlled by a dry electrostatic precipitator is based on the long-understood relationship between in-stack PM concentration levels and plume opacity. Generally, the more particles (i.e., increasing concentration) that are in the stack gas, the higher the observed opacity. As discussed by Conner and Knapp, “[V]ery good mass concentration [PM] – light attenuation [opacity] relationships can be generated” even though the relationships can vary considerably from plant to plant and over time.¹⁴ Therefore, the “information provided [from the operating parameters] can be used to ensure that air pollution control equipment is operating properly.”¹⁵

For a useful relationship to exist between the opacity and mass concentration of the particulate emissions, size, shape, and composition of the particulates must be sufficiently constant over a useful period of time.¹⁶ Moreover, limiting opacity of emissions has the effect of limiting their mass concentration.¹⁷ Thus, EPA’s expectation when it established continuous opacity monitoring requirements and opacity operating limits in the Boiler MACT was that boilers subject to the applicable Boiler MACT requirements would exhibit the good relationship between opacity and PM emissions that EPA has historically observed. EPA further reasoned in establishing the opacity operating limit that if there is a good relationship between opacity and PM emissions, then ensuring that opacity remains below the higher of 10% or the opacity measured during a complying source test run would be expected to assure compliance with the PM emission limit.¹⁸

Based on data from numerous source tests conducted at the Riley and CE boilers, we do not see this expected relationship between the opacity and PM emissions. See Figures 5-3 and 5-4 for plots of PM emissions (lb/mmBtu) versus visible emissions (% opacity) for PB-1 and PB-2, respectively. These figures are excerpts from Appendix F of this SOB. For both the Riley and CE boilers, visible emission levels as measured by the COMS are consistently in the 1% to 2% opacity range regardless of the measured PM levels, even when PM levels are above the value of the PM emission limit for the Riley Boiler. Visible emissions around 0.75% opacity are marginally detectable by the COMS used by PotlatchDeltic.¹⁹ Higher PM levels (relative to each other) do not appear to be associated with higher opacity levels at these two boilers. As such, the relationship between opacity and PM levels in these boiler stacks does not conform to the expected relationship upon which the boiler MACT opacity

¹² See 40 CFR 63.7520(c), 63.7525(e), Row 5 to Table 7 and Row 10 to Table 8 of Boiler MACT, and Conditions 5.7.3, 5.10.3.3 and 5.15.

¹³ See section, “How Did EPA Determine Testing and Monitoring Requirements for the Proposed Rule?” of EPA proposed rulemaking at 68 FR 1685 (January 13, 2003).

¹⁴ William C. Conner and Kenneth T. Knapp (1988) Relationship between the Mass Concentration and Light Attenuation of Particulate Emissions from Coal-Fired Power Plants. JAPCA, 38.2, 152-157, DOI: 10.1080/08940630.1988. 10466363. Conner and Knapp also note without experimental calibration a large error can exist for assuming the relationship between opacity and PM.

¹⁵ EPA, op. cit. 68 FR 1685.

¹⁶ Measurement of the Opacity and Mass Concentration of Particulate Emissions by Transmissometry. EPA –650/2-74-128. November 1974.

¹⁷ Ibid.

¹⁸ See section, “Opacity Is an Operating Parameter” of final EPA rulemaking available at 80 FR 72797 (November 20, 2015).

¹⁹ See document 6z in the administrative record.

monitoring is based. Therefore, Region 10 is including additional recordkeeping Condition 5.11. This additional monitoring is consistent with 40 CFR 71.6(c)(1).

Figure 5-3: PB-1 NESHAP DDDDD Source Test Runs – PM Emissions (lb/mmBtu) vs Opacity

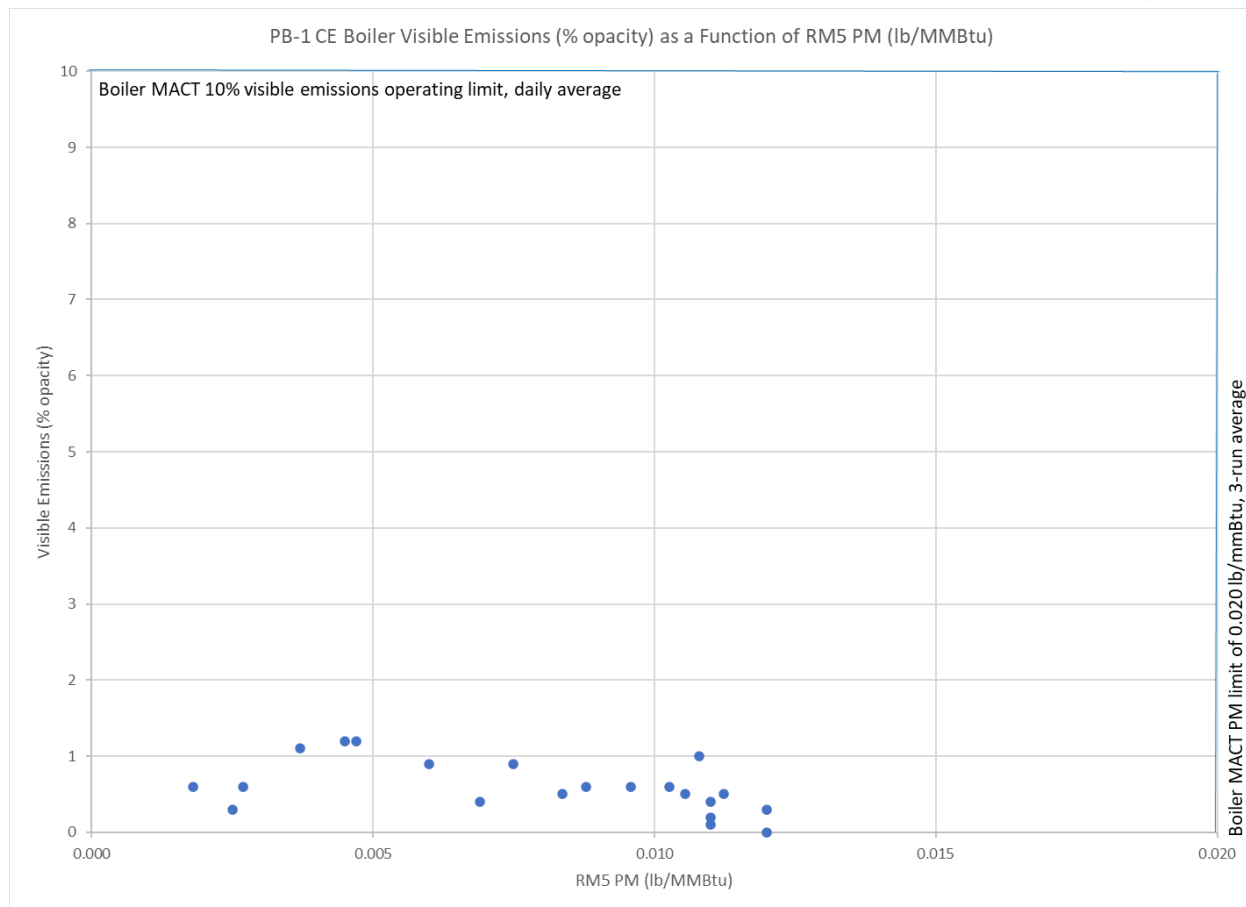
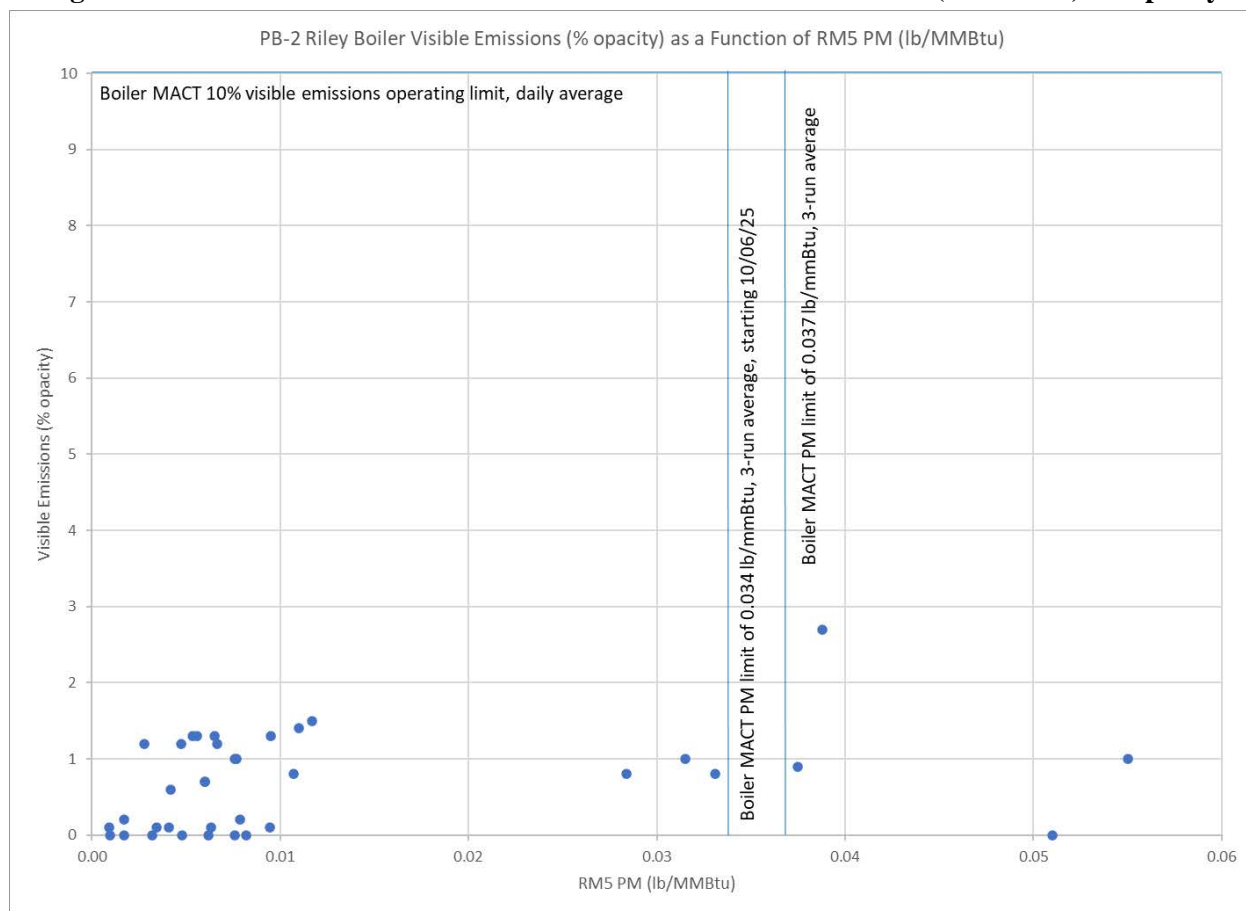


Figure 5-4: PB-2 NESHAP DDDDD Source Test Runs – PM Emissions (lb/mmBtu) vs Opacity



As stated above, Condition 5.11 requires the Permittee to record the date and summary of any inspection and maintenance activity conducted on the ESP at PB-1 and PB-2. In order to comply with Conditions 5.5, 5.7, and 5.8²⁰ the Permittee must maintain the ESP to ensure sufficient capture efficiency. For example, according to Figure 5-5 (daily average secondary voltage over time for all three fields of PB-2 ESP) and Figure 5-6 (daily average secondary current over time for all three fields of PB-2 ESP) in the SOB²¹, changes were made to PB-2 ESP (e.g., replacement of 3rd field insulator, installation of antiway bars in all three fields) around the time of emission testing, which likely impacted the PM emissions at the time. In fact, after the April 2022 test that showed the PM emission limit exceedance for PB-2, antiway bars in all three ESP fields were installed. Subsequent emissions testing showed a PM reduction from 103% to 8% of the PM limit.

