

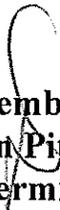
## **Statement of Basis**

**Permit to Construct P-2010.0103  
Project No. 60557  
&  
Tier I 2008.0183  
Project No. 60652**

**Clearwater Paper Corporation  
Wood Products Division  
Lewiston, Idaho**

**Facility ID No. 069-00003**

**Final**

  
**December 22, 2010  
Dan Pitman, P.E.  
Permit Writer**

**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

AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
Btu	British thermal units
CFR	Code of Federal Regulations
CO	carbon monoxide
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAP	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometers
lb/hr	pounds per hour
MACT	Maximum Achievable Control Technology
Mbf	thousand board feet
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
PC	permit condition
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
T/yr	tons per consecutive 12-calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
UTM	Universal Transverse Mercator
VOC	volatile organic compounds

## **FACILITY INFORMATION**

### ***Description***

Clearwater Paper Corporation operates the Clearwater Wood Products facility which manufactures dimensional kiln-dried lumber and trim board products. Wood waste in the forms of sawdust and chips are also produced as marketable products. Clearwater Wood Products is located in Lewiston, Idaho.

Raw logs are debarked and cut to desired lengths before entering the sawmill building. In the sawmill building the cut and debarked logs are cut to maximize the amount of lumber obtained from each log. The rough-cut green lumber is stacked before being dried in the kilns.

The existing lumber drying portion of the facility consists of 31 single-track masonry drying kilns constructed in the 1930's, manufactured by Moore, one double-track kiln, manufactured by LSI and constructed in 1988, and 4 double track kilns constructed in 1995, manufactured by Wellons. These kilns operate on steam obtained from the adjacent Clearwater Pulp and Paper facility.

Dried lumber is removed from the kilns and either stored temporarily or sent to the surfacing department where the lumber is trimmed by saws, planed, sorted, stacked, strapped, and stored before shipment as final dimensional lumber product.

Lewiston Cedar Products (also referred to as the Profiling and Specialties Departments) obtains dimensional lumber from Clearwater Wood Products' surfacing department or outside suppliers. The lumber is planed, finger-jointed and glued, planed again if needed, and sanded. Dimensional trim board is either strapped for shipment or is profiled to a desired shape, and prepared for shipment.

Wood chips, sawdust, planer dust, and sander dust from process equipment are conveyed to storage areas by either conveyor belt or pneumatic conveyance systems employing cyclones or baghouses.

### ***Permitting History***

The 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).

August 22, 1984	T2-1140-0001, Initial Tier II, Permit status (Expired)
December 10, 2002	T1-069-00003, Initial Tier I, Permit Status (Expired)
July 18, 2003	T1-030203, Admin Amendment – Name change (Expired)
August 16, 2005	P-050200, PTC for new kilns (A, but will be superseded by this permit action)
October 17, 2006	P-060205, Permit for Fuel Hog (A)
January 23, 2008	T1-2007.0095, Tier I Renewal (S)
December 23, 2008	T1-2008.0183, Admin Amendment – name change (A, but will be superseded by Admin. Amendment Associated with this PTC)

### ***Application Scope***

PTC is for a minor modification at an existing minor facility. The facility has also requested to have their Tier I operating permit administratively amended to include this permit to construct.

The applicant has proposed to:

- Dry up to 35,101 Mbf/yr of pine lumber in the kilns
- Remove toxic air pollutant emission rate limits for the kiln from the permit because the kilns are regulated by a MACT.

### ***Application Chronology***

August 16, 2010                      DEQ received an application and an application fee.

September 10, 2010	DEQ determined that the application was complete.
October 4, 2010	DEQ made available the draft permit and statement of basis for peer and regional office review.
October 7, 2010	DEQ made available the draft permit and statement of basis for applicant review.
October 28, 2010	DEQ received the permit processing fee.

## TECHNICAL ANALYSIS

### *Emissions Units and Control Devices*

Table 1 EMISSIONS UNIT AND CONTROL DEVICE INFORMATION

ID No.	Source Description	Control Equipment Description	Emissions Point ID No. and Description
NA	31 – Masonry kilns Manufacturer: Moore	None	Multiple Vents
NA	1 – Double Track Kiln Manufacturer: LSI	None	Multiple Vents
KV-1	4 – Double Track Kilns Manufacturer: LSI	None	Multiple Vents

### *Emissions Inventories*

Following are the details of the emissions changes due to the addition of pine species to the lumber drying kilns.

