

United States Environmental Protection Agency
Region 10, Air & Radiation Division
1200 Sixth Avenue, Suite 155, 15-H13
Seattle, Washington 98101-3188

Permit Number: R10TNSR01802
Issued: DRAFT
Effective: DRAFT
AFS Plant I.D. Number: 16-009-00001

Minor New Source Review Permit Revision No. 2

In accordance with the provisions of 40 CFR Part 49, Subpart C, Federal Minor New Source Review Program in Indian Country,

PotlatchDeltic Land and Lumber, LLC – St. Maries Complex

is authorized to construct and operate the air pollution emission source described in its application and this permit in accordance with the conditions listed in this permit in the following location:

Location: Coeur d'Alene Reservation
2200 Railroad Avenue
St. Maries, Idaho

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PotlatchDeltic Land and Lumber, LLC
St. Maries Complex
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Krishna Viswanathan, Director
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U.S. EPA, Region 10

Date

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Permit History

Permit Action Date	Permit Number	Permit Action Description
06/21/2019	R10TNSR01800	Original minor NSR permit for LK-6
10/10/2019	R10TNSR01801	Revision No. 1 – revised LK-6 lumber moisture monitoring
draft	R10TNSR01802	Revision No. 2 – revised LK-6 temperature limit, emission limits and emission factors for PCWR-PM-SH and PCWR-PM-SD, LK-6 temperature and moisture monitoring, deviation reporting and source description

1. Source Information and Project Description

The PotlatchDeltic Land and Lumber, LLC (Permittee) St. Maries Complex is part of a larger “stationary source” (as that term is defined by the CAA) that consists of activities at both the St. Maries Complex and the adjacent Lumber Drying Division property. This permit authorizes construction of a new indirect steam-heated batch lumber dry kiln and the emission increases resulting from operation of the kiln and associated existing emission-generating activities at the St. Maries Complex. Table 1-1 lists both the new and existing emission generating activities associated with the proposed minor modification to the existing major source.¹

PotlatchDeltic proposes to construct a batch, dual-track kiln with two side-by-side track systems inside the kiln. The track system is used for moving carts carrying stacks of lumber into and out of the kiln between batch drying cycles. The lumber carried by the carts on a single track inside the kiln is considered one load, so there are two loads (one on each track system) in each batch of lumber dried. A batch drying cycle duration can range from about one day to several days depending upon several factors. The kiln is designed with ten heating zones wherein the drying process can be separately controlled. The length of the kiln is segmented into five cross-sectional areas. The top of each cross-sectional area is one heating zone, and the bottom another. Four thermocouples are employed per zone, and at any one time two thermocouples are measuring the temperature of the air entering the loads (one thermocouple per load) and the other two are measuring the temperature of the air exiting the loads (one thermocouple per load).

SIC Code: 2421 & 2436

Latitude: 47.3231 N

Longitude: 116.5856 W

Table 1-1: Emission Units and Control Devices

EU ID	Emission Unit Description	PM/PM10/PM2.5 Control Device*
New (Proposed) Emission Generating Activities		
LK-6	Lumber Dry Kiln No. 6. Dual-track, 282,426 board foot per batch, indirect steam-heated lumber dry kiln	None
Existing Emission Generating Activities		
PB-1	CE Boiler. 43,034 lb steam/hr and 58 mmbtu/hr, fuel cell wet biomass-fired boiler, installed 1964, dutch oven firebox replaced with fuel cells in 1979	Multiclone installed 1979 and PPC Industries dry ESP installed 1995

¹ Table 1-1 does not list all the emission generating activities at SMC. Namely, SMC’s plywood mill and its associated activities are not part of this project.