Thus, Condition 5.11 is necessary to assure compliance with these applicable requirements. Monitoring and recording of inspection and maintenance activity will facilitate determination as to whether the ESP is being operated and maintained in a manner necessary to comply with Conditions 5.5, 5.7, and 5.8. See EPA instruction material “Lesson 6 – ESP Operation and Maintenance” in Appendix D of this SOB. Page 15 of 42 of Appendix D includes a preventive maintenance checklist for a typical fly ash precipitator.

²⁰ Inclusion of this condition should not be construed as modifying or particularizing the requirements of Condition 5.8, an indication that sufficiency monitoring is necessary for good air pollution control practice provisions in all circumstances, nor limiting the types or relative probative value of information the EPA may use to determine compliance with Condition 5.8.

²¹ Figures 5-5 and 5-6 in this SOB appear in Appendix G of the draft SOB supporting the August 21, 2024 proposed permit.

EPA published *Operation and Maintenance Manual for Electrostatic Precipitators* in September 1985. The document (EPA/625/1-85/017) is available online at <https://nepis.epa.gov/Exe/ZyPDF.cgi/20008QN4.PDF?Dockey=20008QN4.PDF>. See Appendix D of the document for example forms to record ESP inspection and maintenance activity.

In addition, Region 10 will continue to use existing monitoring required by a NSR permit in Condition 5.12 and reporting in Condition 3.46.1 to assess compliance with Conditions 5.5 and 5.8.

Figure 5-5: PB-2 ESP Daily Average Secondary Voltage March 2021 – April 2023

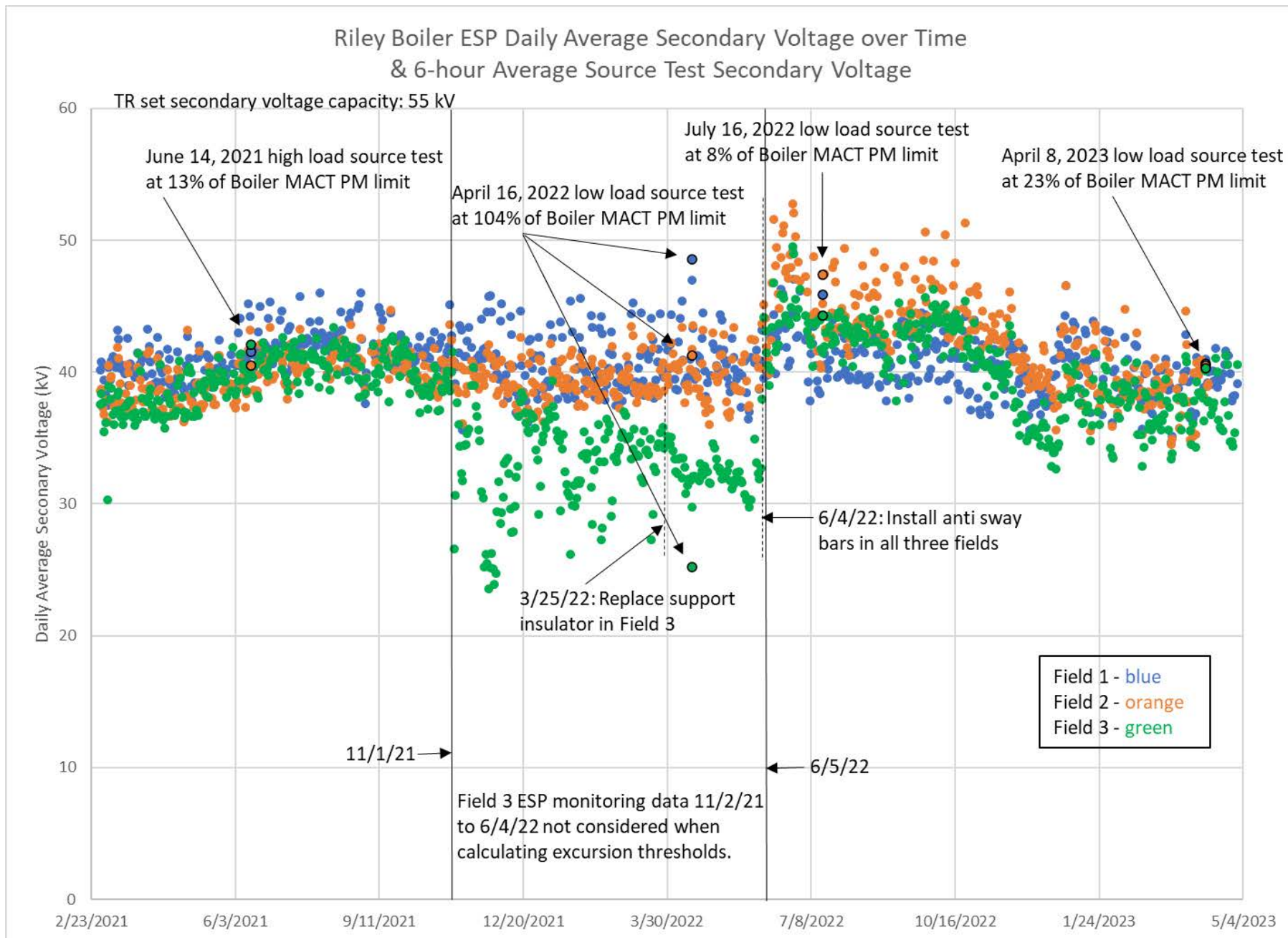
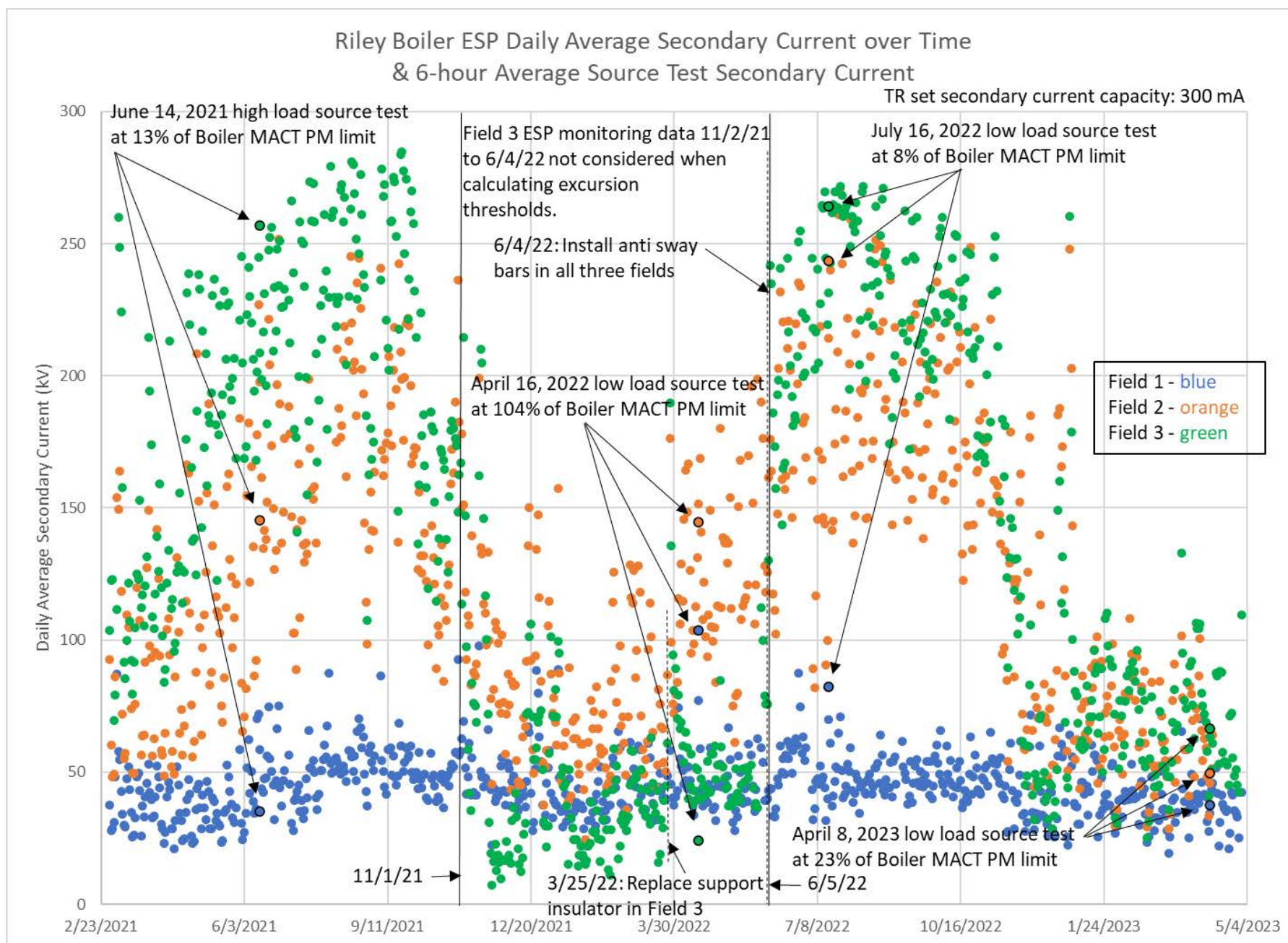


Figure 5-6: PB-2 ESP Daily Average Secondary Current March 2021 – April 2023



Permit Condition 5.12

Overview

Condition 5.12 contains applicable requirements from (1) the minor NSR permit (R10TNSR01804) and (2) gap-filling monitoring and recordkeeping pursuant to 40 CFR 71.6(a)(3)(i)(B) for Condition 5.1 (FARR 0.2 gr/dscf @ 7% O₂ PM limit).