In the following paragraphs DEQ has calculated emissions using new VOC emission factors<sup>1</sup> that were published in the July/August, 2008 issue of the Forest Products Journal. The facility has not formally concurred with the use of these emissions factors and may provide an argument to use a different emission factor in future permitting actions. In the absence of any other information DEQ has determined that the facility's potential to emit is represented through the use of the new factors. The use of the new emission factors does not alter the outcome of this permitting action. Though for future permitting actions, in the absence of any other information, the facility will be considered an existing PSD major facility.

### Pre-Project Potential to Emit

The lumber kilns maximum permitted potential to emit of VOC is 107.1 tons per year as determined in the August 8, 2005 statement of basis which supported the issuance of the existing permit. The potential to emit for the lumber drying kilns was determined through the use of a 0.61 lb/Mbf VOC emissions factor for non-pine species of wood (the permit only allows non-pine species).

New VOC emission factors<sup>2</sup> were published in the July/August, 2008 issue of the Forest Products Journal. According to this Journal VOC emissions from drying non-pine species of wood is up to 1.206 lb/Mbf<sup>3</sup>. Because of the new emission factors the existing lumber kiln potential is 211.7 tons per year (1.206 lb/Mbf x 351,009 Mbf x ton/2000 lb = 211.7 T/yr).

Table 2 shows the potential to emit of the existing lumber drying kilns. The numbers in parentheses were calculated by DEQ using the new VOC emission factors as described above. The other numbers presented in the table are as determined in the August 8, 2005 statement of basis which supported the issuance of the existing permit.

1 Forest Products Journal, Vol. 58, July/August, Mike Milota & Paul Mosher

2 Forest Products Journal, Vol. 58, July/August, Mike Milota & Paul Mosher

3 Douglas fir

**Table 2 PRE-PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

Emission Unit	PM <sub>10</sub>	VOC
	T/yr	T/yr
<b>Point Sources</b>		
All Kilns	6.64	107.06 (211.7)
<b>Pre-Project Total</b>	<b>6.64</b>	<b>107.06 (211.7)</b>

a) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

**Post Project Potential to Emit**

The applicant has calculated that the VOC emission increase from adding pine species to the lumber drying kiln is 37.77 tons per year, based on this value the Clearwater has calculated a post project PTE for the kilns is 144.83 tons per year (107.06+37.77= 144.83 T/yr) . The 37.77 ton per year VOC emission increase was calculated based on a 2003 emission factor from the State of Oregon of 2.762 lb VOC/Mbf.

New VOC emission factors published in the July/August, 2008 issue of the Forest Products Journal show that VOC emissions from drying pine is up to 3.00 lb/Mbf. Using the new emission factor the potential to emit from the addition of pine to the lumber drying kilns is 52.65 tons per year ({3.00 lb VOC/Mbf x 35,101 mbf x ton/2000lb = 52.65 T/yr). Then the post project potential to emit for the lumber drying kilns after the addition of pine is 243.1 T/yr ({(351,009 mbf – 35,101mbf)x 1.206 lb VOC/Mbf x ton/2000lb} + 52.65 = 243.1).

In Table 3 the numbers in parentheses were calculated by DEQ using the new VOC emission factors as described above. The other numbers presented in the table are as determined in the August 8, 2005 statement of basis which supported the issuance of the existing permit.

**Table 3 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

Emission Unit	PM <sub>10</sub>	VOC
	T/yr	T/yr
<b>Point Sources</b>		
All Kilns	6.87	144.83 (243.1)
<b>Post Project Total</b>	<b>6.87</b>	<b>144.83 (243.1)</b>

a) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

**Change in Potential to Emit**

The change in potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the change in the potential to emit for criteria pollutants for the kilns.

**Table 4 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS**

Emission Unit	PM <sub>10</sub>	VOC
	T/yr	T/yr
<b>Point Sources</b>		
<b>Pre-Project Potential to Emit</b>	6.64	107.06 (211.7) <sup>a</sup>
<b>Post Project Potential to Emit</b>	6.87	144.83(243.1) <sup>a</sup>
<b>Changes in Potential to Emit</b>	<b>0.23</b>	<b>37.77 (31.4)<sup>a</sup></b>

a) The numbers in parentheses were calculated by DEQ using the new VOC emission factors

No change in fugitive emissions was assumed since total Mbf/yr of lumber processed is not increasing. Additionally fugitive emissions do not count towards the potential to emit because the facility is not a listed source category which fugitive emissions are included in the potential to emit.

