Permit No.: 06-0015 Expiration Date: 07-01-04

Page 1 of 2

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON TITLE V OPERATING PERMIT ADMINISTRATIVE AMENDMENT

Western Region 750 Front Street NE, Suite 120 Salem, OR 97310 Telephone: (503) 378-8240

Issued in accordance with the provisions of ORS 468.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

INFORMATION RELIED UPON:

Weyerhaeuser Company

P. O. Box 329

North Bend, OR 97459

Department initiated

Application number 018600

PLANT SITE LOCATION:

LAND USE COMPATIBILITY STATEMENT:

Jordan Point

North Bend, OR

From:

Coos County

Dated:

09/20/93

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

John Becker, Air Quality Manager-Medford

Data

Nature of Business:

Paperboard Mill

Primary SIC:

2631

Other SIC

4961

RESPONSIBLE OFFICIAL:

FACILITY CONTACT PERSON

Name:

Title: Plant Manager

Name: Laura Seyler

Phone: (541)756-9463

Permit No.: 06-0015 Expiration Date: 07-01-04

Page 2 of 2

ADDENDUM NO. 1 Administrative Amendment

In accordance with OAR 340-218-150, Oregon Title V Operating Permit No. 06-0015 is revised by changing the facility contact person to Laura Seyler, and correcting the Plant Site Emissions Limits (PSELs) for lead. The PSELs for lead are corrected from 0.01 pounds per day and 0.01 tons per year to 0.9 pounds per day and 0.07 tons per year.



P. O. Box 329 North Bend, OR 97459 Tel (541) 756-5171 Fax (541) 756-0667

February 28, 2001

Tom Peterson P.E.
Senior Permitting Specialist
Western Region Air Quality Program
Oregon Dept. of Environmental Quality
201 West Main, Suite 2-D
Medford, Oregon 97501

RE: Contact change

Mr. Peterson

This letter and attached administrative permit amendment application serves to notify the department of a change in personnel at the Weyerhaeuser North Bend facility. Please contact me regarding any communications or issues. Thank you.

Regards,

Environmental Manager

cc: File

MAR 0 5 2001 DEQ - MEDFORD

 C_{i} en de la composition La composition de la en de la composition La composition de la

1.	Facility	name/site identifier	Weyerhaeuser Con	npany, North Bend Mill, Containerboard Packaging Business
2.	Permit	number	06-0015	
3.	Locatio	on address		
٠	а.	street address	Po Box 329, Horsf	all Beach Road
	b.	city, state, zip	North Bend, OR 9	7459
4.	Contac	t information		
	a.	name and title	Laura Seyler, Env	ironmental Manager
	b.	area code and phone nur	nber 541-756-9	463
5.	Date of	change	2/28/01	
6.	Change	e [describe]	Change in contact	name
7.	Change	e regards ownership/opera	tional control [yes/n	o] no
8.	Change	e provides more accurate e	emissions data [yes/n	o; if yes, attach appropriate form(s)] NA
9.	Constr	uction permit incorporatio	on [yes/no]	. NA
	a.	enhanced permitting pro	cedures used [yes/no	o] NA
	b.	construction, purpose [d	escribe]	NA .
	c.	changes in operating con	ditions [describe]	NA
10.	Sugges	ted permit language		NA

c) , , ,

11. Statement of Certificati	ion
------------------------------	-----

Statement of Certification:

Based on information and belief formed after reasonable inquiry, the statements and information in this document and any attachments are true, accurate and complete.

