

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

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AFS Plant I.D. Number: 16-009-00001

Permit Analysis

Minor New Source Review Permit Permit Revision No. 4

Permit Writer: Valerie Gardner

PotlatchDeltic Land and Lumber, LLC – St. Maries Complex

Coeur d’Alene Reservation
St. Maries, Idaho

Purpose of Permit and Permit Analysis

Title 40 of the Code of Federal Regulations, 49.151-165, establish a federal new source review program in Indian Country that, among other things, establishes (a) a preconstruction permitting program for new and modified minor stationary sources and minor modifications at major sources to meet the requirements of Section 110(a)(2)(C) of the Clean Air Act; (b) a mechanism for otherwise major sources (including major sources of hazardous air pollutants) to voluntarily accept restrictions on potential to emit to become synthetic minor sources; and (c) a mechanism for case-by-case maximum achievable control technology determinations for those major sources of HAPs subject to such determinations under Section 112(g)(2) of the Clean Air Act.

This document, the permit analysis, fulfills the requirements of 40 CFR 49.157(a)(3) and (4) by describing the reviewing authority’s analysis of the application. Unlike the minor new source review permit, this Permit Analysis is not legally enforceable. 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.

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1. Introduction and Project Summary

On March 21, 2025, EPA Region 10 received a request for an administrative revision to the permit to increase the daily PM_{2.5} emission limit for the PB-2 Riley Boiler from 20.63 to 22.17 pounds per day. Table 1-1 lists in chronological order actions related to this minor NSR permit originally issued for the construction of LK-6, along with construction and startup milestones.

Table 1-1 – LK-6 Permitting Chronology and Startup Milestones

Date	Action
06/21/19	Region 10 issues PSD permit R10PSD00100 and minor NSR permit R10TNSR01800 (referred to as the “June 2019 permit” where the context requires), authorizing construction and operation of LK-6
07/22/19	PotlatchDeltic commences construction of LK-6
10/10/19	Region 10 issues R10PSD00101 and minor NSR permit R10TNSR01801 (referred to as the “October 2019 permit” where the context requires), revising June 2019 permits
10/16/19	PotlatchDeltic starts operating LK-6
10/21/19	Region 10 issues R10PSD00102, revising the PSD permit a second time
03/18/21	Region 10 issues PSD permit R10PSD00103 and minor NSR permit R10TNSR01802
06/14-15/21	PotlatchDeltic conducts PM _{2.5} source tests of PB-1 and PB-2
08/12/21	PotlatchDeltic submits test reports to EPA via CDX/CEDRI
10/14/21	Region 10 issues minor NSR permit R10TNSR01803
04/10/25	Region 10 issues minor NSR permit R10TNSR01804 to revise daily PM _{2.5} limit for PB-2

2. Administrative Permit Revisions

Under the applicable rules of the Federal minor NSR program in Indian Country, 40 CFR 49.151 to 49.164, “administrative permit revisions” are not subject to the permit application, issuance, public participation or administrative and judicial review requirements of these sections. 40 CFR 49.159(f)(2). Under 40 CFR 49.159(f)(1)(v), an administrative revision includes a revision that establishes an increase in an emissions unit’s annual allowable emissions limit for a regulated NSR pollutant, when the action that necessitates such increase is not otherwise subject to review under major NSR or under this minor NSR program. Under 40 CFR 49.159(f)(1)(vi), any other type of change that the permitting authority has determined to be similar to administrative permit revisions specified in 40 CFR 49.159(f)(1)(i) through (v) also qualifies as an administrative permit revision.

The 1.54 pound per day increase to the daily PM_{2.5} emission limit for PB-2 being made in this permit action is not subject to review under the major or minor NSR programs and incorporates a type of change that is similar to the administrative permit revision specified in 40 CFR

49.159(f)(1)(v). Therefore, this permitting action is considered an administrative permit revision to the minor NSR permit under 40 CFR 49.159(f)(1)(vi).