### **Toxic Air Pollutants**

The lumber drying kilns are affected emission units by 40 CFR 63 Subpart DDDD (Plywood and Composite Wood Products NESHAP). Since the lumber drying kilns are affected emissions units and the TAPs emitted<sup>4</sup> from the kilns were also specifically considered in developing the MACT standards preconstruction compliance is demonstrated in accordance with IDAPA 58.01.01.210.20. Section 210 of the rules specifies that, "If the owner or operator demonstrates that the toxic air pollutant from the source or modification is regulated by the Department at the time of permit issuance under 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63, no further procedures for demonstrating preconstruction compliance will be required under Section 210 for that toxic air pollutant as part of the application process."

### **Post Project HAP Emissions**

Pre-project HAP potential to emit is greater than 10 tons per year for an individual HAP. The December 3, 2002 statement of basis which supported the issuance of the initial Tier I permit details that potential to emit of methanol is 22.3 tons per year from drying white fir in the kilns. The facility is still capable of processing the same amount of white fir and the potential to emit for methanol remains at least 22.3 tons per year. Therefore the post project potential to emit remains above major source thresholds and it is not necessary to calculate the change in HAP emissions that may result from allowing pine species to be dried in the lumber kilns.

### ***Ambient Air Quality Impact Analyses***

The change in criteria air pollutant emissions from this project are below DEQ's Air Quality Modeling Guideline modeling thresholds.

The increase of PM<sub>10</sub> emissions is 0.05 pound per hour and 0.23 tons per year, the DEQ's Air Quality Modeling Guideline threshold for modeling PM<sub>10</sub> is 0.2 pounds per hour and 1.0 tons per year. Modeling is not required because estimated emissions are below the modeling threshold.

The increase of VOC emissions is 37.77 tons per year and modeling is not required for emissions of VOCs.

## **REGULATORY ANALYSIS**

### ***Attainment Designation (40 CFR 81.313)***

The facility is located in Lewiston, Nez Perce County, Idaho, which is designated as unclassifiable/attainment for all regulated criteria pollutants (i.e., PM<sub>10</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, lead, 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 PTC be issued to the facility for the modified emissions source. 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 I Operating Permit (IDAPA 58.01.01.301)***

IDAPA 58.01.01.301

Tier I Operating Permit

The facility is currently operating under Tier I Operating permit No. T1-2008.183, issued January 23, 2008. The facility has requested that this PTC action be incorporated in the Tier I operating permit as an administrative amendment in accordance with IDAPA 58.01.01.209.05.c. In accordance with IDAPA 58.01.01.209.05.c the permit to construct must satisfy all the requirements of Sections 300 through 381 for Tier I operating permits,

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<sup>4</sup> Acetaldehyde, Formaldehyde, Methanol, Methyl Ethyl Ketone, Phenol.

including requiring a public comment period and EPA review. This permit has satisfied all of these requirements and establishes new underlying permit conditions which have been administratively included in the Tier I permit.

### ***Tier II Operating Permit (IDAPA 58.01.01.401)***

IDAPA 58.01.01.401

Tier II Operating Permit

The applicant did not apply for a Tier II operating permit in accordance with IDAPA 58.01.01.401 and the facility is not currently regulated by a Tier II operating permit.

### ***Toxic Standards (IDAPA 58.01.01.210)***

IDAPA 58.01.01.210

Preconstruction Compliance with Toxic Standards

Section 210 of the rules specifies that, "If the owner or operator demonstrates that the toxic air pollutant from the source or modification is regulated by the Department at the time of permit issuance under 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63, no further procedures for demonstrating preconstruction compliance will be required under Section 210 for that toxic air pollutant as part of the application process." The lumber drying kilns are affected emission units by 40 CFR 63 Subpart DDDD (Plywood and Composite Wood Products NESHAP). Since the lumber drying kilns are affected emissions units and the TAPs emitted<sup>5</sup> from the kiln were also specifically considered in developing the MACT standard preconstruction compliance for this project is demonstrated in accordance with IDAPA 58.01.01.210.20.

The facility has also requested that the existing toxic air pollutant emission rate limits in permit to construct No. P-050200, issued August 16, 2005 for the lumber drying kilns be removed because the lumber drying kilns were regulated by 40 CFR 63 Subpart DDDD (Plywood and Composite Wood Products NESHAP) at the time of permit issuance. This request is being granted, it was a DEQ oversight to include TAP emission limits in the permit when the TAP emissions were regulated by Subpart DDDD.