EU ID	Emission Unit Description	PM/PM10/PM2.5 Control Device*
PB-2	Riley Boiler. 98,000 lb steam/hr and 131 mmbtu/hr, spreader stoker wet biomass-fired boiler with fly ash reinjection, installed 1966	Multiclone installed 1987 and PPC Industries dry ESP installed 1995
PCWR-PM-SH	Exhaust from cyclone (receiving planer shavings) is pneumatically conveyed to baghouse BH-2.	Donaldson/Torit 276-RF10 baghouse BH-2 with cyclone pre-cleaner design, installed 1996
PCWR-PM-SD	Planed lumber trimmer, trim ends chipper, breakdown hoist and infeed rolls dust generating activities.	Donaldson/Torit 276-RF10; 1996 baghouse BH-3 with cyclone pre-cleaner design, installed 1996
PCWR-PM-PTB	Plywood Mill dry veneer chips and fines and Planer Mill trim ends chips pneumatic conveyance to ply trim bin	PM Hagel R9 baghouse BH-4, installed 1997
PCWR-PM-PSB	Dust transfer from baghouses BH-2 and BH-3 to planer shavings bin.	Baghouse BH-5
PCWR-SM-SD	Dust from vertical arbor gang, vertical arbor gang trimmer, quad band mill and edger	Clarke PAF95-20 baghouse BH-10 with cyclone pre-cleaner design, installed 2008
PCWR-SM-SDB	Sawdust from vertical arbor gang and hog fuel screen pneumatic conveyance to sawdust bin.	Hagel baghouse BH-11, installed 2001
PCWR-SM-CH	Green chips pneumatically conveyed from sawmill chipper screen to chip bin via cyclone CY-2.	None
BV-2	Building Vent No. 2 exhausts emissions from miscellaneous indoor activities within Sawmill Building	None
BV-3	Building Vent 3 exhausts emissions from miscellaneous indoor activities within Boiler Building	None
DB	Log debarking (22-inch two debarkers; A8 and A5)	None
COS	Log bucking (three cut-off saws)	None
WRD-SH	Wood residue drops into trucks – shavings	None
WRD-CH	Wood residue drops into trucks – chips (all chips assumed green)	None
WRD-SD	Wood residue drops into trucks – sawdust (all sawdust assumed green)	None
WRD-HF	Wood residue drops into trucks & fuel bin – hog fuel	None
HFP	Wind erosion of outdoor hog fuel pile	None
PT	Plant traffic by vehicles on paved and unpaved roads related to lumber manufacturing	Paved areas: sweeping and watering. Unpaved areas: watering and 15 mph speed limit.

* Use of the listed control devices is required by this permit.

2. General Requirements

- 2.1 Unless otherwise specified, the terms and conditions of this permit apply to the emission units and control devices/work practices identified in Table 1-1.
- 2.2 The provisions of this permit are severable, and in the event of any challenge to any portion of this permit or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.
- 2.3 The Permittee shall comply with all conditions of this permit including emission limitations that apply to the affected emissions units listed in Table 1-1. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the CAA and is grounds for enforcement action and for a permit termination or revocation.
- 2.4 The permitted source must not cause or contribute to a NAAQS violation or in an attainment area, must not cause or contribute to a PSD increment violation.
- 2.5 It is not a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 2.6 The permit may be revised, reopened, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and re-issuance or termination or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 2.7 The permit does not convey any property rights of any sort or any exclusive privilege.
- 2.8 The Permittee shall furnish to Region 10, within a reasonable time as specified by Region 10, any information that Region 10 may request in writing to determine whether cause exists for revising, revoking and reissuing or terminating the permit or to determine compliance with the permit. For any such information claimed to be confidential, the Permittee must also submit a claim of confidentiality in accordance with 40 CFR Part 2, Subpart B.
- 2.9 Upon presentation of proper credentials, the Permittee must allow a representative of Region 10 to:
 - 2.9.1 Enter upon the premises where the source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;

- 2.9.2 Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - 2.9.3 Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
 - 2.9.4 Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
 - 2.9.5 Record any inspection by use of written, electronic, magnetic and photographic media.
- 2.10 This permit becomes invalid if construction is not commenced within 18 months after the effective date of this permit, if construction is discontinued for 18 months or more, or if construction is not completed within a reasonable time. Region 10 may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the approved phases of a phased construction project; the Permittee must commence construction of each such phase within 18 months of the projected and approved commencement date.
- 2.11 This permit does not relieve the Permittee of the responsibility to comply fully with applicable provisions of any EPA-approved implementation plan, federal implementation plan or tribal implementation plan and any other requirements under applicable law.
- 2.12 If the Permittee does not construct or operate the source or modification in accordance with the terms of this minor NSR permit, the Permittee will be subject to appropriate enforcement action.
- 2.13 Alternatives to the testing, monitoring, recordkeeping, and reporting required by this permit may be established through the issuance or renewal of a Title V operating permit issued by Region 10 to the Permittee under 40 CFR Part 71, or through a significant modification thereto, provided that the Tribal minor NSR requirements continue to be satisfied and that the Title V permit identifies the provisions of this permit that are no longer in effect.
- 2.14 Except as specified elsewhere in this permit, the requirements of this permit apply upon initial startup of lumber kiln LK-6. Initial startup occurs when lumber is dried in LK-6 for the first time.

3. Emission Limitations and Work Practice Requirements

- 3.1 The Permittee shall not dry any species of wood other than Grand Fir, White Fir and Western Hemlock in LK-6.