Applicable requirements from NSR Permit (R10TNSR01804)

Conditions 5.12.1 – 5.12.6 of the title V permit reflect Condition 4.3 of the minor NSR permit (R10TNSR01804) authorizing construction of lumber dry kiln LK-6. The minor NSR permit includes emission limits (daily and annual) applicable to the boilers exclusively for PM_{2.5}. The limits assure the LK-6 project does not cause or contribute to a PM_{2.5} NAAQS violation. In addition to having their basis in minor NSR permit R10TNSR01804, Conditions 5.12.1 through 5.12.3 are also periodic monitoring (40 CFR 71.6(a)(3)(i)(B)) for the FARR 0.2 gr/dscf @ 7% O₂ PM limit. The resultant monitoring data provides Permittee with a measure of the degree to which the boiler and multiclone are continuing to operate as they did during performance testing and is useful for troubleshooting problems. Conditions 5.12.4 through 5.12.6 are not periodic monitoring for the FARR PM limit because Region 10 lacks sufficient information to establish that it is necessary to operate the ESP to comply with the emission limit.

The requirement in Condition 5.12.1 (steam monitoring) is similar to the NESHAP DDDDD requirement in Condition 5.15.

The requirement in Condition 5.12.2 (O₂ monitoring) is similar to the NESHAP DDDDD requirement in Condition 5.14. Compliance with O₂ operating limits (Condition 5.7.2) is intended to assure compliance only with the Boiler MACT's CO limit, not the PM limits (which is a surrogate for metal HAP).

Condition 5.12.3 (multiclone monitoring) requires the permittee to measure continuously and record hourly pressure drop across the multiclone. This condition is useful for troubleshooting problems and provides Permittee with a measure of the degree to which the multiclone is continuing to operate as it did during performance testing.

Permit Condition 5.13 requires the mill to install, operate, certify and maintain a COMS because the mill uses a dry ESP to reduce PM emissions and has elected to demonstrate compliance through performance testing. Condition 5.13.3 requires all opacity 6-minute averages be recorded in addition to 24-hour block averages. Because PotlatchDeltic is already required to use the COMS to record all 6-minute opacity averages, the same COMS will also be used to assure compliance with the FARR 6-minute 20% average visible emissions limit.

Permit Condition 5.14 requires the Permittee to install, operate and maintain an exhaust gas oxygen analyzer system. This system is a continuous parameter monitoring system as that term is defined in 40 CFR 63, Subpart A.

Permit Condition 5.14 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.14 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Condition 5.14 does not include requirement to install a CO/O₂ CEMS in lieu of an oxygen analyzer system because the Permittee has not expressed an intent to install a CO/O₂ CEMS to demonstrate compliance with NESHAP Subpart DDDDD.

*5.14. **NESHAP Subpart DDDDD Continuous Oxygen Monitoring. The Permittee must install, operate, and maintain an oxygen analyzer system. An oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate location.***

The Permittee must install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations. This definition includes oxygen trim systems. An oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller or draft controller. [40 CFR 63.7525(a) and 63.7575 "Oxygen Analyzer System" and "Oxygen Trim System"]

40 CFR 63.7525(a): If your boiler or process heater is subject to a CO emission limit in Table 1 or 2 or Tables 11 through 15 to this subpart, you must install, operate, and maintain an oxygen analyzer system, as defined in § 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (O₂) (or carbon dioxide (CO₂)) according to the procedures in paragraphs (a)(1) through (6) of this section.

40 CFR 63.7575 "Oxygen Analyzer System": Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler or process heater, firebox, or other appropriate location. This definition includes oxygen trim systems. The source owner or operator must install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

40 CFR 63.7575 "Oxygen Trim System": Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7525(a)) takes precedence over paraphrasing in the permit condition.

Condition 5.15 is NESHAP DDDDD requirement to collect steam generation data. This system is not a continuous parameter monitoring system as that term is defined in 40 CFR 63, Subpart A.

Condition 5.16 is NESHAP DDDDD monitoring requirements for oxygen analyzer system.

Conditions 5.17 and 5.18 are NESHAP DDDDD monitoring requirements applicable to the COMS and oxygen analyzer system. Note that the Permittee is required to develop and implement a site-specific monitoring plan for the COMS and oxygen analyzer system.

Permit Condition 5.19 includes NESHAP Subpart DDDDD recordkeeping requirements. Condition 5.19.5 is a NESHAP Subpart DDDDD recordkeeping requirement related to tracking the amount and type of fuel combusted in boilers monthly. Conditions 5.19.8 and 5.19.9 reflect NESHAP DDDDD recordkeeping requirements related to malfunctions of the boiler, air pollution control equipment and monitoring equipment. Permit Conditions 5.19.12 through 5.19.14 apply only to those startups for which PotlatchDeltic relies on the paragraph (2) of the definition of "startup" in 40 CFR 63.7575.

Permit Conditions 5.19.6 and 5.19.6.1 contain paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that (1) citations to the regulation have been replaced with citations to the applicable conditions in the permit, and (2) references to "you" have been replaced with references to "the Permittee." Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7555(d)(2)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.19.7 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.19.7 is transposed below followed by the applicable requirement to identify (in yellow

highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Because skip testing eligibility is contingent upon measuring emissions to be less than or equal to 75% of the emission limits applicable to the Permittee's boilers, it is not necessary to reference NESHAP Subpart DDDDD Tables 1, 2 and 11 through 15 or the "less than the emission limit" skip testing eligibility criteria that does not apply to the Permittee's boilers.

5.19.7. If, consistent with 40 CFR 63.7515(b), the Permittee chooses to stack test less frequently than annually, the Permittee must keep a record that documents that the Permittee's emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit in Condition 5.5, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. [40 CFR 63.7555(d)(5)]

40 CFR 63.7555(d)(5): If, consistent with § 63.7515(b), you choose to stack test less frequently than annually, you must keep a record that documents that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Tables 1 and 2 or 11 through 15 to this subpart, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7555(d)(5)) takes precedence over paraphrasing in the permit condition.

Permit Conditions 5.20 through 5.26 are NESHAP Subpart DDDDD notification and reporting requirements. Prior to conducting a performance test, the Permittee must submit (if requested by the Administrator) a site-specific test plan for EPA review and approval. The test plan must provide steam generating rate data pursuant to Permit Condition 5.21.2 to inform the Region's decisionmaking as to the operating conditions under which testing must be performed. Each time the boiler is tested, boiler operating limits are either confirmed or re-established. Permit Condition 5.22.5 requires the Permittee to submit an administrative amendment request to keep the permit current. Requirement to submit CBI performance test data to Region 10 (in addition to OAQPS) in Condition 5.22.2 was added to satisfy the requirement in 40 CFR 71.6(c)(1) to include compliance certification, testing, monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement.

Permit Condition 5.21 contains paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that references to "owner or operator" have been replaced with references to "the Permittee." Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7(c)(2)(i)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.21 includes one requirement from 40 CFR 63.7(c)(2)(i), and Permit Condition 5.21.1 includes the other.

Permit Condition 5.21.2 implements 40 CFR 63.7520(a) requirement that the Permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. If Region 10 requests a site-specific test plan of the Permittee, the plan must include daily steam generating rate records over the preceding 12-month period because the boilers operate across a range of steam generating rates. See condition 5.10 for additional explanation.

Permit Condition 5.24.8 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.24.8 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Because the Permittee has not expressed the intent to burn a new type of fuel (e.g.,

coal, oil, natural gas), the details of that reporting requirement applicable to that action have been left out of the permit.

5.24.8. A statement indicating that *the Permittee* burned no new types of fuel in an individual boiler subject to an emission limit. Or, if *the Permittee* did burn a new type of fuel, *the Permittee* must submit *the information required by 40 CFR 63.7550(c)(5)(viii).* [40 CFR 63.7550(c)(3) and (5)(viii) and Row 1.a to Table 9 of 40 CFR 63, Subpart DDDDD]

40 CFR 63.7550(c)(5)(viii): A statement indicating that *you* burned no new types of fuel in an individual boiler *or process heater* subject to an emission limit. Or, if *you* did burn a new type of fuel *and are subject to a HCl emission limit*, *you must submit the calculation of chlorine input, using Equation 7 of § 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 16 of § 63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).* If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of § 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 17 of § 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a TSM emission limit, you must submit the calculation of TSM input, using Equation 9 of § 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate, using Equation 18 of § 63.7530, that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(c)(5)(viii)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.24.9 contains paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that references to “you” have been replaced with references to “the Permittee.” Because PB-1 and PB-2 are boilers (not process heaters), the reference to “or process heater” was not included in the permit condition. Abbreviated regulatory citation in the regulation was replaced with full regulatory citation in the permit. Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(c)(5)(ix)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.24.13 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.24.13 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

5.24.13. *The date of the most recent burner inspection if it was not done annually or on a 5-year period, as applicable, and was delayed until the next scheduled or unscheduled unit shutdown.* [40 CFR 63.7550(c)(1) and (5)(xiv) and Row 1.a to Table 9 of 40 CFR 63, Subpart DDDDD]

40 CFR 63.7550(c)(5)(xiv): *Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to § 63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(c)(5)(xiv)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.24.16 contains paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that references to “you” have been replaced with references to “the Permittee.” Because PB-1 and PB-2 are boilers (not process heaters), the reference to “or process heater” was not included in the permit condition. Abbreviated regulatory citation in the regulation was replaced with full regulatory citation in the permit. Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(d)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.24.17 contains paraphrasing for ease of reference. Pursuant to 40 CFR 71.6(a)(1)(i), Region 10 states here that references to “you” have been replaced with references to “the Permittee.” Because PB-1 and PB-2 are boilers (not process heaters), the reference to “or process heater” was not included in the permit condition. Abbreviated regulatory citation in the regulation was replaced with full regulatory citation in the permit. Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(e)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.25 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 5.25 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. If the reporting form specific to NESHAP Subpart DDDDD is not available in CEDRI, Region 10 is requesting the Permittee to submit the report to the Administrator at the address listed in Condition 3.40 rather than the address in 40 CFR 63.13 for Region 10 because the address in 40 CFR 63.13 is not current.

5.25. *NESHAP Subpart DDDDD Semi-annual Compliance Report Submittal. The Permittee must submit each NESHAP Subpart DDDDD compliance report required by Condition 5.23 electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The Permittee must use the appropriate electronic report in CEDRI for NESHAP Subpart DDDDD. Instead of using the electronic report in CEDRI for NESHAP Subpart DDDDD, the Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee must submit the report to the Administrator at the appropriate address listed in Condition 3.40. The Permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.*
[40 CFR 63.7550(h)(3)]

40 CFR 63.7550(h)(3): *You must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address*

listed in § 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.7550(h)(3)) takes precedence over paraphrasing in the permit condition.