### ***PSD Classification (40 CFR 52.21)***

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The Clearwater Paper Corporation, Lumber Products Division is a separate facility from the adjacent Pulp Mill Division and Consumer Products Division as determined by the Office of Attorney General on February 6, 1997. The two facilities have different primary SIC codes and the lumber mill does not serve as a support facility for the Pulp Mill or Consumer Products Divisions. The Lumber Products Division is not a designated facility. The existing lumber products facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change that would constitute a major stationary source by itself as defined in 40 CFR 52.21(a)(2). Therefore in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action.

It should be noted that according to previous analysis the existing facilities maximum permitted potential to emit is 119.36 tons per year of VOC, with 107.1 tons per year from the lumber drying kilns<sup>6</sup>. The potential to emit for the lumber drying kilns was determined based on the use of a 0.61 lb/Mbf VOC emissions factor for non-pine species of wood (the permit only allows non-pine species). New VOC emission factors<sup>7</sup> were published in the July/August, 2008 issue of the Forest Products Journal. According to this Journal VOC emissions from drying non-pine species of wood is up to 1.206 lb/Mbf<sup>8</sup>. Then the existing lumber kiln potential to emit becomes 211.7 tons per year (1.206 lb/Mbf x 351,009 Mbf x ton/2000 lb = 211.7 T/yr). This makes the existing facilities potential to emit 224 tons per year (with 211.7 tons per year from the kilns). Therefore, even with the new emission factors the facility would still remain an existing PSD minor facility because the potential to emit is less than 250 tons per year. In order for this project to trigger PSD the increase of VOC emissions from the change would have to be 250 tons per year.

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5 Acetaldehyde, Formaldehyde, Methanol, Methyl Ethyl Ketone, Phenol.

6 As determined in the August 8, 2005 statement of basis.

7 Forest Products Journal, Vol. 58, July/August, Mike Milota & Paul Mosher

8 Douglas fir

The applicant has calculated that the emission increase from adding pine species to the lumber drying kiln results in a 37.7 ton per year increase of VOC emissions. The 37.7 ton per year VOC emission increase was calculated based on an emission factor of 2.762 lb VOC/Mbf based on 2003 emission factors from the State of Oregon. New VOC emission factors published in the July/August, 2008 issue of the Forest Products Journal show that pine emits up to 3.00 lb VOC/Mbf. Using the new emission factor the potential to emit increase from the addition of pine to the lumber drying kilns is 31.4 as shown in Table 4. Emissions increases are significantly below 250 tons per year and PSD is not triggered.

Table 5 gives the post project facility-wide potential to emit. The VOC emissions from the kiln are based on worst case emission factors which represents the facility's potential. The post project facility wide potential to emit is 255.36 tons per year of VOC. Future modifications to the facility will be subject to the major modification test for existing PSD major facilities.

**Table 5. FACILITY-WIDE POST-MODIFICATION ANNUAL POTENTIAL EMISSION INVENTORY**

Emission Unit/Source	PM	PM <sub>10</sub>		VOCs	CO	NO <sub>x</sub>	SO <sub>2</sub>
	(T/yr)	(lb/hr)	(T/yr)	(T/yr)	(T/yr)	(T/yr)	(T/yr)
Kiln Vents <sup>b</sup>	6.87	1.57	6.87	243.1			
Cyclone CY-1 <sup>a</sup>	0.14	0.07	0.14				
Cyclone, CY-2 <sup>a</sup>	0.03	0.02	0.03				
Cyclone, CY-3 <sup>a</sup>	0.06	0.03	0.06				
Cyclone, CY-4 <sup>a</sup>	0.35	0.17	0.35				
Cyclone, CY-6 <sup>a</sup>	0.21	0.11	0.21				
Cyclone, CY-18 <sup>a</sup>	0.02	0.004	0.02				
Cyclone, CY-25 <sup>a</sup>	0.64	0.16	0.64				
Cyclone, CY-26 <sup>a</sup>	0.02	0.01	0.02				
Cyclone, CY-27A <sup>a</sup>	0.07	0.02	0.07				
Cyclone, CY-27B <sup>a</sup>	0.07	0.02	0.07				
Surfacing Baghouse, BH-1 <sup>a</sup>	4.06	0.93	4.06				
Surfacing Baghouse, BH-2 <sup>a</sup>	4.28	0.98	4.28				
Surfacing Baghouse, BH-3 <sup>a</sup>	4.62	1.05	4.62				
Profile Baghouse, BH-4 <sup>a</sup>	5.07	1.16	5.07				
Profile Baghouse, BH-5 <sup>a</sup>	4.84	1.11	4.84				
Profile Baghouse, BH-6 <sup>a</sup>	3.94	0.90	3.94				
Profile Baghouse, BH-7 <sup>a</sup>	3.72	0.85	3.72				
Edge and Finger Joint Gluing, GL-1 <sup>a</sup>				3.55			
IC Engines, Firewater Pumps, IC-1, IC-2, IC-3, IC-4, IC-5 Aggregated Emissions <sup>a</sup>	6.55	1.48	6.55	7.36	19.97	92.30	6.11
IC Engine, Greenhouse Generator, IC-5 <sup>a</sup>	1.21	0.28	1.21	1.35	3.66	16.99	1.12
<b>Facility-wide totals (T/yr)</b>	<b>47.11</b>	<b>10.92</b>	<b>46.77</b>	<b>255.36</b>	<b>23.63</b>	<b>109.29</b>	<b>7.23</b>