The existing permit includes daily and annual allowable emission limits to protect ambient air quality. The limits reflect October 14, 2021 permit revisions based on changes to the emission estimates relied on in the ambient air quality analysis supporting issuance of the original June 2019 permit. This April 10, 2025 permit revision is a further increase to the daily PM_{2.5} emission limit for PB-2 to enable the facility to generate more steam within a calendar day while continuing to protect the PM_{2.5} NAAQS. This permit revision does not include an increase to the annual allowable PM_{2.5} emissions limit.

The technical basis for increasing the daily PM_{2.5} emission limit for PB-2 is further explained below; the specific permit changes are presented in Section 4 of this Permit Analysis.

Revised PM_{2.5} Daily Emission Limit

In the October 14, 2021 administrative amendment for this permit, Region 10 increased the daily PM_{2.5} permit limit to 20.63 pounds per day for PB-2. The PB-2 limit is one of several emission limits applicable to LK-6 project-related emission units at the facility to ensure protection of the 24-hour PM_{2.5} NAAQS. The current revision will increase the PB-2 daily PM_{2.5} limit further to 22.17 pounds per day.

Region 10 conducted an analysis of air quality to ensure the requested 22.17 pound per day emissions limit would not risk a violation of the 24-hour PM_{2.5} NAAQS. Region 10 concluded from a preliminary investigation that regulatory dispersion modeling was not necessary. A conservative assessment of current background air quality and potential contribution of PB-2 emissions was conducted to form a basis for this decision. The evidence from this investigation shows background air quality has improved since the time of the original permit (2019) and the fraction increase in facility PM_{2.5} emissions from the revised PB-2 limit could only result in a small increase in facility contribution to ambient PM_{2.5} concentrations.

Background air quality conditions are determined using the hourly PM_{2.5} dataset collected at the Idaho DEQ St. Maries monitor near the PotlatchDeltic facility. Region 10 calculated a 24-hour PM_{2.5} design concentration of 26 µg/m³ (the 3-year, 2021-2023, average of 98th percentile daily 24-hour averages; the full 2024 dataset was not yet available at the time this analysis was conducted), after correcting for periods flagged by the state of Idaho for wildfire smoke impact (removed as atypical events, as advised under 40 CFR Part 51, Appendix W). The background concentration has improved compared to the value of 31 µg/m³ at the time of the original permit in 2019. This change reflects a 16% decrease in 24-hour average ambient PM_{2.5} concentration. The current concentration of 26 µg/m³ is well below the 24-hour PM_{2.5} NAAQS value of 35 µg/m³.

To calculate a conservative estimate of maximum possible increase in PM_{2.5} concentrations due to the revised permit limit, Region 10 first identified that at the current limit of 20.63 lbs/day, PB-2 represents 14% of the total allowed PM_{2.5} emissions from the LK-6 project-related emission units in the permit (based on limits listed in Table 3-1 of the permit). The revised limit of 22.17 lbs/day represents an increase of 1.54 lbs/day or roughly a 1% increase in total PM_{2.5} emissions allowed. The increased PM_{2.5} emissions from the new limit could only result in a small increase in facility contribution to ambient 24-hour PM_{2.5} concentrations. Taking these

factors into account, Region 10 found no reason to be concerned in the increase in PB-2 emissions could cause or contribute to a violation of the PM2.5 NAAQS or PSD increment.

3. Additional Analyses

EPA Trust Responsibility. As part of the EPA Region 10's direct federal implementation and oversight responsibilities in Indian Country, 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, the EPA is charged with considering the interest of tribes in planning and decision-making processes. Each office within the EPA is mandated to establish procedures for regular and meaningful consultation and collaboration with Indian tribal governments in the development of EPA decisions that have tribal implications. Because the daily emission increase allowed by this administrative permit revision would not otherwise be subject to review under major or minor NSR, and because the daily emissions increase could only result in a small increase in facility contribution to ambient 24-hour PM2.5 concentrations, Region 10 has determined that this permit revision does not have tribal implications. Region 10's Air and Radiation Division has nonetheless notified the Tribal environmental staff of this administrative permit revision before finalizing this permit action.

Statutory and Policy Requirements. Given the limited scope of this permit revision, Region 10's findings related to the Endangered Species Act and National Historic Preservation Act remain unchanged from those reached in support of issuance of June 2019 minor NSR permit authorizing construction of LK-6.