Permit Condition 5.27 ensures PotlatchDeltic maintains the flexibility provided under NESHAP Subpart DDDDD to meet the requirements of the rule using different compliance options other than the option it is currently using. PotlatchDeltic is currently complying with NESHAP Subpart DDDDD HCl, Hg, CO and PM limits through performance testing and associated continuous monitoring. PM is a surrogate for TSM, and although there is no permit condition that limits TSM stack emissions, the NESHAP allows PotlatchDeltic to demonstrate compliance with the TSM limit rather than the PM limit. For certain pollutants, PotlatchDeltic has indicated that it may, in the future, choose to demonstrate compliance through fuel sampling and analysis. Although no permit amendment is necessary prior to switching compliance options, an amendment may be necessary afterward to extract requirements associated with obsolete compliance options and to create permit conditions reflecting new applicable requirements.

Permit Condition 5.28 incorporates NESHAP DDDDD requirements that apply generally by reference into the permit. See Appendix B to this statement of basis for details.

Permit Condition 5.29 requires the Permittee to comply with applicable NESHAP Subpart A general provisions referenced in Table 10 to NESHAP DDDDD. Specific requirements are included in Appendix to the permit and requirements that apply generally have been incorporated by reference. See Appendix B to this statement of basis for details.

Permit Section 6 – Unit-Specific Requirements for EU-2 – Veneer Dryers VD-1, VD-2, VD-3 and VD-4

Permit Condition 6.1 limits PM emissions from veneer dryer roof vents, cooling sections stacks, heating section bypass stacks and the RCO²². The permit condition also contains the method for determining compliance. The limit applies at all times. No unit-specific PM testing is required of the veneer dryer vents (from which emissions from leaks are released to atmosphere) and cooling section stacks given that the volume of gas handled by typical roof vents and cooling sections are not known to cause PM grain loading issues. No unit-specific testing of the RCO is required based upon previous unit-specific test results and source category testing that suggests no control of heating section exhaust is necessary to comply with the 0.1 gr/dscf limit. September 24, 2008, EPA RM5 emissions testing of the RCO stack (while the RCO was combusting supplementary propane fuel and oxidizing veneer dryer heated section exhaust) measured three-run average PM emissions of 0.0029 gr/dscf. This PM concentration represents 3 percent of the emission limit. Six one-hour test runs of uncontrolled heating section exhaust from another veneer dryer located in Indian country (three runs while processing white wood and three while processing red wood) measured a high one-hour average PM concentration of 0.0333 gr/dscf. This represents 33 percent of the FARR limit. Given that PotlatchDeltic only diverts veneer dryer heating section exhaust to the atmosphere on rare occasions (as evidenced by NESHAP Subpart DDDD

²² The RCO is not subject to the “corrected to 7% O₂” combustion source stack grain loading standard in 40 CFR 49.125(d)(1). It is appropriate to “correct” the exhaust concentration of a combustion source stack to a standard %O₂ (to account for unwarranted introduction of air into the exhaust) when the subject pollutant is primarily the by-product of combustion. But in this case, the PM in the RCO exhaust is primarily from the veneer dryer heating section exhaust and not the byproduct of combusting propane to raise the temperature in the RCO to promote oxidation of organics across the catalyst. In addition, the 2008 test report shows that the O₂ concentration in the heating section exhaust is relatively high at 21% while a relatively small amount of combustion air (O₂) is introduced at the RCO to assist in the combustion of propane. The relatively small amount of PM generated from the combustion of PM will be counted when determining compliance with the process unit grain loading standard.

compliance reports), and given that emissions are anticipated to be approximately one-third of the emission limit, no unit-specific testing of bypass stacks is being required. If visible emission monitoring identifies a visible emission compliance concern, testing may be necessary to assure compliance with the FARR grain loading limit for these emission units.

Permit Condition 6.2 limits the sulfur dioxide emissions from the RCO stack and describes the methods for determining compliance. The limit applies at all times. The veneer dryer heated zone exhaust is not expected to contribute any sulfur to RCO stack emissions. Because the oxidizer only uses propane as fuel, SO₂ emissions are expected to be well below the emission limit of 500 ppm_{dv} at 7% O₂. For an example, see the calculation below.

$$\begin{aligned} \text{SO}_2 \text{ concentration} &= (\text{sulfur content}_{\text{commercial propane}} \text{ by mass}) \times (\text{density}_{\text{propane}}) \times (1/\text{heating} \\ &\quad \text{value}_{\text{propane}}) \times (\text{CF}_{\text{Btu} \rightarrow \text{MMBtu}}) \times (\text{Mass Ratio SO}_2 \text{ Out/S In}) \times (1/\text{F}_d \\ &\quad \text{factor}_{\text{propane}}) \times \\ &\quad (\text{CF}_{\text{lb/ft}^3 \rightarrow \text{ppmv@20}^\circ\text{C}}) \\ &= (185 \text{ lb S}/1 \times 10^6 \text{ lb fuel}) \times (4.24 \text{ lb fuel/gal fuel}) \times (\text{gal fuel}/90,500 \text{ Btu}) \times \\ &\quad (1 \times 10^6 \text{ Btu/MMBtu}) \times (2 \text{ lb SO}_2/\text{lb S}) \times (\text{MMBtu}/8710 \text{ dscf}) \times (385.6 \times 10^6 \\ &\quad \text{dscf-ppmdv SO}_2/32 \text{ lb SO}_2) \\ &= 23.9 \text{ ppm}_{\text{dv}} \text{ at } 0\% \text{ O}_2 \end{aligned}$$

Where: Sulfur content_{commercial propane} by mass = 123 ppm. See GPA Liquefied Petroleum Gas Specifications Standard 2140-97.

F_d factor = 8710 dscf/MMBtu. See 40 CFR 60, Appendix A, RM19, Table 19-2.

CF_{lb/ft³→ppmv@20°C} = 385.6x10⁶ dscf-ppmdv SO₂/32 lb SO₂. See Conversion Factors for Common Air Pollution Measurements – Atmospheric Gases presented on page A-27 of Appendix A to AP-42.

The recordkeeping (fuel vendor records showing sulfur content of the propane or the type of LPG received) required in Permit Condition 4.7 will serve as the monitoring to assure compliance for the RCO.

Permit Condition 6.3 requires the Permittee to conduct EPA RM22 visible emissions observations (and RM9 if visible emissions are observed) of veneer dryer heating section bypass stacks in the event heating section emissions are diverted away from the catalytic oxidizer. However, the requirement does not apply if the Permittee follows documented site-specific procedures required by PCWP MACT and veneer dryer operation ceases within one hour of the start of the event. The FARR 20% visible emissions limit applies at all times. The requirement was added to satisfy the requirement in 40 CFR 71.6(c)(1) to include monitoring, recordkeeping, and reporting sufficient to assure compliance with the applicable requirement.

Permit Conditions 6.4 through 6.27 are NESHAP Subpart DDDD requirements applicable to the four veneer dryers and the two-can propane-fueled regenerative catalytic oxidizer that reduces veneer dryer heated zone HAP emissions routed to it. Use of the two alternating catalyst beds helps reduce the temperature needed in the combustion chamber to achieve the 90 percent control requirement. During September 24, 2008 emissions testing that demonstrated a 94% control efficiency, a combustion chamber temperature of 707°F (a thermocouple on each end of the chamber) was observed. During August 3-4, 2023 emissions testing that PotlatchDeltic asserts demonstrated a 93% control efficiency, a combustion chamber temperature of 840°F was observed. See Appendix G to this statement of basis for a derivation of the two temperature values. The 707°F and 840°F values reflect the average of the three minimum 15-minute temperatures monitored during the respective three test runs pursuant to 40 CFR 63.2262(l). Region 10 is evaluating the November 3, 2023 revised source test report for testing conducted August 2023. The Permittee is required to maintain a 3-hour block average combustion chamber temperature

above the 707°F threshold value at all times. Except for the year in which performance testing is conducted, the mill is required to annually check the catalyst material to determine whether it needs to be replaced. Because the mill is satisfying the add-on control system compliance option during all drying operations (including drying veneer that has previously been dried, but not to the desired moisture content), the NESHAP does not require the Permittee to comply with the redry work practice requirements. Before introducing veneer to the dryers, both the dryers and the RCO are brought up to temperature such that no veneer dryer heating section exhaust is diverted to the bypass stacks. Similarly, the oxidation catalyst continues to operate as the last piece of veneer exits the dryer. In this way, no excess emissions are generated during startup and shutdown.

The requirements for the RCO to achieve 90% control of veneer dryer heating zone exhaust and for the RCO temperature to remain above 707°F apply at all times except during safety-related shutdowns, when Condition 6.5.1 applies. The NESHAP provides for PotlatchDeltic to apply to Region 10 for approval of a routine control device maintenance exemption. If approved, the requirements in question would not apply during periods of routine control device maintenance. PotlatchDeltic has not submitted such a request to Region 10 for approval.

Permit Condition 6.4.1 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.4.1 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. PCWP MACT compliance options and operating requirements are included in Conditions 6.7, 6.8 and 6.9. Requirements in 40 CFR 63.2250(f)(2) regarding safety-related shutdowns apply to the dryers operated by PotlatchDeltic, but 40 CFR 63.2250(f)(3) and (4) do not.

6.4.1. *The Permittee must minimize the length of time when Conditions 6.7, 6.8 and 6.9 are not met due to safety-related shutdowns; and [40 CFR 63.2250(f)(5)]*

40 CFR 63.2250(f)(5): *You must minimize the length of time when compliance options and operating requirements in this subpart are not met due to the conditions in paragraphs (f)(2) and (4) of this section.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2250(f)(5)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.4.2 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.4.2 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. PCWP MACT compliance options, operating requirements and work practice requirements are included in Conditions 6.6, 6.7, 6.8 and 6.9. Requirements in 40 CFR 63.2250(f)(2) regarding safety-related shutdowns apply to the dryers operated by PotlatchDeltic, but 40 CFR 63.2250(f)(3) and (4) do not.

