

Statement of Basis

**Permit to Construct No. P-2012.0046
Project ID 61091**

**Clearwater Paper Corporation, Idaho Pulp and Paperboard Division, Lewiston
Lewiston, Idaho**

Facility ID 069-00001

Final

October 4, 2012 
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The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
ESP	electrostatic precipitator
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HHV	higher heating value
HMA	hot mix asphalt
HVLC	high volume, low concentration
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
LVHC	low volume, high concentration
m	meters
MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NCG	noncondensable gases

NESHAP	National Emission Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operation and maintenance
O ₂	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM _{2.5}	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
RICE	reciprocating internal combustion engines
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
scf	standard cubic feet
SCL	significant contribution limits
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T1	Tier I operating permit
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
TRS	total reduced sulfur
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd ³	cubic yards
µg/m ³	micrograms per cubic meter

FACILITY INFORMATION

Description

Clearwater Paper Corporation operates a kraft pulp mill in Lewiston, Idaho. The mill produces bleached kraft pulp, which is processed in three different areas. Uncoated and coated paperboard is produced in the paper machine area; market pulp is dried on the pulp dryer in the finishing area; and slurried pulp stock is pumped to the Clearwater Paper Corporation, Consumer Product Division, which is adjacent to the Idaho Pulp and Paperboard Division. The Clearwater Paper Corporation's Pulp and Paper Division and the Consumer Products Division are considered one single Tier I major facility. The Clearwater Paper Corporation Tier I is issued in two sections. One section is for the Pulp and Paper Division, and the other section is for the Consumer Products Division.

Permitting History

The following information was derived from a review of the permit files available to DEQ. Table 1 is the permitting history related to the PTC to be revised. Table 2 is the permitting history for the Pulp and Paperboard Division. Permit status is noted as active and in effect (A) or superseded (S).

Table 1 PTC PERMITTING HISTORY FOR NCG INCINERATOR AND LVHC CONTROL SYSTEM

Date	Permit Number	Project Description	Status
April 30, 1993	069-00001	PTC for NCG Incinerator	S
March 15, 1995	069-00001	PTC for NCG Incinerator	S
March 21, 1997	069-00001	PTC Amendment for NCG Incinerator	S
April 30, 1997	069-00001	PTC Amendment for NCG Incinerator	S
August 29, 1997	069-00001	PTC for NCG Incinerator	S
May 25, 2007	P-060209	PTC Amendment for NCG Incinerator	A (will be S after the issuance of this permit)

Table 2 PERMITTING HISTORY FOR PULP AND PAPERBOARD DIVISION

Date	Permit #	Project Description	Status
December 6, 1973	069-00001	PTC for #1 Recovery, #4 Kiln, Digester, Stock Washer	A - does not include restrictions
September 20, 1978		Condition PTC Letter for #4 Power Boiler	A
July 5, 1979	13-1140-0003-00 (9 pg.)	SIP Air Pollution Source Permit	A
July 5, 1979	13-1140-0001-001 (19 pg.)	SIP Air Pollution Source Permit	A
September 30, 1980	PSD-X80-18	EPA PTC for #4 Power Boiler	A
May 6, 1983	Air Permit 1140-0001	No. 5 Recovery	A - with portions superseded
July 26, 1983	13-1140-0001-00 (9 pg.)	Amendment to 79 Air Pollution Source Permit	Expired
August 22, 1984	1140-0001	Air Pollution Source Permit	Expired
December 3, 1984	PSD-X84-01	PTC for #5 Recovery Furnace	A
July 3, 1985	1140-0001-315	PTC for Trash Hog	S
August 19, 1985	1140-0001	Air Pollution Source Permit Modification- Trash Hog	Transferred to Wood Products
September 15, 1986	1140-0001	Air Pollution Source Permit Modification- Kilns	S