- 3.2 The Permittee shall not dry any lumber using a drying schedule with a maximum set point temperature of heated air that exits a load of lumber exceeding 245°F.
- 3.3 The highest 60-minute kiln-wide average dry bulb temperature of heated air that exits a load of lumber as measured, calculated and recorded pursuant to Condition 4.2.7.1 shall not exceed 245°F.
- 3.4 The Permittee shall take corrective action to return the actual temperature to the set point temperature if the instantaneous dry bulb temperature of heated air that exits any load of lumber in any zone of the kiln as measured pursuant to Condition 4.2.7.2 exceeds the set point temperature in the drying schedule by more than 20°F. This condition applies only when the drying schedule's set point temperature is greater than the ambient (outside) temperature.
- 3.5 The lowest, average, kiln-wide moisture content for each batch of lumber dried, as measured, calculated and recorded pursuant to Condition 4.2.8, shall not be less than 13%, dry basis.
- 3.6 The Permittee shall install, operate and maintain a computerized kiln management system to control the entire drying process.
- 3.7 The Permittee shall develop and implement an operation and maintenance manual for the LK-6 lumber drying kiln to assure good air pollution control practices and efficient operation. At a minimum, the operation and maintenance manual shall address the following elements:
 - 3.7.1 Air temperature measurement systems used in the kiln;
 - 3.7.2 Lumber moisture measurement systems used in the kiln;
 - 3.7.3 Systems for ensuring only allowed species of wood are dried in the kiln;
 - 3.7.4 Sizing and placement of stickers, bolsters and boards;
 - 3.7.5 Door seals and kiln structure integrity;
 - 3.7.6 Kiln vent, baffle and fan systems (including, but not limited to, regular air velocity checks);
 - 3.7.7 Kiln steam system;
 - 3.7.8 Kiln control PC interface system;

3.7.9 Recordkeeping of inspections, maintenance and calibrations including dates and the personnel conducting the work; and

3.7.10 Availability of spare parts.

3.8 Emissions shall not exceed the daily emission limits in Table 3-1. Unless otherwise required in this permit, compliance with these limits is determined by multiplying each emission factor in Table 3-1 (pounds per unit of operation) by the daily operation specified in Table 3-1, except as required in Condition 3.11.

Table 3-1 – Daily PM2.5 Emission Limits, pounds per day

Emission Unit	Emission Limit	Emission Factor, units	Operation
LK-6	9.52	0.0510 lb/mbf lumber	Condition 4.2.5
PB-1	15.37	0.01488 lb/mlb steam	Condition 4.4.1
PB-2	16.98	0.00722 lb/mlb steam	Condition 4.4.1
PCWR-PM-SH	6.53	0.00263 lb/mbf	Condition 4.5.4
PCWR-PM-SD	5.77	0.00229 lb/mbf	Condition 4.5.4
PCWR-PM-PTB	3.95	0.1646 lb/hr	Condition 4.5.2
PCWR-PM-PSB	3.95	0.1646 lb/hr	Condition 4.5.1
PCWR-SM-SD	31.87	1.3280 lb/hr	Condition 4.5.3
PCWR-SM-SDB	6.98	0.2907 lb/hr	Condition 4.5.3
PCWR-SM-CH	26.23	1.0929 lb/hr	Condition 4.5.3
PT	19.39	0.8079 lb/hr	Condition 4.5.3

3.8.1 Table 3-2 lists the required EPA Reference Methods for determining an emission factor in the event source testing is required.

Table 3-2 – Required EPA Reference Methods

Pollutant/Parameter	Test Method	Reference
Port Location/Traverse	Method 1, 1A	40 CFR Part 60, Appendix A
Velocity/Flow	Method 2, 2A, 2C, 2D, 2F, 2G	40 CFR Part 60, Appendix A
Gas Molecular Weight	Method 3, 3A, 3B	40 CFR Part 60, Appendix A
Gas Moisture	Method 4	40 CFR Part 60, Appendix A
PM2.5	Method 5 or 201A, and 202	40 CFR Part 51, Appendix M
PM10	Method 5 or 201A, and 202	40 CFR Part 51, Appendix M

3.9 Emissions shall not exceed the annual emission limits in Table 3-3. Unless otherwise required in this permit, compliance with these limits is determined by multiplying each emission factor in Table 3-3 (pounds per unit of operation) by the annual operation specified in Table 3-3, except as required in Condition 3.11.

Table 3-3 – Annual PM2.5 Emission Limits, tons per year

Emission Unit	Emission Limit	Emission Factor, units	Operation
LK-6	1.74	0.0510 lb/mbf lumber	Condition 4.2.2
PB-1	2.28	0.01488 lb/mlb steam	Condition 4.4.1
PB-2	3.10	0.00722 lb/mlb steam	Condition 4.4.1
PCWR-PM-SH	1.01	0.00263 lb/mbf	Condition 4.5.4
PCWR-PM-SD	0.90	0.00229 lb/mbf	Condition 4.5.4
PCWR-PM-PTB	0.62	0.1646 lb/hr	Condition 4.5.2
PCWR-PM-PSB	0.62	0.1646 lb/hr	Condition 4.5.1
PCWR-SM-SD	4.97	1.3280 lb/hr	Condition 4.5.3
PCWR-SM-SDB	1.09	0.2907 lb/hr	Condition 4.5.3
PCWR-SM-CH	4.09	1.0929 lb/hr	Condition 4.5.3
PT	2.52	0.8079 lb/hr	Condition 4.5.3

3.9.1 Table 3-2 lists the required EPA Reference Methods for determining an emission factor in the event source testing is required.