6.4.2. *The Permittee must comply with Condition 6.5, the applicable standard for safety-related shutdowns. The otherwise applicable Conditions 6.6, 6.7, 6.8, and 6.9 do not apply during safety-related shutdowns. [40 CFR 63.2250(f)(6)]*

40 CFR 63.2250(f)(6): *The applicable standard during each of the operating conditions specified in paragraphs (f)(2) through (4) of this section are the work practice requirements in Table 3 to this subpart for safety-related shutdowns (row 6), pressurized refiner startup and shutdown (row 7), and direct-fired softwood veneer dryers undergoing startup or shutdown of gas-fired burners (row 8). The otherwise applicable compliance options, operating requirements, and work practice requirements (in rows 1 through 5 of Table 3 to this subpart) do not apply during the operating conditions specified in paragraphs (f)(2) through (4) of this section.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2250(f)(6)) takes precedence over paraphrasing in the permit condition.

Pursuant to Permit Condition 6.5.1, PotlatchDeltic is required to follow documented site-specific procedures to reduce emissions during safety-related shutdown. PotlatchDeltic is required to follow a plan for minimizing fugitive emissions from the veneer dryers pursuant to Permit Condition 6.6.1.

The Permittee is required to conduct performance testing every 60 months pursuant to Condition 6.11. The RCO minimum temperature of 707°F from the 2008 source test continues to apply today, and the 2023 source test confirmed the previous RCO temperature. In the future, PotlatchDeltic may establish a lower RCO minimum temperature by submitting notification to EPA according to 40 CFR 63.2262(l)(2).

Permit Condition 6.16.2 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.16.2 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. The facility does not own or operate a pressurized refiner or direct-fired softwood veneer dryer.

*6.16.2. **The Permittee** may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities or data recorded during periods of safety-related shutdown or control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. **The Permittee** must use all the data collected during all other periods in assessing the operation of the control system. [40 CFR 63.2270(c)]*

*40 CFR 63.2270(c): **You** may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities or data recorded during periods of safety-related shutdown, **pressurized refiner startup or shutdown, startup and shutdown of direct-fired softwood veneer dryer gas-fired burners,** or control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. **You** must use all the data collected during all other periods in assessing the operation of the control system.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2270(c)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.17 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.17 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. NESHAP general provision CMS requirements applicable to RCO combustion chamber temperature CMS are not the only NESHAP general provision requirements applicable to EU-2. Condition 6.17 was included given the relative importance of this requirement among other NESHAP general provision requirements.

*6.17. **NESHAP General Provisions – Monitoring Requirements Applicable to Regenerative Catalytic Oxidizer Combustion Chamber Temperature CMS. The Permittee must be in compliance with the requirements of 40 CFR 63.8 as those provisions apply to the regenerative catalytic oxidizer combustion chamber temperature CMS,** except as noted in Table 10 to 40 CFR 63, Subpart DDDD. [40 CFR 63.2250(e)]*

40 CFR 63.2250(e): *You must be in compliance with the provisions of subpart A of this part, except as noted in Table 10 to this subpart.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2250(e)) takes precedence over paraphrasing in the permit condition.

Condition 6.21.4 is the requirement in 40 CFR 63.2280(d)(1) to submit NOCS related to the facility following safety-related shutdown procedures. See row 6 of Table 6 to NESHAP Subpart DDDD for initial compliance demonstration. The Permittee was required to have conducted an initial compliance demonstration by September 12, 2021 given the August 13, 2021 compliance date pursuant to 40 CFR 63.2261(b). The NOCS was required to have been submitted to Region 10 within 30 days of completing the initial compliance demonstration.

Permit Condition 6.25.4 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.25.4 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. The PotlatchDeltic veneer dryers are affected sources that commenced construction or reconstruction before September 6, 2019.

6.25.4 If the Permittee had a startup, shutdown, or malfunction during the reporting period and the Permittee took actions consistent with its SSMP, the compliance report must include the information specified in 40 CFR 63.10(d)(5)(i) before August 13, 2021. [40 CFR 63.2281(c)(4)]

40 CFR 63.2281(c)(4): If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information specified in § 63.10(d)(5)(i) before August 13, 2021 for affected sources that commenced construction or reconstruction before September 6, 2019. After August 13, 2020 for affected sources that commenced construction or reconstruction after September 6, 2019, and on and after August 13, 2021 for all other affected sources, the compliance report must include the number of instances and total amount of time during the reporting period in which each of the startup/shutdown work practice requirements in Table 3 to this subpart (rows 6 through 8) is used in place of the otherwise applicable compliance options, operating requirements, and work practice requirements (in Table 3 to this subpart rows 1 through 5). If a startup/shutdown work practice in Table 3 to this subpart (rows 6 through 8) is used for more than a total of 100 hours during the semiannual reporting period, you must report the date, time and duration of each instance when that startup/shutdown work practice was used.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2281(c)(4)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.25.5 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.25.5 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. The PotlatchDeltic veneer dryers are affected sources that commenced construction or reconstruction before September 6, 2019. Safety-related shutdown work practices are the only startup/shutdown work practices applicable to the Permittee's veneer dryers.

6.25.5 On and after August 13, 2021, the compliance report must include the number of instances and total amount of time during the reporting period in which the safety-related shutdown work practice requirement in Condition 6.5 is used in place of the otherwise applicable compliance options, operating requirements, and work practice requirements (Rows 1 through 5 of Table 3 to NESHAP Subpart DDDD). If a safety-related shutdown

work practice is used for more than a total of 100 hours during the semiannual reporting period, the Permittee must report the date, time and duration of each instance when that safety-related shutdown work practice was used. [40 CFR 63.2281(c)(4)]

40 CFR 63.2281(c)(4): If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information specified in § 63.10(d)(5)(i) before August 13, 2021 for affected sources that commenced construction or reconstruction before September 6, 2019. After August 13, 2020 for affected sources that commenced construction or reconstruction after September 6, 2019, and on and after August 13, 2021 for all other affected sources, the compliance report must include the number of instances and total amount of time during the reporting period in which each of the startup/shutdown work practice requirements in Table 3 to this subpart (rows 6 through 8) is used in place of the otherwise applicable compliance options, operating requirements, and work practice requirements (in Table 3 to this subpart rows 1 through 5). If a startup/shutdown work practice in Table 3 to this subpart (rows 6 through 8) is used for more than a total of 100 hours during the semiannual reporting period, you must report the date, time and duration of each instance when that startup/shutdown work practice was used.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2281(c)(4)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.25.8 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.25.8 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

6.25.8 For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to NESHAP Subpart DDDD that occurs at an affected source where the Permittee is not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in NESHAP Subpart DDDD (this includes periods of startup, shutdown, and malfunction and routine control device maintenance), the compliance report must contain the information in Conditions 6.25.1 through 6.25.5 and the following: [40 CFR 63.2281(d)]

6.25.8.1 The total operating time of each affected source during the reporting period. [40 CFR 63.2281(d)(1)]

6.25.8.2 Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.2281(d)(2)]

[40 CFR 63.2281(d)]

40 CFR 63.2281(d): For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to this subpart that occurs at an affected source where you are not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (6) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(1) The total operating time of each affected source during the reporting period.

(2) *Information on the date, time, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2281(d)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.25.9 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 6.25.9 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Condition 6.7 is a compliance option in 40 CFR 63.2240, including a compliance option in Table 1B to PCWP MACT.

6.25.9 *For each deviation from a compliance option, operating requirement, or work practice requirement occurring at an affected source where the Permittee is using a CMS to comply with the compliance options, operating requirements, or work practice requirements in NESHAP Subpart DDDD (this includes periods of startup, shutdown, and malfunction and routine control device maintenance), the Permittee must include the information in Conditions 6.25.1 through 6.25.5 and the following: [40 CFR 63.2281(e)]*

6.25.9.1 *The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [40 CFR 63.2281(e)(2)]*

6.25.9.2 *The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). [40 CFR 63.2281(e)(3)]*

6.25.9.3 *The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during a period of control device maintenance covered in an approved routine control device maintenance exemption; or during another period. [40 CFR 63.2281(e)(4)]*

6.25.9.4 *A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. [40 CFR 63.2281(e)(5)]*

6.25.9.5 *A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes. [40 CFR 63.2281(e)(6)]*

6.25.9.6 *A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period. [40 CFR 63.2281(e)(7)]*

6.25.9.7 *A brief description of the process units. [40 CFR 63.2281(e)(8)]*

6.25.9.8 *A brief description of the CMS. [40 CFR 63.2281(e)(9)]*

6.25.9.9 *The date of the latest CMS certification or audit. [40 CFR 63.2281(e)(10)]*

6.25.9.10 *A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.2281(e)(11)]*

6.25.9.11 *For any failure to meet Condition 6.7, provide an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a*

description of the method used to estimate the emissions. [40 CFR 63.2281(e)(12)]

6.25.9.12 The total operating time of each affected source during the reporting period. [40 CFR 63.2281(e)(13)]

[40 CFR 63.2281(e)]

40 CFR 63.2281(e): For each deviation from a compliance option, operating requirement, or work practice requirement occurring at an affected source where you are using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, you must include the information in paragraphs (c)(1) through (6) and (e)(1) through (13) of this section. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(1) [Reserved]

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during a period of control device maintenance covered in your approved routine control device maintenance exemption; or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or controls since the last reporting period.

(12) For any failure to meet a compliance option in § 63.2240, including the compliance options in Table 1A or 1B to this subpart or the emissions averaging compliance option, provide an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(13) The total operating time of each affected source during the reporting period.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2281(e)) takes precedence over paraphrasing in the permit condition.

Permit Condition 6.27 incorporates by reference into the permit the NESHAP DDDD requirements that apply generally to the Permittee. See Appendix B to this statement of basis for details.

Permit Condition 6.28 requires the Permittee to comply with applicable NESHAP Subpart A general provisions referenced in Table 10 to PCWP MACT. Specific requirements are included in Appendix to the permit and requirements that apply generally have been incorporated by reference. See Appendix B to this statement of basis for details.

Permit Section 7 – Unit-Specific Requirements for EU-3 – Oil and Edge Seal Line (ES), Wood Putty Patching (WP) and Surface Coating Logos (SCL)

Permit Conditions 7.1 through 7.5 are NESHAP DDDD requirements applicable to ES, WP and SCL. Each activity is a Group 1 miscellaneous coating operation. Compliance with Condition 7.3.1 is documented by securing and maintaining for each coating (a) Material Safety Data Sheet and (b) statement from the manufacturer certifying that its coating is a “non-HAP coating” as that term is defined by NESHAP DDDD. Region 10 has determined that the NESHAP DDDD monitoring required at Row 5 to Table 8 of the subpart is sufficient to assure compliance with the NESHAP DDDD emission limitation at Row 3 to Table 3 of the subpart. EPA Region 10 has determined that no additional monitoring is necessary to assure compliance with the underlying emission limitation.