On January 21, 2025, President Trump issued Executive Order (E.O.) 14173 entitled, "Ending Illegal Discrimination and Restoring Merit-Based Opportunity." E.O. 14173, among its directives, revokes E.O. 12898 entitled, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations" issued February 11, 1994. E.O. 12198 was the basis for Region 10's attempt to identify and address disproportionately high and adverse human health or environmental effects of PotlatchDeltic's original minor NSR application (for the St. Maries Complex) on minority populations and low-income populations. With the revocation of E.O. 12898, Region 10 is no longer considering environmental justice in its minor NSR permitting actions, including this one for PotlatchDeltic's St. Maries Complex.

4. Permit Changes

The changes to the permit are explained below in the order that the permit is organized:

- Permit Section: Title Page
- Permit Section: Permit History
- Permit Section 1: Source Information and Project Description
- Permit Section 2: General Requirements
- Permit Section 3: Emission Limitations and Work Practice Requirements
- Permit Section 4: Monitoring and Recordkeeping Requirements
- Permit Section 5: Reporting Requirements

All changes are transcribed below. New text appears in underlined font, deleted text appears in ~~strikeout~~ font.

Permit Section – Title Page

No revisions.

Permit Section – Permit History

As discussed in Section 2, Region 10 is revising Permit History section of the permit to add this administrative permit revision as follows:

<i>Permit Action Date</i>	<i>Permit Number</i>	<i>Permit Action Description</i>
<u>04/10/2025</u>	<u>R10TNSR01804</u>	<u>Revision No. 4 – administrative permit revision to change the daily PM2.5 emission limit for PB-2</u>

Permit Section 1 – Source Information and Project Description

No revisions.

Permit Section 2 – General Requirements

No revisions.

Permit Section 3 – Emission Limitations and Work Practice Requirements

As discussed in Section 2, Region 10 is revising Condition 3.8 of the permit as follows to increase the daily PM2.5 emission limit for PB-2.

Permit Condition 3.8:

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

<i>Emission Unit</i>	<i>Emission Limit</i>	<i>Emission Factor, units</i>	<i>Operation</i>
<i>PB-2</i>	20.63 <u>22.17</u>	<i>0.00897 lb/mlb steam</i>	<i>Condition 4.3.1</i>

Permit Section 4 – Testing, Monitoring and Recordkeeping Requirements

No revisions.

Permit Section 5 – Reporting Requirements

No revisions.

5. Public Participation

As discussed in Section 2 of this Permit Analysis, EPA Region 10 is administratively revising the permit under 40 CFR 49.159(f). As provided in 40 CFR 49.159(f)(2), an administrative permit revision is not subject to the permit application, issuance, public participation or administrative and judicial review requirements of the minor NSR program.

6. Abbreviations, Acronyms and Symbols

AQIA	Air quality impact analysis
Bf	Board feet
Btu	British thermal units

CAA	Clean Air Act [42 U.S.C. section 7401 et seq.]
CFR	Code of Federal Regulations
CO	Carbon monoxide
EF	Emission factor
EJ	Environmental Justice
EPA	United States Environmental Protection Agency (also U.S. EPA)
ESA	Endangered Species Act
ESP	Electrostatic Precipitator
EU	Emission Unit
F	Fahrenheit
FARR	Federal Air Rules for Reservations
FDP	Fugitive Dust Plan
HAP	Hazardous air pollutant
Hr	Hour
Lb	Pound (lbs = pounds)
M	Thousand
Mm	Million
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
mNSR	Minor New Source Review program
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Parts 61 and 63)
NHPA	National Historical Preservation Act
NO _x	Nitrogen oxides
NSPS	New Source Performance Standard
PM	Particulate matter
PM ₁₀	Particulate matter less than or equal to 10 microns in aerodynamic diameter
PM _{2.5}	Particulate matter less than or equal to 2.5 microns in aerodynamic diameter
PSD	Prevention of significant deterioration
PTE	Potential to emit
Region 10	U.S. EPA, Region 10
RM	EPA Reference Method, as in EPA RM 5
SIC	Standard Industrial Code
SO ₂	Sulfur dioxide
Tpy	Tons per year
VOC	Volatile organic compound