Date	Permit #	Project Description	Status
October 29, 1986	1140-0001	Air Pollution Source Permit Modification- Kilns	S
September 9, 1988	1140-0001	PTC for Lime Slaking and Handling	S
May 25, 1989	PSD-X84-01	EPA PTC amendment for #5 Recovery	S
July 3, 1990	1140-0001	PTC for Chlorine Dioxide	S
August 14, 1990	1140-0001	PTC for Oxygen Delignification	S
December 11, 1990	1140-0001	PTC Modification for Oxygen Delignification	S
April 30, 1993	069-00001	PTC for NCG Incinerator	S
June 22, 1994	069-00001	PTC for Chlorine Dioxide	S
September 6, 1994	069-00001	PTC for Chlorine Dioxide (Amendment)	S
September 6, 1994	069-00001	PTC for Oxygen Delignification	S
March 2, 1995	069-00001	DEQ Permit modification #5 Recovery	A
March 15, 1995	069-00001	PTC for NCG Incinerator	S
March 16, 1995	069-00001	DEQ Permit modification #5 Recovery	A
May 8, 1995	069-00001	PTC for No. 4 & 5 Saltcake	S
August 7, 1995	069-00001	PTC for No. 4 & 5 Saltcake	S
December 18, 1995	069-00001	PTC for Chlorine Dioxide	S
January 31, 1996	069-00001	PTC for Chlorine Dioxide (Amendment)	S
September 16, 1996	069-00001	PTC for Oxygen Delignification	S
January 29, 1997	069-00001	PTC for No. 4 & 5 Saltcake	A
March 21, 1997	069-00001	PTC Amendment for NCG Incinerator	S
April 30, 1997	069-00001	PTC Amendment for NCG Incinerator	S
August 29, 1997	069-00001	PTC for NCG Incinerator	S
September 3, 1998	069-00001	PTC for Temporary Boilers	S
November 6, 1998	069-00001	PTC for Temporary Boilers	A
April 28, 1999	069-00001	PTC Chlorine Dioxide Plant	S
September 22, 1999	069-00001	PTC Chlorine Dioxide Plant	S
February 14, 2000	069-00001	PTC for Chlorine Dioxide (Amendment)	A
August 31, 2001	069-00001	PTC for Thermocompressor	A
February 26, 2002	069-00001	PTC for #3&4 Lime Kilns	S
May 31, 2002	069-00001	PTC for #3&4 Lime Kilns	S
June 24, 2002	069-00001	PTC for #3&4 Lime Kilns	A
December 17, 2002	069-00001	T1 - Initial Tier I	S
February 27, 2003	069-00001	PTC for Lime Kilns - Incorporates PTC issued 6/24/02	S
August 14, 2006		Transfer permits from Potlatch to Potlatch Forest Prod.	S
November 9, 2006	P-050208	PTC for Package Boilers	S
February 21, 2007	T1-050216	Replaces T1-069-00001	S
May 25, 2007	P-060209	PTC for NCG Incinerator (amendment)	A (will be S after the issuance of this permit)

Date	Permit #	Project Description	Status
August 17, 2007	P-2007.0056	PTC Oxygen Delignification, Replaces PTC 069-00001	A
August 27, 2007	T1-2007.0057	T1- Replaces # T1-050216	S
April 24, 2008	P-2008.0009	PTC for Package Boilers (Amendment)	A
April 13, 2009	P-2009.0020	PTC for Lime Handling (Amendment)	A
January 1, 2010	T1-2007.0106	Tier I renewal	S
April 1, 2010	T1-2010.0030	DEQ initiated Tier I administrative amendment	S
February 2, 2012	P-2011.0101	PTC revision for the lime kilns. Replaced the PTC issued 2/27/2003.	A
February 22 2012	T1-2010.0030 Project 60991	Tier I administrative amendment to incorporate the PTC issued on 2/2/2012 and to correct some typos.	S
July 20, 2012	T1-2010.0030 Project 61076	Tier I administrative amendment due to Air Rules changes and ownership change for a few pieces of equipment.	A

Application Scope

This permit action is for a PTC revision at an existing Tier I facility.

As a result of the *Rules* changes, Permit Conditions 2.17, 2.18, and 2.19 in the PTC issued on May 25, 2007 contain out-of-date requirements. This permitting action is to revise the permit conditions to reflect the new requirements in the *Rules*.

The current Tier I operating permit issued on July 20, 2012 has already been updated to include these new requirements.

Application Chronology

July 18, 2012	DEQ received an application
July 19, 2012	DEQ received an application fee.
August 10, 2012	DEQ determined that the application was complete.
September 19, 2012	DEQ made available the draft permit and statement of basis for peer and regional office review.
July 19, 2012	DEQ received the permit processing fee.
October 4, 2012	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION ^a

Source ID No.	Sources	Control Equipment	Emission Point ID No.
NA	12 batch digesters, No. 1 and No. 2 M&D digesters, multiple-effect evaporator system, turpentine system, and foul condensate collection tank.	Incinerator with the SO ₂ packed bed scrubber, backed up by No. 4 lime kiln with an electrostatic precipitator (ESP) and the SO ₂ packed bed scrubber, and then backed up by No. 3 lime kiln with an ESP	NA

a. The information is taken from the PTC issued on May 25, 2007. Because no physical changes are made to the facility, the applicant did not provide information on emissions units and control equipment in the applicant.
NA: not available.

Emissions Inventories

Emissions inventory was not provided in the application because this permitting action does not change emissions.

Ambient Air Quality Impact Analyses

Modeling was not provided in the application because this permitting action does not change emissions.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Nez Perce County, which is designated as attainment or unclassifiable for PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The permittee has requested that a revised PTC be issued to the facility to replace the old requirements with the new requirements as a result of the *Rules* changes. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400-410 were not applicable to this permitting action.

KRAFT PULP MILL LVHC AND HVLC GAS VENTING NOTIFICATION AND REPORTING (IDAPA 58.01.01.818)

IDAPA 58.01.01.818..... Kraft Pulp Mill LVHC And HVLC Gas Venting Notification And Reporting

The requirements in IDAPA 58.01.01.818 were promulgated on March 29, 2012. The LVHC system included in the PTC is subject to the requirements.