Permit Condition 7.4 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 7.4 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. Region 10 is requiring the Permittee to submit the NESHAP subpart DDDD semiannual compliance report by the 60th day following the end of the reporting period pursuant to Conditions 7.4 and 3.46. The two reporting periods are January 1 to June 30 and July 1 to December 31. The reporting deadline in the permit is later than the 30-day deadline specified in 40 CFR 63.2281(b)(4). This is permissible pursuant to 40 CFR 63.2281(b)(5).

7.4. *NESHAP Subpart DDDD Semiannual Compliance Report. The Permittee must submit to Region 10 a compliance report containing the information in 40 CFR 63.2281(c) through (g) semiannually according to the requirements in 40 CFR 63.2281(b). The report shall be submitted as part of the semiannual report required by Condition 3.46. [40 CFR 63.2271(b), 63.2281(a) and (b) and Row 1 of Table 9 to 40 CFR 63, Subpart DDDD]*
40 CFR 63.2281(b)(5): For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to § 70.6(a)(3)(iii)(A) or § 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 63.2281(b)(5)) takes precedence over paraphrasing in the permit condition.

Permit Condition 7.5 incorporates by reference into the permit the NESHAP DDDD requirements that apply generally to the Permittee. See Appendix B to this statement of basis for details.

Permit Condition 7.6 requires the Permittee to comply with applicable NESHAP Subpart A general provisions referenced in Table 10 to NESHAP DDDD. Specific requirements are included in Appendix to the permit and requirements that apply generally have been incorporated by reference. See Appendix B to this statement of basis for details.

Permit Section 8 - Unit-Specific Requirements for EU-4 – Compression Ignition Internal Combustion Engines IC-1 and IC-2

Permit Condition 8.1 limits PM emissions from this emission unit and describes the method for determining compliance. The limit applies at all times. No unit-specific RM5 PM testing is required given that PotlatchDeltic only intends to operate the engines in an emergency and as needed for maintenance checks and readiness testing. If the unit-specific visible emission monitoring required in Permit Condition 8.10 identifies a visible emission compliance concern, additional monitoring or testing may be necessary to assure compliance with the FARR grain loading limit for these emission units.

Permit Condition 8.2 limits the SO₂ emissions and describes the methods for determining compliance. The limit applies at all times. Because the engines use only Grade 1 or 2 ULSD fuel, SO₂ emissions are expected to be well below the emission limit of 500 ppm_{dv} at 7% O₂. For an example, see the calculation below.

$$\begin{aligned}\text{SO}_2 \text{ concentration} &= (\text{sulfur content}_{\text{ULSD}} \text{ by mass}) \times (\text{density}_{\text{diesel}}) \times (1/\text{heating value}_{\text{diesel}}) \times \\ &(\text{CF}_{\text{Btu} \rightarrow \text{MMBtu}}) \times (\text{Mass Ratio SO}_2 \text{ Out/S In}) \times (1/\text{F}_d \text{ factor}_{\text{diesel}}) \times \\ &(\text{CF}_{\text{lb/ft}^3 \rightarrow \text{ppmv@20}^\circ\text{C}}) \\ &= (15 \text{ lb S}/1 \times 10^6 \text{ lb fuel}) \times (7.05 \text{ lb fuel}/\text{gal fuel}) \times (\text{gal fuel}/140,000 \text{ Btu}) \times \\ &(1 \times 10^6 \text{ Btu}/\text{MMBtu}) \times (2 \text{ lb SO}_2/\text{lb S}) \times (\text{MMBtu}/9190 \text{ dscf}) \times (385.6 \times 10^6 \\ &\text{dscf} \cdot \text{ppmdv SO}_2/32 \text{ lb SO}_2) \\ &= 2.0 \text{ ppm}_{\text{dv}} \text{ at } 0\% \text{ O}_2\end{aligned}$$

Where: Sulfur content_{ULSD} by mass = 15 ppm. From application.

F_d factor = 9190 dscf/MMBtu. See 40 CFR 60, Appendix A, RM19, Table 19-2.

CF_{lb/ft³→ppmv@20°C} = 385.6 × 10⁶ dscf·ppmdv SO₂/32 lb SO₂. See Conversion Factors for Common Air Pollution Measurements – Atmospheric Gases presented on page A-27 of Appendix A to AP-42.

The recordkeeping (fuel vendor records showing sulfur content of the Grade 1 or 2 diesel or ULSD receipts) required in Permit Conditions 4.6 assures compliance with the FARR exhaust gas SO₂ limit for these emission units. No unit-specific testing is required.

Permit Conditions 8.3 through 8.6 and 8.8 through 8.11 are NSPS IIII requirements applicable to CI engines that are only operated in emergencies and on a limited basis for maintenance checks, readiness testing and other non-emergency situations. Because PotlatchDeltic is prohibited from operating either engine for more than 100 hours per year (except for emergencies), the engines are not subject to emission and operating limitations that may require post-combustion controls be installed. PotlatchDeltic is required to minimize emissions by maintaining the engines according to a written plan authored by the manufacturer or PotlatchDeltic. The certified emissions life (as defined in 40 CFR 60.4219) is the first ten years or first 8,000 operating hours, whichever comes first, pursuant to 40 CFR 1039.101(g)(1)(v). Regardless of whether an engine's certified emission life has been exhausted, the Permittee is still required to operate and maintain the engine. PotlatchDeltic is required to maintain records of engine operation and maintenance performed. Because the engines are considered emergency fire pump engines, NSPS IIII requires that they be certified by the manufacturer to comply with emission standards in NSPS IIII, Table 4. If the engines were not considered emergency fire pump engines, they would be subject to more stringent emission standards in 40 CFR 1039 pursuant to 40 CFR 60.4201(a). Based on information presented in AR-6z (pages 17 and 40) for IC-1 and IC-2, it appears that emissions for the 2019 model year engines are greater than the emission limits in 40 CFR 1039.101 (Table 1 to 40 CFR 1039.101) that

would apply if the engines were non-emergency engines. See Condition 8.9. Thus, it is critical for the Permittee to track their operating hours to maintain their classification as emergency engines.

Permit Condition 8.3 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.3 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. The Permittee's fire pump engines have a displacement of less than 30 liters per cylinder.

8.3. *NSPS Subpart III Emission Standards. The Permittee must comply with the emission standards in NSPS Subpart III, table 4, for all pollutants. [40 CFR 60.4205(c)]*

40 CFR 60.4205(c): *Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.*

Consistent with Condition 2.1 of the permit, the language in the cited regulation (40 CFR 60.4205(c)) takes precedence over paraphrasing in the permit condition.

Permit Condition 8.4.3 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.4.3 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. The resultant permit condition is an amalgamation of requirements in 40 CFR 60.4211(a)(1) and 60.4206. The Permittee's fire pump engines are required to achieve emission standards in 40 CFR 60.4205(c).

8.4.3. *Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions over the entire life of the engine; [40 CFR 60.4206, 60.4211(a)(1)]*

40 CFR 60.4211(a)(1) *Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;*

40 CFR 60.4206: *Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.*

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4211(a)(1) and 60.4206) takes precedence over paraphrasing in the permit condition.

Permit Condition 8.5.2 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.5.2 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

8.5.2. *The Permittee may operate its engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Any operation for non-emergency situations as allowed by Condition 8.5.3 counts as part of the 100 hours per calendar year allowed by this Condition 8.5.2. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of*

emergency RICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2) and (f)(2)(i)]

40 CFR 60.4211(f)(2): You may operate your emergency stationary ICE for the purpose specified in paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4211(f)(2) and (f)(2)(i) takes precedence over paraphrasing in the permit condition.

Permit Conditions 8.5.3 and 8.5.3.1 contain paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Conditions 8.5.3 and 8.5.3.1 are transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

8.5.3. The Permittee may operate its engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition 8.5.2. Except as provided in Condition 8.5.3.1, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

8.5.3.1 The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[40 CFR 60.4211(f)(3) and (f)(3)(i)]

40 CFR 60.4211(f)(3): Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4211(f)(3) and (f)(3)(i)) takes precedence over paraphrasing in the permit condition.

Permit Condition 8.8 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.8 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

8.8. *NSPS Subpart III Engine Operation. If the engine does not meet the standards applicable to non-emergency engines, **the Permittee** must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]*

*40 CFR 60.4209(a) If **you are an owner or operator of an emergency stationary CI internal combustion engine** **that** does not meet the standards applicable to non-emergency engines, **you** must install a non-resettable hour meter prior to startup of the engine.*

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4209(a)) takes precedence over paraphrasing in the permit condition.

Permit Condition 8.9 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.9 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

8.9. *NSPS Subpart III Engine Operation. If the engine is an emergency engine, **the Permittee** is not required to submit an initial notification. Starting with the model years in table 5 to **NSPS Subpart III (2011 for models like IC-1 and IC-2 with engine power greater than 130 kW)**, if the emergency engine does not meet the standards applicable to nonemergency engines in the applicable model year, the **Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The **Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]*

*40 CFR 60.4214(b): If the **stationary CI internal combustion engine** is an emergency **stationary internal combustion engine**, **the owner or operator** is not required to submit an initial notification. Starting with the model years in table 5 **to this subpart**, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the **owner or operator** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The **owner** must record the time of operation of the engine and the reason the engine was in operation during that time.*

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4214(b)) takes precedence over paraphrasing in the permit condition.

Condition 8.10 has been included using Part 71 authority to assure compliance with Conditions 8.4.1 and 8.4.3.

Permit Condition 8.11 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.11 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based. IC-1 and IC-2 both have a power output rating of 327 HP.

8.11. *NSPS Subpart IIII Operation in Non-Emergency Situations. The Permittee must submit an annual report according to the requirements in 40 CFR 60.4211(d)(1) through (3) if the engine operates for the purpose specified in Condition 8.5.3.1 [40 CFR 60.4214(d)]*

40 CFR 60.4214(d): If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4214(d)) takes precedence over paraphrasing in the permit condition.

Permit Condition 8.7 requires monitoring to assure compliance with the FARR visible emissions limit in Permit Condition 3.9. The requirement was added using Part 71 authority. Each engine only operates during emergencies, and during maintenance checks and readiness testing not to exceed 100 hours per year (non-emergency operation limit). Region 10 is requiring the Permittee to conduct visible emissions observations (and if detected, RM9 opacity determinations for six minutes) of each engine's exhaust while operating at least once per year (but only if the engine is operated in that year). Fugitive and visible emission monitoring required in Permit Conditions 4.8 through 4.13 does not apply because the engines will likely not be operating during a monthly or quarterly walk-through of the facility.

Permit Condition 8.12 incorporates by reference into the permit the NSPS IIII requirements that apply generally to the Permittee. See Appendix B to this statement of basis for details.