3.10 LK-6 PM10 emissions shall not exceed 1.74 tons per year. Compliance with this limit is determined by multiplying 0.0510 lb/mbf by the volume of lumber dried per year (mbf/yr) required to be measured and recorded by Condition 4.2.2, and as required by Condition 3.11.

3.10.1 Table 3-2 lists the required EPA Reference Methods for determining an emission factor.

3.11 Emission factors produced by source testing required by this permit shall be used to determine compliance with the emission limit in Condition 3.10 and the applicable emission limits in Tables 3-1 and 3-3 for such unit starting on the date the Permittee submits the test report, but no later than 60 days after completing the source test.

3.11.1 For boilers PB-1 and PB-2, the new emission factors resulting from required testing shall be used to calculate hourly emissions. If Region 10 requires the Permittee to conduct testing under 40 CFR 63.7515 at one load, the new emission factor shall be used to calculate daily and annual emissions. If Region 10 requires the Permittee to conduct testing under 40 CFR 63.7515 at two loads, the new emission factor resulting from required testing at the high load shall be used to calculate hourly emissions for operating rates at or above the load tested; the new emission factor from required testing at low load shall be used to calculate hourly emissions for operating rates at or below the load tested; the higher of the two new emission factors shall be used to calculate hourly emissions for operating rates between the two loads tested; and daily and annual emissions shall be calculated by summing the hourly emissions. If Region 10 requires the Permittee to conduct testing under 40 CFR 63.7515 at two loads, high load and low load will be defined in the test plan approval issued by Region 10.

- 3.12 Visible emissions from LK-6 shall not exceed 20% opacity, averaged over any consecutive six-minute period. Compliance with this emission limit is determined using EPA Reference Method 9 found in Appendix A of 40 CFR Part 60.
- 3.13 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the emission units listed in Table 1-1 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Region 10 which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 3.14 The Permittee shall install, maintain and operate the control devices listed in Table 1-1.
- 3.15 The Permittee shall take all reasonable precautions to prevent fugitive particulate matter emissions and shall maintain and operate all pollutant-emitting activities to minimize fugitive particulate matter emissions. Reasonable precautions include implementing those aspects of the Permittee's current Fugitive Dust Plan required by 40 CFR 49.126(e)(iii) that apply to emission units and activities listed in Table 1-1 of this permit and the following:
- 3.15.1 Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, grading of roads, or clearing of land;
 - 3.15.2 Application of asphalt, oil (but not used oil), water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces that can create airborne dust;
 - 3.15.3 Full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals is not sufficient or appropriate to prevent particulate matter from becoming airborne;
 - 3.15.4 Implementation of good housekeeping practices to avoid or minimize the accumulation of dusty materials that have the potential to become airborne, and the prompt cleanup of spilled or accumulated materials;
 - 3.15.5 Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - 3.15.6 Adequate containment during sandblasting or other similar operations;

- 3.15.7 Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - 3.15.8 The prompt removal from paved streets of earth or other material that does or may become airborne;
 - 3.15.9 Limiting unnecessary travel of vehicles on unpaved areas;
 - 3.15.10 Limiting the speed of vehicles traveling on unpaved areas to 15 miles per hour by appropriate signage; and
 - 3.15.11 Watering logs immediately prior to debarking as necessary during arid and windy conditions except when the ambient temperature is 32°F or less.
- 3.16 The BH-10 stack serving PCWR-SM-SD shall have a vertical orientation, and its tallest point shall be at least 41 feet above the ground.
- 3.17 The BH-11 stack serving PCWR-SM-SDB shall have a vertical orientation.

4. Testing, Monitoring and Recordkeeping Requirements

Source Testing Requirements

- 4.1 Concurrent with the first instance in which the Permittee conducts testing to satisfy 40 CFR 63.7515 that occurs at least eight months after the initial startup of LK-6, the Permittee shall measure PM_{2.5} emissions (lb/mlb steam) from boilers PB-1 and PB-2 using the methods specified in Table 3-2 and in accordance with an approved test plan.
- 4.1.1 The Permittee shall conduct all source tests under such boiler operating conditions as required for testing to satisfy 40 CFR 63.7515.
 - 4.1.2 During each source test run, the Permittee shall record the values (and time recorded) of the parameters specified in Condition 4.4. For monitoring devices that do not have continuous recording devices, the recorded values must consist of no fewer than three values recorded per test run.
 - 4.1.3 The Permittee shall determine the emission factor (lb/mlb steam) for each test run by dividing the mass emissions measured (lb/hr) by the steam produced (mlb steam/hr). The emission factors from the three runs shall be averaged to determine a single three-run-average emission factor for each operating load.

