



State of Idaho
Department of Environmental Quality
Air Quality Division

**AIR QUALITY PERMIT
STATEMENT OF BASIS**

Permit to Construct No. P-2008.0009

Final

Potlatch Forest Products Corporation

Pulp and Paperboard Division

Lewiston, Idaho

Facility ID No. 069-00001

April 24, 2008

Dan Pitman, P.E.

Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. FACILITY INFORMATION	4
2. APPLICATION SCOPE	4
3. TECHNICAL ANALYSIS.....	5
4. REGULATORY REVIEW	6
5. PERMIT FEES	8
6. PUBLIC COMMENT	9
APPENDIX A – AIRS INFORMATION	10

Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
gr	grain (1 lb = 7,000 grains)
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
HAPs	Hazardous Air Pollutants
hp	horsepower
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PC	permit condition
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	Synthetic Minor
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/yr	tons per year
µg/m ³	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No. 069-00001

1. FACILITY INFORMATION

1.1 Facility Description

The Potlatch Forest Products Corporation (Potlatch) manufactures paper products at the Lewiston facility. This permit addresses a project to replace Power Boilers No. 2 and No. 3 with two proposed Package Boilers. These boilers produce steam for production operations at the Potlatch facility in Lewiston. The output from these boilers supplies steam to the facility's 600 psig steam header system.

1.2 Permitting History

This PTC is for a revision of an existing permit for Package Boilers that may replace existing boilers. Following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

November 9, 2006 PTC No. P-050208 issued for package boilers (S)

2. APPLICATION SCOPE

Potlatch has requested to revise the existing permit for the package boilers to correct the rated input capacity of the No. 3 Power Boiler from 269 MMBtu/hr to 250 MMBtu/hr. Potlatch had inadvertently given the incorrect input capacity in the original application for the permit. Additionally, Potlatch has requested to:

- remove the condition from the permit that specifies that the permit will expire if the boiler replacements have not occurred within 2 years of permit issuance; and
- update the PSD avoidance monitoring requirements (40 CFR 52.21(r)(6)) to be consistent the regulatory changes that have occurred since the permits original issuance.

2.1 Application Chronology

January 23, 2008	DEQ received Potlatch's application for permit revisions
February 25, 2008	DEQ determined the application complete
April 4, 2008	DEQ received a \$250 permit processing fee
April 22, 2008	DEQ received a \$1,000 permit to construct application fee

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No. 069-00001

3. TECHNICAL ANALYSIS

Table 3.1 lists the emissions units included in this permit.

Table 3.1 EMISSION UNIT AND CONTROL DEVICE INFORMATION

Emissions Units / Processes	Emissions Control Device
Package Boiler with a rated heat input capacity less than or equal to 250 MMBtu/hr	None
Package Boiler with a rated heat input capacity less than or equal to 336 MMBtu/hr	None

3.1 Emissions Inventory

An emissions inventory was not required to be submitted as part of the application to revise the existing permit to construct for the replacement boilers (Package Boilers). The application was submitted to correct the rated input capacity of Power Boiler No. 3 from 269 MMBtu/hr to 250 MMBtu/hr. The change out of the boiler is only allowed if the boiler change qualifies as a "replacement" under the PSD program (40 CFR 52.21(b)(33)). In order to qualify as a replacement unit, the new unit's maximum rated input capacity can not exceed that of the unit that is being replaced. Therefore, the rated input capacity of Power Boiler No. 3 needs to be corrected to its actual input rated capacity of 250 MMBtu/hr.

At the time of boiler replacement, Potlatch will be required to conduct an emission inventory to determine baseline actual emissions and projected actual emissions in order to determine PSD applicability and to determine whether monitoring of emissions is required after the change. Monitoring is required if projected actual emissions exceed baseline actual emissions by equal to or greater than 50% of a what is defined as a significant emission rate for any NSR regulated air pollutant.

An emissions inventory was submitted with the application for the original permit that was issued on November 9, 2006 and was used to determine compliance with the ambient standards. Reducing the boiler's rated input capacity from 269 MMBtu/hr to 250 MMBtu/hr results in a decrease of emissions from those used in the initial ambient impact assessment.

3.2 Ambient Air Quality Impact Analysis

In the original application for the boiler replacement project, the facility demonstrated compliance to DEQ's satisfaction that emissions from the project would not cause or significantly contribute to a violation of any ambient air quality standard, and Potlatch was issued a permit on November 9, 2006. This permit revision does not result in an increase of permitted emissions. Therefore, the ambient impact of the November 9, 2006 permit continues to demonstrate that emissions from this project will not cause or significantly contribute to a violation. The ambient impact assessment may be seen in the October 25, 2006 Statement of Basis which supports the issuance of the November 9, 2006 Permit to Construct (PTC No. P-050208).