Permit Condition 8.13 requires the Permittee to comply with applicable NSPS Subpart A general provisions referenced in Table 8 to NSPS IIII. Requirements that apply generally have been incorporated by reference. See Appendix B to this statement of basis for details.

Permit Condition 8.14 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 8.14 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

8.14. *The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable NSPS standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]*

40 CFR 60.12: No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.12) takes precedence over paraphrasing in the permit condition.

Permit Section 9 – Unit-Specific Requirements for EU-5 – Spark Ignition Internal Combustion Engines IC-3, IC-4, IC-5, IC-6, IC-7, IC-8, IC-9, IC-10 and IC-11

Permit Condition 9.1 limits the PM emissions and describes the method for determining compliance. The limit applies at all times. No unit-specific RM5 PM testing is required given that PotlatchDeltic only intends to operate the engines in an emergency and as needed for maintenance checks and readiness testing. If the unit-specific visible emission monitoring required in Permit Conditions 4.8 through 4.12 identifies a visible emission compliance concern, additional monitoring or testing may be necessary to assure compliance with the FARR grain loading limit for these emission units.

Permit Condition 9.2 limits the SO₂ emissions and describes the methods for determining compliance. The limit applies at all times. Because the engines use only propane as fuel, SO₂ emissions are expected to be well below the emission limit of 500 ppm_{dv} at 7% O₂. For an example, see the calculation below.

$$\begin{aligned}\text{SO}_2 \text{ concentration} &= (\text{sulfur content}_{\text{commercial propane}} \text{ by mass}) \times (\text{density}_{\text{propane}}) \times (1/\text{heating value}_{\text{propane}}) \times (\text{CF}_{\text{Btu} \rightarrow \text{MMBtu}}) \times (\text{Mass Ratio SO}_2 \text{ Out/S In}) \times (1/\text{F}_d \text{ factor}_{\text{propane}}) \times (\text{CF}_{\text{lb/ft}^3 \rightarrow \text{ppmv@20}^\circ\text{C}}) \\ &= (185 \text{ lb S}/1 \times 10^6 \text{ lb fuel}) \times (4.24 \text{ lb fuel/gal fuel}) \times (\text{gal fuel}/90,500 \text{ Btu}) \times (1 \times 10^6 \text{ Btu/MMBtu}) \times (2 \text{ lb SO}_2/\text{lb S}) \times (\text{MMBtu}/8710 \text{ dscf}) \times (385.6 \times 10^6 \text{ dscf} \cdot \text{ppmdv SO}_2/32 \text{ lb SO}_2) \\ &= 23.9 \text{ ppm}_{\text{dv}} \text{ at } 0\% \text{ O}_2\end{aligned}$$

Where: Sulfur content_{commercial propane} by mass = 185 ppm. See GPA Liquefied Petroleum Gas Specifications Standard 2140-97.

F_d factor = 8710 dscf/MMBtu. See 40 CFR 60, Appendix A, RM19, Table 19-2.

CF_{lb/ft³→ppmv@20°C} = 385.6x10⁶ dscf·ppmdv SO₂/32 lb SO₂. See Conversion Factors for Common Air Pollution Measurements – Atmospheric Gases presented on page A-27 of Appendix A to AP-42.

The recordkeeping (fuel vendor records showing sulfur content of the propane or the type of LPG received) required in Permit Condition 4.7 will serve as the monitoring to assure compliance with the FARR exhaust gas SO₂ limit for these emission units. No unit-specific testing is required.

Permit Conditions 9.3 through 9.7 are NSPS JJJJ requirements applicable to SI engines that are only operated in emergencies and on a limited basis for maintenance checks, readiness testing and other non-emergency situations. PotlatchDeltic is required to minimize emissions by maintaining such engines according to a written plan authored by the manufacturer or PotlatchDeltic. For IC-3, IC-7, IC-8, IC-10 and IC-11, the certified emissions life (as defined in 40 CFR 60.4248) is the first five years or first 1,000 operating hours, whichever comes first pursuant to 40 CFR 1054.107(a)(1). For IC-4, IC-5, IC-6 and IC-9, their certified emissions life pursuant to 40 CFR 60.4248 is no shorter than any of the following: (a) 1,000 hours of operation, (b) the manufacturer's recommended overhaul interval, or (c) the manufacturer's mechanical warranty for the engine. Regardless of whether an engine's certified emission life has been exhausted, the Permittee is still required to operate and maintain the engine. PotlatchDeltic is required to maintain records of engine operation and maintenance performed. Because IC-4 and IC-5 are considered emergency engines, NSPS JJJJ requires that they be certified by the manufacturer to comply with emission standards for emergency engines in Table 1 to 40 CFR 60, Subpart JJJJ. If the engines were not considered emergency engines, they would be subject to more stringent emission standards in 40 CFR 1048 pursuant to 40 CFR 60.4233(d). Because IC-6 and IC-9 are considered emergency engines, NSPS JJJJ requires that they be certified by the manufacturer to comply with EPA Phase I class II nonroad

engine emission standards for propane fuel in 40 CFR 1054, Appendix I. EPA revised 40 CFR 1054 on January 24, 2023, and part of that rule amendment included moving requirements in Appendix I to Appendix A. EPA did not simultaneously update NSPS subpart JJJJ emission standard reference from 40 CFR 1054 Appendix I to Appendix A. If the engines were not considered emergency engines, they would be subject to more stringent emission standards in 40 CFR 1048 pursuant to 40 CFR 60.4231(c). Thus, it is critical for the Permittee to track IC-4, IC-5, IC-6 and IC-9 operating hours to maintain their classification as emergency engines. Because SI engines IC-3, IC-7, IC-8, IC-10 and IC-11 are certified by the manufacturer to comply with EPA Phase 3, Class II emission standards for propane-fired nonhandheld engines in 40 CFR 1054, the hour restriction for emergency engines does not change the NSPS requirements and there is no reason to require an hour meter using Title V authority. There is no less stringent emission standards for emergency engines for this category of engines.

Permit Condition 9.6 for IC-4, IC-5, IC-6 and IC-9 includes the requirement to install a non-resettable hour meter if one does not already exist with a requirement to keep a record of hours of operation using the hour meter and the corresponding reason for use. This condition assures compliance with Permit Condition 9.5 limiting hours of operation and is only necessary for engines less than 130 horsepower manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines. Permit Condition 9.7 is applicable to all engines and includes a requirement to keep records of the maintenance conducted on the engine.

Certain emergency demand response provisions of NSPS JJJJ vacated by the DC Circuit Court of Appeals (May 4, 2016 mandate) no longer apply, and thus are not included in the permit. An engine may not operate in circumstances described in the vacated provisions unless it is in compliance with the emission standards and other applicable requirements for a non-emergency engine.

Permit Condition 9.5.2 contains paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Condition 9.5.2 is transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

9.5.2. The Permittee may operate its engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Any operation for non-emergency situations as allowed by Condition 9.5.3 counts as part of the 100 hours per calendar year allowed by this Condition 9.5.2. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2) and (d)(2)(i)]

40 CFR 60.4243(d)(2): You may operate your emergency stationary ICE for the purpose specified in paragraph (d)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the

insurance company associated with the engine. *The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.*

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4243(d)(2) and (d)(2)(i) takes precedence over paraphrasing in the permit condition.

Permit Conditions 9.5.3 and 9.5.3.1 contain paraphrasing for clarity purposes. Pursuant to 40 CFR 71.6(a)(1)(i), Permit Conditions 9.5.3 and 9.5.3.1 are transposed below followed by the applicable requirement to identify (in yellow highlight font) the differences in form as compared to the applicable requirement upon which the term or condition is based.

9.5.3. *The Permittee may operate its engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition 9.5.2. Except as provided in Condition 9.5.3.1, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.*

9.5.3.1 *The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:*

[40 CFR 60.4243(d)(3) and (d)(3)(i)]

40 CFR 60.4243(d)(3): *Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (d)(3) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.*

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

Consistent with Condition 2.1 of the permit, the language in the cited regulations (40 CFR 60.4243(d)(3) and (d)(3)(i)) takes precedence over paraphrasing in the permit condition.

Permit Conditions 9.8 incorporates by reference into the permit the NSPS Subpart JJJJ requirements that apply generally to the Permittee. See Appendix B to this statement of basis for details.

Permit Condition 9.9 requires the Permittee to comply with applicable NSPS Subpart A general provisions referenced in Table 3 to NSPS JJJJ. Those requirements have been incorporated by reference into the permit. See Appendix B to this statement of basis for details.

Permit Section 10 – Unit-Specific Requirements for EU-6 – Lumber Drying Kiln LK-5

Permit Condition 10.1 limits PM emissions and describes the method for determining compliance. The limit applies at all times. No unit-specific testing or monitoring is required. If the visible and fugitive

emission monitoring required in Permit Conditions 4.8 through 4.13 identify a compliance concern, additional monitoring or testing may be necessary to assure compliance with the FARR grain loading limit for these emission units.

Permit Condition 10.2 restricts the species of wood that may be dried in LK-6 consistent with the demonstration in PotlatchDeltic's application in support of PSD and minor NSR permits issued in June 2019.

Permit Condition 10.3 assures compliance with the PSD BACT and minor NSR control technology review determination for construction of kiln LK-6 in Condition 10.4.1. The requirement was established in the third revision to the PSD permit and second revision to the minor NSR permit. See the support documents for those permit actions for details.

Permit Conditions 10.4 reflects the PSD BACT and minor NSR control technology review determination for construction of kiln LK-6. Conditions 10.4.1 and 10.4.2 were issued and became effective in the third revision to the PSD permit and second revision to the minor NSR permit. Conditions 10.4.3 through 10.4.5 were established in the original June 2019 PSD and minor NSR permits. See the support documents for those permit actions for details.

Permit Condition 10.5 reflects the minor NSR control technology review determination for construction of kiln LK-6. The requirement was established in the original June 2019 minor NSR permit and reflects FARR visible emissions limit in 40 CFR 49.124(d). See the permit analysis for that permit action for details.

Permit Conditions 10.6 and 10.7 establish allowable daily and annual emission limits that reflect the emission rates modeled to protect the PM_{2.5} NAAQS in support of minor NSR permit authorizing construction of LK-6. These permit conditions specify the emission factors (lb PM_{2.5}/mbf lumber) and daily and annual operational rates (mbf/day, mbf/year from Conditions 10.10.5 and 10.10.2, respectively) to use in calculating daily and annual PM_{2.5} emissions for determining compliance. See the permit analysis for that permit action for details.

Permit Condition 10.8 is the LK-6 annual allowable emission limit for PM₁₀. Pursuant to 40 CFR 49.155(a)(2), the minor NSR permit must include an annual allowable emissions limit for each affected emissions unit and for each regulated NSR pollutant emitted by the emission unit if the unit is issued an enforceable emission limitation lower than the potential to emit of that unit. Because PM₁₀ is assumed equal to PM_{2.5}, the PM₁₀ limit and emission factor reflects the PM_{2.5} limit and emission factor in Condition 10.7.