Monitoring and Recordkeeping Requirements

- 4.2 For LK-6, the Permittee shall install, calibrate, operate, and maintain, in accordance with manufacturer specifications, equipment and procedures necessary to measure, calculate and record (including the date and time of measurements or records and, if applicable, the

company or entity that performed the analyses and the analytical techniques or methods used) the following for each batch of lumber dried:

- 4.2.1 The species of wood dried;
- 4.2.2 The volume of lumber dried per batch (mbf/batch) and per year (mbf/yr);
- 4.2.3 The batch drying time per day (hr/day);
- 4.2.4 The entire batch drying time (hr/batch)
- 4.2.5 Equivalent volume of lumber dried per day (mbf/day), calculated and recorded each day using the following formula for each batch dried that day and summing the contribution of all batches:

$$\text{daily lumber volume dried (per batch)} = \frac{(\text{volume of lumber dried}) \times (\text{batch drying time today})}{(\text{entire batch drying time})};$$

- 4.2.6 The maximum set point temperature (°F) specified in the drying schedule;
- 4.2.7 The dry bulb temperature of the heated air that exits each load of lumber in each zone of the kiln (°F), continuously measured.

4.2.7.1 For each load of lumber in each zone of the kiln, calculate and record the average temperature every 60 minutes using the temperature data collected by the computerized kiln management system required by Condition 3.6 over the 60-minute period. Calculate and record the 60-minute kiln-wide average temperature using all load-specific, zone-specific 60-minute averages. Use the highest 60-minute kiln-wide average temperature measured during each batch to demonstrate compliance with Condition 3.3;

4.2.7.2 For each load of lumber in each zone of the kiln, calculate the instantaneous temperature differential by subtracting the set point temperature in the drying schedule from the dry bulb temperature of the heated air that exits the load of lumber. Record each temperature differential that exceeds 20°F and the corrective action taken to resolve the exceedance. This condition applies only when the drying schedule's set point temperature is greater than the ambient (outside) temperature.

- 4.2.8 Beginning the thirteenth hour of each batch's drying cycle, the moisture content (% , dry basis) of a representative sample of boards (minimum of two courses²) in

² A course is a single layer of lumber.

each load of lumber at a minimum of four equally-spaced locations (per load) along the length of the load using a capacitance-based in-kiln moisture measurement system, continuously measured. For partial loads, the number of monitoring locations shall be proportional to the load's length (e.g. two monitoring locations for a load spanning half the length of the kiln). Using the manufacturer's computerized kiln management system as required by condition 3.6, record the management system's calculated average of valid instantaneous measurements from all available locations every 6 minutes. Calculate and record the simple average of valid instantaneous measurements from all available locations at the end of the drying cycle, and prior to equalizing and conditioning (if done), to demonstrate compliance with Condition 3.5.

- 4.3 The dry bulb temperature and lumber moisture content measurement systems required in Condition 4.2 shall be calibrated at least every six months using the manufacturer's recommended procedures.
- 4.4 For PB-1 and PB-2, the Permittee shall install, calibrate, operate, and maintain, in accordance with manufacturer specifications, equipment and procedures necessary to measure, calculate, and record (including the date and time of measurements or records and, if applicable, the company or entity that performed the analyses and the analytical techniques or methods used) the following for each boiler:
 - 4.4.1 Steam production measured continuously and recorded hourly, daily and annually (mlb steam/hr, mlb steam/day and mlb steam/yr);
 - 4.4.2 Oxygen downstream of the combustion chamber measured continuously and recorded hourly (%);
 - 4.4.3 Pressure drop across the multiclone measured continuously and recorded hourly (inches of water);
 - 4.4.4 Secondary voltage and current measured continuously and recorded hourly for each field of the ESP (kilovolts and milliamps, respectively);
 - 4.4.5 Sparking rate for each field of the ESP measured continuously and recorded hourly; and
 - 4.4.6 Secondary power calculated and recorded hourly for each field of the ESP using secondary voltage and current (kilowatts).
- 4.5 For the planer mill and sawmill, the Permittee shall install, calibrate, operate, and maintain, in accordance with manufacturer specifications, equipment and procedures necessary to measure and record (including the date and time of measurements or records

and, if applicable, the company or entity that performed the analyses and the analytical techniques or methods used) the following:

- 4.5.1 Planer mill operating hours measured continuously and recorded daily and annually (hr/day and hr/yr);
 - 4.5.2 BH-4 fan operating hours measured continuously and recorded daily and annually (hr/day and hr/yr);
 - 4.5.3 Sawmill operating hours measured continuously and recorded daily and annually (hr/day and hr/yr); and
 - 4.5.4 Lumber entering the planer measured continuously and recorded daily and annually (mbf/day and mbf/yr).
- 4.6 For PT, measure and record the following each day:
- 4.6.1 The frequency of water applications to paved and unpaved areas (#/day-area);
 - 4.6.2 The frequency of chemical applications to paved and unpaved areas (#/day-area) and identity of the chemical agent; and
 - 4.6.3 The frequency of trips (#/day-area) to sweep paved areas.
- 4.7 Each week, the Permittee shall calculate and record the prior week's daily PM2.5 emissions (lb/day) for the emission units listed in, and in accordance with, Condition 3.8.
- 4.8 By February 28 of each year, the Permittee shall calculate and record the prior year's annual emissions as follows:
- 4.8.1 For PM2.5, calculate and record emissions (tons/yr) for the emission units listed in, and in accordance with, Condition 3.9;
 - 4.8.2 For PM10, calculate and record LK-6 emissions (tons/yr) in accordance with Condition 3.10.
- 4.9 The Permittee shall maintain files of all testing, monitoring and recordkeeping information (including all reports and notifications) and supporting information required by this permit in a form suitable and readily available for expeditious inspection and review. Support information may include all calibration and maintenance records, all original strip-chart recordings or digital records for continuous monitoring instrumentation and copies of all reports required by the permit. The files shall be retained for at least 5 years following the date of each occurrence, measurement,

maintenance, corrective action, report, or record. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Monthly/Quarterly Visible PM Survey Monitoring and Recordkeeping Requirements

- 4.10 Except as provided for in Conditions 4.11 and 4.12, once each month, the Permittee shall visually survey each potential source of fugitive dust or visible particulate emissions (that operated that month) for the presence of visible emissions or fugitive emissions of particulate matter.
- 4.10.1 The observer conducting the visual survey must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting and wind, and the presence of uncombined water on the visibility of emissions (see 40 CFR part 60, Appendix A, Method 22).
- 4.10.2 For the surveys, the observer shall select a position that enables a clear view of the emission point to be surveyed, that is at least 15 feet, but not more than 0.25 miles, from the emission point, and where the sunlight is not shining directly in the observer's eyes.
- 4.10.3 The observer shall continuously watch for visible emissions from each potential emission point for at least 15 seconds.
- 4.10.4 Any observed visible emissions or fugitive emissions of particulate matter (other than uncombined water) shall be recorded as a positive reading associated with the emission unit or pollutant emitting activity.
- 4.10.5 Surveys shall be conducted while the emission unit or pollutant emitting activity is operating, and during daylight hours.
- 4.11 For any emission unit or pollutant emitting activity that does not employ an air pollution control device or implement a work practice standard to reduce emissions, if the survey conducted pursuant to Condition 4.10 identifies no visible emissions or fugitive emissions of particulate matter for three consecutive months, the Permittee may visually survey that emission unit or pollutant emitting activity once each quarter for the presence of visible emissions or fugitive emissions of particulate matter in accordance with Conditions 4.10.1 through 4.10.5.
- 4.12 If the survey conducted pursuant to Conditions 4.10 or 4.11 identifies any visible emissions or fugitive emissions of particulate matter, the Permittee shall:

- 4.12.1 Immediately upon conclusion of the visual survey in Conditions 4.10 or 4.11, investigate the source and reason for the presence of visible emissions or fugitive emissions; and
- 4.12.2 As soon as practicable, take appropriate corrective action.
- 4.13 If the corrective actions undertaken pursuant to Condition 4.12.2 do not eliminate the visible or fugitive emissions, the Permittee shall within 24 hours of the visual survey in Conditions 4.10 or 4.11 determine the opacity of the emissions in question, for a 30-minute duration, using EPA Reference Method 9 found in Appendix A of 40 CFR Part 60.
- 4.14 If any 6-minute average opacity determined pursuant to Condition 4.13 is greater than 20%, the Permittee shall determine the opacity of the emissions in question daily, for a 30-minute duration each day, using Reference Method 9 until no 6-minute average opacity is greater than 20% for two consecutive days.
- 4.15 The Permittee shall maintain records of the following:
 - 4.15.1 Details of each visual survey, including date, time, observer and results for each emission unit and any other pollutant emitting activity;
 - 4.15.2 Date, time and type of any investigation conducted pursuant to Condition 4.12.1;
 - 4.15.3 Findings of the investigation, including the reasons for the presence of visible emissions or fugitive emissions of particulate matter;
 - 4.15.4 Date, time and type of corrective actions taken pursuant to Condition 4.12.2;
 - 4.15.5 Field, observation and data reduction records for any Reference Method 9 determination conducted on the source of visible or fugitive emissions pursuant to Condition 4.13;
 - 4.15.6 A list identifying the emission units and pollutant emitting activities that the Permittee identifies as potential sources of fugitive dust or visible particulate emissions; and
 - 4.15.7 A list identifying the emission units and pollutant emitting activities that qualify for, and for which the Permittee has elected to conduct, quarterly monitoring in accordance with Condition 4.11.
- 4.16 Exceptions. The requirements of Conditions 4.10 through 4.15 shall not apply to emissions generated by PB-1 or PB-2.