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No.: 069-00001

4. REGULATORY REVIEW

4.1 Attainment Designation (40 CFR 81.313)

The facility is located in Nez Perce County, which is designated as attainment or unclassifiable for PM₁₀, PM_{2.5}, CO, NO₂, SO_x, and Ozone. Reference 40 CFR 81.313.

4.2 Permit to Construct (IDAPA 58.01.01.201)

The original permit to construct for the Package Boilers issued November 9, 2006 includes a rated input capacity for the No. 3 Power Boiler of 269 MMBtu/hr. The actual rated input capacity is 250 MMBtu/hr; the 269 MMBtu/hr input capacity was an oversight in the original application, and Potlatch has requested to correct it through a permit revision.

4.3 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

Potlatch is classified as a Tier I major facility in accordance with IDAPA 58.01.01.008.10 because hazardous and criteria air pollutants are emitted at levels greater than major facility thresholds. Potlatch has submitted an application to renew the Tier I operating permit and that application is currently being processed by DEQ. The Tier I Operating Permit, when renewed, will reflect the revisions being made to this permit to construct.

4.4 PSD Classification (40 CFR 52.21)

The Potlatch Pulp and Paper facility is classified as a PSD major facility. The facility is a kraft pulp mill, and the major facility threshold is 100 tons per year. Potlatch emits PM, PM₁₀, SO₂, CO and NO_x at rates greater than 100 tons per year.

4.5 NSPS Applicability (40 CFR 60)

In order for NSPS applicability to be determined, the rated input capacity and manufacture date of the boiler must be known. This permit allows installation of boilers at future dates. Since a replacement boiler project has not yet been undertaken the rated input capacity and manufacture date of the boiler(s) that will be installed is unknown. Potlatch must determine NSPS applicability at the time of boiler installation. The permit includes reference to the potentially applicable NSPS and requires the facility to provide notification to DEQ if the boilers are affected by NSPS.

4.6 NESHAP Applicability (40 CFR 61)

The boilers are not affected by any of the promulgated emissions standards of 40 CFR 61.

4.7 MACT Applicability (40 CFR 63)

The initial permit to construct issued November 9, 2006 contained requirements for the facility to perform a MACT applicability determination for 40 CFR 63 Subpart DDDDD (Industrial/Commercial/Institutional Boilers and Process Heaters). On June 8, 2007, the United States Court of Appeals vacated that regulation. Therefore, reference to that rule has been removed from the permit.

4.8 CAM Applicability (40 CFR 64)

In accordance with 40 CFR 64.2, CAM is only applicable if an emission unit uses a control device to comply with an applicable standard (§ 64.2(a)(2)). The replacement power boilers are limited to combusting natural gas and will not have a control device to comply with any applicable standards;

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No. 069-00001

therefore, CAM is not applicable.

4.9 Permit Conditions Review

This section describes only those permit conditions (PC) that have been added, modified or deleted as a result of this permitting action. All other permit conditions remain unchanged.

The General Conditions in Section 8 of the cover page of Permit to Construct No. P-050208, issued November 9, 2006 included the following requirement:

“This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.”

The formats of permits to construct have changed since the initial permit’s issuance on November 9, 2006; in part, the General Conditions section has been renamed to Permit Authority. The Permit Authority section typically includes the statement that the permit will expire if construction has not begun within two years of its issue date. However, this permit is not a typical permit in that the intent of the permit is to allow construction even after two years after permit issuance. Therefore, the expiration clause has been removed from the revised permit. In the case of the replacement boiler project, removing the expiration clause is not in conflict with any applicable rule.

Existing permit Table 2.1 has been revised to correct the rated input capacity of one of the boilers from 269 MMBtu/hr to 250 MMBtu/hr.

Existing permit condition 2.4 has been removed from the permit to construct. Permit condition 2.4 was the fuel burning equipment particulate matter grain loading standard for gaseous fuels; this requirement is included in the Facility Wide permit conditions (Section 1.16) of the Tier I operating permit, and there is no need to repeat it in this permit to construct.

Existing Permit Condition 2.6, which is for NESHAP requirements for Industrial/Commercial/Institutional Boilers and Process Heaters (40 CFR 63 Subpart DDDDD), has been removed from the permit. On June 8, 2007, the United States Court of Appeals vacated that regulation.