a) Emission rates are from the August 8, 2005 statement of basis which supports the issuance of PTC No. P-050200

b) Emission rates calculated by DEQ by using the worst case VOC emissions factors published in the July/August, 2008 issue of the Forest Products Journal.

### **Obligation to Comply (IDAPA 58.01.01.212)**

Section 212 specifies that, "At such time that a particular facility or modification becomes a major facility or major modification solely by virtue of a relaxation in any enforceable emission standard or restriction on the operating rate, hours of operation or on the type or amount of material combusted, stored or processed, which was used to exempt the facility or modification from certain requirements for a permit to construct, the requirements for new major facilities or major modifications shall apply to the facility or modification as though construction had not yet commenced." Therefore it is necessary to determine if the proposed relaxation of the permit condition (remove the limit on pine species of wood) triggers PSD. From Table 5 the post project potential to emit from the lumber drying kilns does not exceed 243.1 tons per year, therefore the relaxation of the permit condition does not cause the original modification to trigger PSD (i.e. cause an emission increase of 250 tons per year).

### ***NSPS Applicability (40 CFR 60)***

The addition of pine species to the lumber drying kilns does not trigger any new NSPS requirements.

### ***NESHAP Applicability (40 CFR 61)***

The proposed source is not an affected source subject to NESHAP in 40 CFR 61, and this permitting action does not alter the applicability status of existing affected sources at the facility.

### ***MACT Applicability (40 CFR 63)***

The is source an affected source subject to NESHAP in 40 CFR 63 Subpart DDDD (Plywood and Composite Wood Products NESHAP) as explained in the January 23, 2008 statement of basis that supports the issuance of Tier I renewal Permit No. T1-2007.0095. This permitting action does not alter the regulatory MACT status of existing affected lumber kilns at the facility. As described in the January 23, 2008 statement of basis to Permit No. T1-2007.0095, the requirement to provide initial notification to EPA in accordance with 40 CFR 63.2280(b) has been satisfied by Clearwater.

### ***Permit Conditions Review***

This section describes the permit conditions for this initial permit or only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action.

Existing PTC Conditions 1 through 2.2 lists the regulated sources, and provides process and emission control descriptions. These permit conditions do not change except that they are renumbered to match the current permit to construct format.

#### Existing PTC Condition 2.3

This permit condition is the general 20% opacity limit of the rules. It is included in the facility wide permit conditions of the Tier I permit and is not repeated in this permit to construct.

#### Existing PTC Condition 2.4

Permit Condition 2.4 limited emission of acetaldehyde and formaldehyde. This permit condition limits emissions of toxic air pollutants, as described in the Toxic Standards section of this statement of basis. Because these pollutants have been regulated by 40 CFR 63 Subpart DDDD these limits were removed from the permit.

#### Existing PTC Condition 2.5

Existing PTC Condition 2.5 limits lumber drying to 351,009 Mbf/yr. This condition is maintained in the permit. A 35,101 Mbf/yr throughput limit for pine species was added consistent with the applicant's request.

#### Existing PTC Condition 2.6

This permit condition limited pine species of wood from being dried in the kiln. This permit condition has been removed from the permit.

#### Existing PTC Condition 2.7

This permit condition limited concurrent operation of the kilns being replaced with the new kilns. This permit condition has been removed from the permit. Emissions from the kilns are limited by throughput restrictions. Therefore, it does not matter how long the kilns operate concurrently provided the throughput restrictions are complied with.

#### Existing PTC Condition 2.8

This permit condition requires monitoring the throughput and species of lumber dried in the kilns. This permit condition remains in the permit.