Annual Fugitive Dust Survey Monitoring and Recordkeeping Requirements

- 4.17 Once each calendar year, during typical operating conditions and meteorological conditions conducive to producing fugitive dust, the Permittee shall survey the facility to determine the sources of fugitive particulate matter emissions. For new sources or new operations, a survey shall be conducted within 30 days after commencing operation.
- 4.17.1 The Permittee shall record the results of the survey, including the date and time of the survey and identification of any sources of fugitive particulate matter emissions found; and
- 4.17.2 If sources of fugitive particulate matter emissions are present, the Permittee shall determine the reasonable precautions that will be taken to prevent or minimize fugitive particulate matter emissions.
- 4.18 The Permittee shall prepare, and update as necessary following each survey, a written plan that specifies the reasonable precautions that will be taken and the procedures to be followed to prevent fugitive particulate matter emissions, including appropriate monitoring and recordkeeping.
- 4.18.1 For construction or demolition activities, a written plan shall be prepared prior to commencing construction or demolition.
- 4.19 The Permittee shall implement the written plan, and maintain and operate all sources to minimize fugitive particulate matter emissions.
- 4.20 Efforts to comply with this section cannot be used as a reason for not complying with other applicable laws and ordinances.
- 4.21 The requirements of Conditions 4.17 through 4.20 do not apply to open burning, agricultural activities, forestry and silvicultural activities, sweat houses or lodges, non-commercial smoke houses, or activities associated with single-family residences or residential buildings with four or fewer dwelling units.

General Emission Testing Requirements

- 4.22 Unless otherwise required in this permit, for any emission testing required by this permit, the Permittee shall meet the following requirements:
- 4.22.1 Facilities for performing and observing the emission testing shall be provided that meet the requirements of 40 CFR 60.8(e) and Reference Method 1 (40 CFR Part 60, Appendix A).

- 4.22.2 Unless Region 10 determines in writing that other operating conditions are representative of normal operations or unless specified in the emission unit sections of this permit, the source shall be operated at a capacity of at least 90% but no more than 100% of maximum during all tests.
- 4.22.3 Only regular operating staff may adjust the processes or emission control devices during or within 2 hours prior to the start of a source test. Any operating adjustments made during a source test, that are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
- 4.22.4 Each source test shall follow the reference test methods specified by this permit and consist of at least three (3) valid test runs. Source test emission data shall be reported as the arithmetic average of all valid test runs and in the terms of any applicable emission limit, unless otherwise specified in the emission unit sections of this permit.
- 4.23 The Permittee may request “minor changes to test methods” and “intermediate changes to test methods,” as those terms are defined in 40 CFR 63.90, provided that such request is made in writing and approved in writing.
- 4.24 The Permittee may request alternative test methods or “major changes to test methods” (as that term is defined in 40 CFR 63.90) as follows:
- 4.24.1 The Permittee must submit a written request to Region 10 at least 60 days before the source test is scheduled to begin which includes the reasons why the alternative or major change is needed and the rationale and data to demonstrate that the alternative or major change to test method:
- 4.24.1.1 Provides equal or improved accuracy and precision as compared to the specified reference test method; and
- 4.24.1.2 Does not decrease the stringency of the standard as compared to the specified reference test method.
- 4.24.2 If requested by Region 10, the demonstration referred to in Condition 4.25.1 must use Method 301 in 40 CFR Part 63, Appendix A, to validate the alternative or major change to test method.
- 4.24.3 Region 10 must approve the request in writing.
- 4.25 The Permittee may request an extension of a source test deadline established by the permit provided the Permittee requests the extension in writing 14 days prior to the test

deadline, and the written request includes the reason for the extension request and the proposed testing date. Approval of the request shall be in writing and shall require the testing be completed as expeditiously as possible.

5. Reporting Requirements

- 5.1 The Permittee shall notify Region 10 of the following milestones related to LK-6:
 - 5.1.1 Of the date construction commences, as defined in 40 CFR 52.21(b)(9), within 30 days after the event;
 - 5.1.2 Of the date construction is completed, within 30 days after the event;
 - 5.1.3 If construction is discontinued for a period of 18 months or more, within 30 days after the period; and
 - 5.1.4 Of the actual date of initial startup, as defined in 40 CFR 60.2, and that compliance with Conditions 3.16 and 3.17 has been achieved, within 15 days after the initial startup.
- 5.2 The Permittee shall submit to Region 10 for approval a source test plan 60 days prior to any required testing. The source test plan shall include and address the following elements:
 - 5.2.1 Purpose and scope of testing;
 - 5.2.2 Source description, including a description of the operating scenarios and mode of operation during testing and including fuel sampling and analysis procedures;
 - 5.2.3 If testing at a location other than the St. Maries Complex, the address and contact details for the company operating at that location along with a detailed description of the kiln, heat source and operating system;
 - 5.2.4 Schedule/dates of testing;
 - 5.2.5 Process data to be collected during the test and reported with the results, including source-specific data identified in the emission unit sections of this permit;
 - 5.2.6 Sampling and analysis procedures, specifically requesting approval for any proposed alternatives to the reference test methods, and addressing minimum test length (e.g., one hour, 8 hours, 24 hours, etc.) and minimum sample volume;
 - 5.2.7 Sampling location description and compliance with the reference test methods;