Permit Condition 10.9 restricts VOC emissions from LK-6 to 50 tpy to reflect PotlatchDeltic's upper bound estimate of VOC emissions expected from the project to construct the kiln considering the species of wood that will be dried. Region 10 considered this restriction on emissions in finalizing the AQIA evaluation and BACT analysis for the PSD permit. The limit is an annual limit, consistent with the annual emissions used in the ambient air quality and BACT analyses, rather than a rolling 12-month limit used for limiting "potential" emissions. See the fact sheet for Permit No. R10PSD00100 for details.

Permit Condition 10.10 reflects LK-6 monitoring requirements in Permit No.'s R10PSD00103 and R10TNSR01804. The monitoring is necessary to assure compliance with PSD BACT and minor NSR control technology review requirements. The monitoring is also necessary to provide operating data necessary to calculate PM_{2.5}, PM₁₀ and VOC emissions to demonstrate compliance with emission limits. See support documents for original permits issued in June 2019 for details.

Permit Conditions 10.11 through 10.14 are from Permit No. R10TNSR01804 and R10PSD00103.

Permit Condition 10.11 requires that the LK-6 temperature and moisture monitoring systems/equipment be maintained and accurate.

Permit Condition 10.12 requires LK-6 PM10 and VOC emissions be calculated annually. The requirement to calculate PM2.5 emissions is in Condition 4.21.

Permit Condition 10.13 is deviation reporting in the semiannual title V monitoring report specific to kiln LK-6. Although the reporting frequency in the underlying NSR permits is annually, title V requires semiannual deviation reporting.

Permit Condition 10.14 requires the kiln LK-6 O&M manual be kept up to date.

Permit Section 11 - Unit-Specific Requirements for EU-7 – Pneumatic Conveyance and Dust Capture Systems

Permit Condition 11.1 limits PM emissions and describes the method for determining compliance. No unit-specific testing or monitoring is required. If the visible and fugitive emission monitoring required in Permit Conditions 4.8 through 4.13 identify a compliance concern, additional monitoring or testing may be necessary to assure compliance with the FARR 0.1 gr/dscf grain loading limit for these emission units.

On page 2 of EPA's document entitled, Fabric Filter Bag Leak Detection Guidance, EPA-454/R-98-015, September 1997 at <https://www3.epa.gov/ttnemc01/cem/tribo.pdf>, EPA states, "Fabric filters are capable of extremely high control efficiencies of both coarse and fine particles; outlet concentrations as low as 20 mg/dscm (0.01 gr/dscf) can be achieved with most fabric filter systems. During May 1996 testing of newly installed BH-2 (Planer Shavings Baghouse) and BH-3 (Trimmer/Chipper Baghouse), PM emissions of 0.0059 and 0.0069 gr/dscf, respectively, were measured. Both measurements are less than 10% of the FARR PM limit. Three 60-minute PM2.5 runs of each baghouse in 2020 all resulted in reporting emissions less than the method detection limit. Region 10 is not aware of PotlatchDeltic having tested any other baghouses (some older than others) at the mill. Only three cyclones, CY-2, CY-5 and CY-9 emit directly to atmosphere. CY-2 and CY-5 receive only green (wet) wood residue. Pneumatic conveyance of green wood residue (heavier and more likely to be captured by cyclone) is less likely to generate PM emissions as compared dry wood residue (lighter and less likely to be captured by cyclone). CY-9 receives metal filings. Although the application does not include information regarding actual emissions from these three cyclones, Region 10 does not anticipate emissions to be in excess of the FARR 0.1 gr/dscf limit. If process equipment (generating dust and pneumatically conveying wood residue) other than CY-2, CY-5 and CY-9 operates with associated baghouses off-line, PM emissions may exceed the FARR visible emissions and grain loading limits.

Permit Conditions 11.2 and 11.3 establish allowable daily and annual emission limits that reflect the emission rates modeled to protect the PM2.5 NAAQS in support of Permit No. R10TNSR01804. These permit conditions specify the emission factors and daily and annual operational rates to use in calculating daily and annual PM2.5 emissions for determining compliance.

Permit Conditions 11.4 and 11.5 are necessary for the protection of the NAAQS. The requirements were required to have been satisfied upon initial startup of LK-6 in October 2019 pursuant to Condition 2.18 of Permit No. R10TNSR01800.

Permit Conditions 11.6 and 11.7 are additional monitoring, recordkeeping and reporting measures. The requirements were added using Part 71 authority. PotlatchDeltic is being required to record and report each instance that EU-7 process equipment operated without the associated control equipment also online. The Permittee is required to use baghouses BH-2, 3, 4, 5, 10 and 11 pursuant to Condition 4.18 based upon underlying requirement in Permit No. R10TNSR01804. That requirement does not apply to baghouses BH-1, 6, 7, 8, 9 and 12.

Permit Section 12 – Unit-Specific Requirements for EU-8 – Plywood Presses PV-1 and PV-2

Permit Condition 12.1 limits PM emissions and describes the method for determining compliance. The limit applies at all times. Emissions testing of a similar source recorded PM emissions of 0.002 gr/dscf. A total temporary enclosure was erected to capture and sample the exhaust from two softwood plywood presses at a panelboard facility in Oregon. The measured PM emissions represent 2% of the FARR 0.1 gr/dscf emission limit.

No unit-specific testing or monitoring is required for EU-8 given demonstrated low emissions from a similar source. If the visible and fugitive emission monitoring required in Permit Conditions 4.8 through 4.13 identify a compliance concern, additional monitoring or testing may be necessary to assure compliance with the FARR grain loading limit for these emission units.

Permit Section 13 – Unit-Specific Requirements for EU-9 – Plant Traffic (PT)

Permit Conditions 13.1 and 13.2 establish allowable daily and annual emission limits that reflect the emission rates modeled to protect the PM_{2.5} NAAQS in support of Permit No. R10TNSR01804. These permit conditions specify the emission factors and daily and annual operational rates to use in calculating daily and annual PM_{2.5} emissions for determining compliance.

Permit Condition 13.3 requires the Permittee to track activities related to lumber manufacturing that influence PM_{2.5} emissions generated by plant traffic on paved and unpaved areas. Condition 13.1 of the permit limits these emissions to 19.39 lb/day. The emission factor the Permittee is required to use to calculate daily emissions assumes a certain degree of emission reduction as the result of restricting traffic speed to 15 miles-per-hour on unpaved areas, watering paved and unpaved areas, and sweeping paved areas. Monitoring and recording details of these work practices is important to assure the representativeness of the emission factor, and moreover to assure that actual emissions are not greater than reported.

Permit Appendix – NESHAP Subpart A Requirements Applicable to EU-1, EU-2 and EU-3

Specific NESHAP subpart A requirements applicable to EU-1, EU-2 and EU-3 are included in Appendix to the permit. Conversely, NESHAP subpart A requirements that apply generally to EU-1, EU-2 and EU-3 have been incorporated by reference. See Appendix B to this statement of basis for the requirements that have been incorporated by reference.

6. Public Participation

6.1 Public Notice and Comment

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). There is a public comment period of at least 30 days for actions pertaining to a draft Title V permit. As required by 40 CFR 71.11(f), the permitting authority shall hold a hearing whenever it finds, on the basis of requests, a significant degree of public interest in a draft permit. Region 10 received significant comments on the August 21, 2024 draft permit, and consideration of those comments resulted in significant changes to the permit. Rather than proceed directly to a final permit decision, Region 10 is requesting public input on the revised draft permit that is supported by this draft statement of basis and draft response to comments.

The requirements of 40 CFR 71.11(a)(5) and 71.8 have been satisfied thus far as follows:

1. The August 21, 2024 public notice, draft permit, statement of basis and the draft administrative record (which includes the application and relevant supporting materials) were posted on Region 10's website for the duration of the public comment period from August 21, 2024 through

December 17, 2024 (after extending the public comment period on two occasions). The notice was also provided in the August 21, 2024 edition of the weekly St. Maries Gazette Record.

2. On August 21, 2024, Region 10 provided the public notice electronically to the following: the permit applicant, the affected states, the air pollution control agencies of affected states, the Tribal and local air pollution control agencies that have jurisdiction over the area where the source is located, Tribal, city and county executives where the source is located, 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. In this case, the affected states (as that term is defined in 40 CFR 71.2) are Idaho and Washington (contiguous to the Coeur d'Alene Reservation). Title V permit authorities Idaho Department of Environmental Quality and the Department of Ecology act on behalf of their governors in receiving notice of title V permit actions outside their jurisdiction. Because the jurisdiction of title V permit authority Spokane Regional Clean Air Agency is located within 50 miles of the permitted source, notice was provided to them as a courtesy.
3. The public comment period was originally scheduled to close on September 20, 2024. But on September 18, 2024, Region 10 contacted electronically the entities listed above in Item No. 2 and extended the public comment period to October 21, 2024. Then on October 21, 2024, Region 10 contacted electronically the entities listed above in Item No. 2 and extended the public comment period to December 17, 2024, and scheduled a virtual public hearing for December 3, 2024.
4. The public hearing was held on December 3, 2024, and a total of 15 people provided oral comments. Region 10 received 24 written comments by the close of the public comment period on December 17, 2024.
5. A public notice, revised draft permit, revised draft statement of basis, draft response to comments and the administrative record (which includes the August 21, 2024 draft permit and comments received from the public on the August 21, 2024 draft permit) will be posted on Region 10's website for the duration of the public comment period from April 23, 2025 through May 23, 2025. Notice will be provided in the April 23, 2025 edition of the weekly St. Maries Gazette Record. Notice will be provided via email to same list of designated officials and others receiving notice of the original August 21, 2024 draft permit action. Notice of the revised draft permit action will also be provided to those who submitted written comments on the August 21, 2024 draft permit and to those who attended the December 3, 2024 public hearing (to the extent we are able to contact those individuals).

6.2 Response to Public Comments and Permit Issuance

As required in 40 CFR 71.11(e), the EPA will consider all timely comments received when making a final decision. The EPA's response to (1) all written comments received during public comment period for the revised draft permit, (2) all written comments received during public comment period for the original draft permit, (3) oral testimony provided December 3, 2024 during public hearing on the original draft permit, and (4) oral testimony on the revised draft permit (if a public hearing is held), will be addressed in a separate final Response to Comments document. As required in 40 CFR 71.11(i), the EPA will notify the applicant and each person who submitted written comments (whether on the original or revised draft permit) or requested notice of the final permit decision.