Existing Permit Condition 2.7.1 specified that “The permittee shall permanently discontinue operation of Power Boiler No. 2 and Power Boiler No. 3 on or before the date any Package Boiler begins operation at the facility.” This condition has been changed to require shutdown of only the boiler that is being replaced instead of requiring the shutdown of both boilers and is in permit condition 2.5.1. This allows the facility to change out only one boiler.

Existing Permit Condition 2.7.2 was revised to include all of the “replacement” requirements of 40 CFR 52.21(33). The following requirements of the regulation were added for the replacement boiler:

- The replacement boiler is identical to or functionally equivalent to the replaced boiler (40 CFR 52.21(b)(33)(ii))
- The replacement boiler does not have maximum hourly heat input and maximum hourly fuel consumption design rate greater than the replaced boiler (40 CFR 52.21(b)(33))

Existing Permit Condition 2.7.2 was revised to correct the rated input capacity for one of the boilers from 269 MMBtu/hr to 250 MMBtu/hr. Permit Condition 2.7.2 is now condition 2.5.2.

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No. 069-00001

Existing Permit Condition 2.11 (now condition 2.9) was revised to reflect a modification of the federal regulations (40 CFR 52.21 (r)(6)) that occurred after the initial permit issuance. At the time of initial permit issuance, Subsection (r)(6) required monitoring of emissions after boiler replacement if there was a “reasonable possibility” that the project would result in a significant emissions increase. At the time of the initial permit issuance the “reasonable possibility” clause was not defined. Since the original permit issuance, the regulation has been modified to include a definition of when there is a reasonable possibility. A “reasonable possibility” under paragraph (r)(6)(vi) of this section occurs when the owner or operator calculates the project to result in either:

(a) A projected actual emissions increase of at least 50 percent of the amount that is a “significant emissions increase,” as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or

(b) A projected actual emissions increase that, added to the amount of emissions excluded under paragraph (b)(41)(ii)(c)¹ of this section, sums to at least 50 percent of the amount that is a “significant emissions increase,” as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of paragraph (r)(6)(vi)(b) of this section, and not also within the meaning of paragraph (r)(6)(vi)(a) of this section, then provisions (r)(6)(ii) through (v) do not apply to the project. [This provision of the regulation is often referred to as the “demand growth exclusion”. In short, emissions that would have occurred due to growth at the facility which could have been accommodated prior to the modification are excluded from the emission increase calculation.]

The following statement has also been added to this permit condition:

“The purpose of this section of the permit is to summarize the source’s obligation to record keeping in accordance with 40 CFR 52.21(r)(6). Should there be a conflict between this permit section and 40 CFR 52.21(r)(6), 40 CFR 52.21(r)(6) shall govern.”

Table 2.2 has been deleted from the permit. This table was generated as if the modification was occurring at the time of permit issuance. The modification did not occur at that time. The baseline actual emissions and projected actual emissions included in the table can only be determined at the time that boilers are actually replaced.

Existing Permit Condition 2.12 (now condition 2.10) regarding notifications has been revised to clarify that the DEQ Lewiston Regional Office is recipient of the NSPS notification instead of EPA.

5. PERMIT FEES

The facility is subject to a \$1,000 permit to construct application fee, and a \$250 processing fee because an engineering analysis was not required and emissions do not increase. Refer to the chronology for fee receipt dates.

¹ (b)(41)(ii)(c) - Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth

STATEMENT OF BASIS

Permittee:	Potlatch Forest Products Corporation	Permit No.: P-2008.0009
Location:	Lewiston, Idaho	Facility ID No. 069-00001

6. PUBLIC COMMENT

An opportunity for public comment period is not required in accordance with IDAPA 58.01.01.209.04 because the revision of the permit does not result in an emissions increase.

APPENDIX A – AIRS INFORMATION



AIRS/AFS^a FACILITY-WIDE CLASSIFICATION^b DATA ENTRY FORM

Permittee/Facility Name: Potlatch Forest Products Corporation
Facility Location: Lewiston
AIRS Number: 069-00001

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION
								A-Attainment U-Unclassified N- Nonattainment
SO ₂	A		A				A	U
NO _x	A		A				A	U
CO	A						A	U
PM ₁₀	A						A	U
PT (Particulate)	A		A					
VOC	A						A	U
THAP (Total HAPs)	A					A		A
			APPLICABLE SUBPART					
			D, Dc, BB		S, MM			

- ^A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 ton-per-year (T/yr) threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- ^B = Actual and potential emissions below all applicable major source thresholds.
- ^C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).
- ^{NA} = Not applicable as defined in IDAPA 58.01.01.579, constructed prior to baseline dates..