- 5.2.8 Analysis procedures and laboratory identification;
 - 5.2.9 Quality assurance plan;
 - 5.2.10 Calibration procedures and frequency;
 - 5.2.11 Sample recovery and field documentation;
 - 5.2.12 Chain of custody procedures;
 - 5.2.13 Quality assurance/quality control project flow chart;
 - 5.2.14 Data processing and reporting;
 - 5.2.15 Description of data handling and quality control procedures; and
 - 5.2.16 Report content and timing.
- 5.3 Emission test reports shall be submitted to Region 10 within 60 days of completing any emission test required by this permit along with items required to be recorded during the test.
- 5.4 The Permittee shall promptly report to Region 10 by telephone (206-553-1331) deviations from permit conditions, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Reports shall also include the company name, permit number, and permit condition number.
- 5.4.1 For the purposes of Condition 5.4, deviation means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or record keeping required by this permit. For a situation lasting more than 24 hours that constitutes a deviation, each 24-hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:
- 5.4.1.1 A situation where emissions exceed an emission limitation;
 - 5.4.1.2 A situation where process or emissions control device parameter values indicate that an emission limitation or work practice requirement has not been met;

- 5.4.1.3 A situation in which observations or data collected demonstrate noncompliance with an emission limitation or work practice requirement required by the permit (including indicators of compliance revealed through parameter monitoring); and
- 5.4.1.4 A situation in which any testing, monitoring, recordkeeping or reporting required by this permit is not performed or not performed as required.
- 5.4.2 Reports of deviations shall be submitted to Region 10 based on the following schedule:
 - 5.4.2.1 For emissions of any regulated air pollutant that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours;
 - 5.4.2.2 For deviations of Conditions 3.2, 3.3, 3.4 and 3.5 that continue for more than two hours, the report must be made within 48 hours of the occurrence; or
 - 5.4.2.3 For all other deviations from permit requirements, the deviations shall be reported semi-annually in the annual report required by Condition 5.5 and in a semi-annual report postmarked by August 31 of each year.
- 5.4.3 Within ten working days of the occurrence of a deviation as provided in Condition 5.4.2.1 and 5.4.2.2, the Permittee shall also submit a written notice, which shall include a narrative description of the deviation and updated information as listed in Condition 5.4, to EPA.
- 5.5 The Permittee shall submit to Region 10 annual reports of any monitoring required by this permit. Each report shall include the type and frequency of monitoring performed and a summary of the results obtained by the monitoring. Each report shall be postmarked by February 28 of the following year.
 - 5.5.1 The summary of monitoring performed to satisfy Condition 4.2.7.2 shall include the time and location of the occurrence of each temperature differential that exceeds 20°F and the corrective action taken to resolve the exceedance.
- 5.6 The operation and maintenance manual required pursuant to Condition 3.7 shall be submitted to Region 10 within six months after initial startup of lumber kiln LK-6. The Permittee shall review the operation and maintenance manual annually, update it as needed, and submit updates to Region 10 within 30 days of the update.
- 5.7 Any documents required to be submitted under this permit, including notifications, reports, test data and monitoring data shall be submitted to the Region 10 address below.

A copy of each document submitted to Region 10 that does not contain confidential business information shall be sent to the Tribal address below:

Original documents go to Region 10 at:
Clean Air Act Compliance Manager
U.S. EPA – Region 10, 20-C04
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

Copies go to Tribe at:
Air Quality Manager
Coeur d’Alene Tribe
P.O. Box 408
Plummer, ID 83851-0408

6. Abbreviations and Acronyms

bf	Board feet
btu	British thermal units
CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency (also U.S. EPA)
ESP	Electrostatic precipitator
EU ID	Emission unit identification
F	Fahrenheit
hr	Hour
lb	Pound
m	Thousand
mm	Million
NAAQS	National Ambient Air Quality Standard
No.	Number
PM	Particulate matter
PM10	Particulate matter less than or equal to 10 microns in aerodynamic diameter
PM2.5	Particulate matter less than or equal to 2.5 microns in aerodynamic diameter
PSD	Prevention of significant deterioration
psig	Pounds per square inch gauge
Region 10	U.S. EPA, Region 10
SIC	Standard Industrial Code
yr	year