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

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

This facility has a potential to emit greater than 100 tons per year for PM_{2.5}, PM₁₀, SO₂, NO_x, CO, VOC, and TRS, 10 tons per year for any one HAP, and 25 tons per year for all HAPs combined as demonstrated in the current Tier I operating permit issued on July 20, 2012.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is classified as a PSD existing major stationary source because the estimated emissions of PM_{2.5}, PM₁₀, SO₂, NO_x, CO, VOC, and TRS have the potential to exceed major stationary source thresholds (i.e., 100 T/yr for a designated facility). The facility is a designated facility (i.e., Pulp and Paper Mills) as defined in 40 CFR 52.21(b)(1)(i)(a).

This permitting action is for a permit amendment. There is no physical or operational change that causes emissions increase as a result of this permitting action. Therefore, it is not a PSD modification as defined in 40 CFR 52.21 and is not subject to PSD permitting.

NSPS Applicability (40 CFR 60)

The information on regulatory review is available in the Statements of Basis for the Tier I renewal issued on January 1, 2010 and its amendment permits issued on April 1, 2010 and February 22, 2012.

This permitting action does not change the facility's applicability to NSPS requirements.

NESHAP Applicability (40 CFR 61)

The information on regulatory review is available in the Statements of Basis for the Tier I renewal issued on January 1, 2010 and its amendment permits issued on April 1, 2010 and February 22, 2012.

This permitting action does not change the facility's applicability to NESHAP requirements.

MACT Applicability (40 CFR 63)

The information on regulatory review is available in the Statements of Basis for the Tier I renewal issued on January 1, 2010 and its amendment permits issued on April 1, 2010 and February 22, 2012.

This permitting action does not change the facility's applicability to MACT requirements.

CAM Applicability (40 CFR 64)

The information on regulatory review is available in the Statements of Basis for the Tier I renewal issued on January 1, 2010 and its amendment permits issued on April 1, 2010 and February 22, 2012.

This permitting action does not change the facility's applicability to CAM requirements.

Permit Conditions Review

This section describes only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action. The new texts are in bold. The deleted texts are struck out.

Old Permit Condition 2.17

Old PC 2.17 is not necessary and removed because PC 2.17 is out-of-date, and the revised permit condition (i.e., PC 2.19) copies the requirements in IDAPA 58.01.01.818 entirely.

“2.17 Reserved General Requirement

~~The permittee shall comply with IDAPA58.01.01.815-826. The following permit conditions 2.18 and 2.19 apply to LVHC gas emissions from digesters and multiple effect evaporator system. Should there be a conflict between IDAPA58.01.01.815-826, and permit conditions 2.18 and 2.19, requirements in IDAPA58.01.01.815-826 shall govern.”~~

Old Permit Condition 2.18

Old PC 2.18 is removed because the basis for this permit condition (i.e., IDAPA 58.01.01.820) is removed as a result of the *Rules* changes.

“2.18 Reserved IDAPA58.01.01.820—Digester and Evaporator Standards

~~Nonecondensibles (also called LVHC) gases from digesters and multiple effect evaporators shall be treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln. Compliance with this requirement shall be achieved by not later than July, 1972.”~~

Permit Condition 2.19

As a result of the *Rules* changes, Permit Condition 2.19 in the PTC issued on May 25, 2007 contains out of date monitoring and reporting requirements. PC 2.19 is revised to replace the old requirements with the new requirements. Revised PC 2.19 reads as follows:

“2.19 IDAPA 58.01.01.818 - Kraft Pulp Mill LVHC and HVLC Gas Venting Notification and Reporting

IDAPA 58.01.01.818 is applicable to kraft pulp mill LVHC and HVLC gas venting from sources required to be controlled pursuant to 40 CFR 63, Subpart S. For purposes of IDAPA 58.01.01.130 through 136, an excess emission is defined as a continuous uncontrolled gas venting in excess of five minutes. Excess emissions notification and reporting shall be conducted pursuant to the requirements contained in IDAPA 58.01.01.130 through 136 and the permit issued to the kraft pulp mill.

~~2.19 IDAPA 58.01.01.824 Monitoring and Reporting~~

~~05 Semi-Annual Reporting Requirements~~

~~Unless otherwise authorized by the Department, excess emissions data for emissions units covered by IDAPA 58.01.01.820 shall be reported by each mill at the end of each semi-annual calendar period, as follows:~~

- ~~a. Excess emissions for the semi-annual report required by IDAPA 58.01.01.824.05 shall be defined as periods during which noncondensibles are not treated as required by IDAPA 58.01.01.820. Periods of excess emissions reported under IDAPA 58.01.01.824.05 shall not be a violation under IDAPA 58.01.01.820 provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual period does not exceed one percent (1%).~~
- ~~b. The total duration of excess emissions during the reporting period (recorded in hours).~~
- ~~c. The total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and~~
- ~~d. A breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes.”~~

General Provisions

General Provisions are taken from the current PTC template.

PUBLIC REVIEW

Public Comment Opportunity

Because this permitting action does not authorize an increase in emissions, an opportunity for public comment period was not required or provided in accordance with IDAPA 58.01.01.209.04.

PROCESSING FEE

Because this permitting action does not require engineering analysis, in accordance with IDAPA 58.01.01.225, the permit processing fee is \$250.