#### Existing PTC Condition 2.9

This permit condition incorporated the MACT Subpart DDDD initial notification requirement. As described in the January 23, 2008 statement of basis for the Tier I renewal Clearwater fulfilled that requirement in January 2005. Therefore this permit condition is obsolete and has been removed from the permit.

Consistent with the existing permit, emission rate limits are not included for VOC emissions. Lumber throughput restrictions and limitations on the amount of pine species that may be processed sufficiently limits VOC emissions without a need for specific emission rate limits.

The Tier I operating permit included permit conditions identical to the PTC. Those Tier I permit conditions have been changed exactly as the PTC conditions have been changed as described above. A Tier I administrative amendment is being issued concurrently with the PTC.

## **PUBLIC REVIEW**

### ***Public Comment Period***

As required by IDAPA 58.01.01.209.05.c and IDAPA 58.01.01.364, a public comment period was made available to the public from November 10, 2010 to December 10, 2010. During this time, comments were not submitted in response to DEQ's proposed action.

## **EPA REVIEW OF PROPOSED PERMIT**

As required by IDAPA 58.01.01.209.05.c and IDAPA 58.01.01.366, DEQ provided the proposed permit to EPA Region 10 for its review and comment on November 4, 2010 via e-mail. On December 22, 2010, EPA Region 10 responded to DEQ via e-mail indicating that the permit was eligible to be issued.

## APPENDIX A – EMISSIONS INVENTORIES

**Clearwater Paper Corporation – Wood Products Division**

PTE Calculations for Dry Kilns processing up to 10 percent pine wood species.

**Table B-1. Dry Kiln – Pine Wood Species Emission Calculations**

Pollutant	EF <sub>wood species</sub> <sup>a</sup> (lb/mbf)	EF <sub>pine</sub> <sup>b</sup> (lb/mbf)		EF <sub>white pine</sub> (lb/mbf)	note	EF <sub>max</sub> (lb/mbf)	Emission Rate (t/yr)	note
		a	b					
PM <sub>10</sub>	0.022	a	a	0.051	b	0.051	0.9	d
VOC	1.71	a	a	2.762	c	2.762	48.46	d

**Notes:**

- a – Oregon DEQ Permit Application Guidance AQ-EF02 (6/26/03). VOC corrected from lb Cmbf to lb propane/mbf (44/36).
- b – No particulate matter emission data available for white pine. Use maximum emission factor for other wood species (Hemlock emission factor from Oregon DEQ Guidance [note a]). PM = 0.051 (lb/mbf).
- c – University of Idaho Study (NCASIJ). VOC corrected from lb Cmbf to lb propane/mbf (44/36).
- d – Pine wood species emission rates based on maximum emission factor (redgum, ponderosa, and white pine) and 35,101 mbyr throughout.

**Table B-2. Dry Kiln – Potential to Emit**

	Emission Rate (t/yr)	
	PM <sub>10</sub>	VOC
Pre-Project PTE <sup>a</sup>	8.64	107.06
Post-Project PTE <sup>b</sup>	8.87	144.83
Increase	0.23	37.77
IDEQ Modeling Threshold <sup>c</sup>	1	–

**Notes:**

- a – Pre-Project PTE based on drying 351,009 mbyr of current wood species (no pine species).
- b – Post-Project PTE based on 351,009 mbyr drying throughout with 80 percent current wood species (pre-project PTE) and 10 percent pine species (see Table B-1).
- c – Modeling Thresholds for Criteria Pollutants provided in Table 1 of State of Idaho Air Quality Modeling Guidelines.

## APPENDIX B – PROCESSING FEE

## PTC Fee Calculation

**Instructions:**

Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

**Company:** Clearwater -Wood Products  
**Address:** P.O.Box 1323  
**City:** Lewiston  
**State:** Idaho  
**Zip Code:** 83501  
**Facility Contact:** Jim Miller  
**Title:** Env. Coordinator  
**AIRS No.:** 069-00003

- N** Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
- Y** Did this permit require engineering analysis? Y/N
- N** Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

<b>Emissions Inventory</b>			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO <sub>x</sub>	0.0	0	0.0
SO <sub>2</sub>	0.0	0	0.0
CO	0.0	0	0.0
PM10	0.2	0	0.2
VOC	41.1	0	41.1
TAPS/HAPS	0.0	0	0.0
<b>Total:</b>	<b>0.0</b>	<b>0</b>	<b>41.3</b>
Fee Due	<b>\$ 5,000.00</b>		