J. Fred Cassidy

Name of designated responsible official

Facility Manager Title of responsible official

Signature of responsible official

RECEIVED

MAR 0 5 2001

DEQ - MEDFORD

* **o** _ • 1

Permit No.: 06-0015 Expiration Date: 07-01-04

Page 1 of 37 Pages

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON TITLE V OPERATING PERMIT

Western Region 750 Front Street NE, Suite 120 Salem, OR 97301-1034 Telephone: (503) 378-8240

Issued in accordance with the provisions of ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:	SSUED TO:	
------------	-----------	--

Weyerhaeuser Company Containerboard Packaging

P.O. Box 329

North Bend, OR 97459

INFORMATION RELIED UPON:

Application No.: 17021 Date Received: 06/29/98

PLANT SITE LOCATION:

LAND USE COMPATIBILITY STATEMENT:

North Bend Mill Jordan Point North Bend, OR From: Coos County Dated: 09/20/93

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

John Becker, Western Region Air Manager

Date

Nature of Business:

Primary SIC:

2631 Paperboard Mills

Other SICs:

Title:

4961 Fuel Burning Equipment

RESPONSIBLE OFFICIAL:

FACILITY CONTACT PERSON

Mill Manager

Name: Ronald Newlander

Title:

Environmental Process Manager

Phone:

(541) 756-5171

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 3 of 37 Pages

volatile organic compound, as

carbon

LIST OF ABBREVIATIONS USED IN THIS PERMIT

American Society of Testing and Materials VOC **ASTM BDT** bone dry tons **CEMS** continuous emissions monitoring system Code of Federal Regulations CFR continuous monitoring system **CMS** carbon monoxide CO CO, carbon dioxide DEQ Oregon Department of Environmental Quality dscf dry standard cubic foot dry standard cubic feet per minute dscfm EF emission factor US Environmental Protection Agency **EPA** EU emissions unit **FCAA** Federal Clean Air Act gpm gallons per minute gr/dscf grain per dry standard cubic foot HAP hazardous air pollutant identification number ID inspection and maintenance I&M material balance MB MM million **MMBtu** million British thermal units National Council of the Paper Industry for Air **NCASI** and Stream Improvement, Inc. NG natural gas oxides of nitrogen NO. O₂ oxygen OAR Oregon Administrative Rules OCC old corrugated cardboard Oregon Revised Statutes ORS O&M operation and maintenance Pb lead **PCD** pollution control device PM particulate matter particulate mater less than 10 microns in size PM₁₀ parameter monitoring action level **PMAL** part per million ppm part per million by volume ppmv ppmdv part per million by dry volume **PSEL** Plant Site Emission Limit quality assurance QA quality assurance plan QAP OC. quality control scf standard cubic foot scfm standard cubic feet per minute SERP Source Emission Reduction Plan SIC Standard Industrial Code sulfur dioxide SO₂ ST source test **TAPPI** Technical Association of the Pulp and Paper Industry

TRS

VE

total reduced sulfur

visible emissions

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 4 of 37 Pages

PERMITTED ACTIVITIES

Attachment 1 of this permit provides a cross-reference for SIP rules that have been renumbered in the current Oregon Administrative Rules. [OAR 340-218-0060 and 340-218-0070]

- 1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
- 2. All conditions in this permit are federally enforceable and state enforceable.

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following [OAR 340-218-0040(3)]:

		<u> </u>	
Emissions Unit/Devices	EU ID	Pollution Control Device	PCD ID
Clippings Area	CLIP-E-1	NONE	NA
Paper Machine	PAMO-E-3	NONE	NA
#1 Boiler (STM1-E-U-001)	STM-E-1	#1 Burley Scrubbers (4)	STM1-S-P-001-C
		#1 Multiclones	STM1-X-X-001-C
#2 Boiler (STM2-E-U-002)	STM-E-2	#2 Burley Scrubbers (4)	STM2-S-P-002-C
		#2 Multiclones	STM2-X-X-002-C
Waste Water Treatment	WWT0-E-1	NONE	NA
Landfill (WWTO-A-F-011)	MISC-E-2	NONE	NA .
Hog Fuel Pite	FUG-E-505	NONE	NA
Materials Handling	FUG-E-506	NONE	NA
Paved Roads	FUG-E-507	Sweeping	NA
Unpaved Roads	FUG-E-508	Watering	NA
Aggregate Insignificant Activities:			
Woodyard Process Sewers/Drains	NA.	NONE	NA
Primary Refining	· NA	NONE	NA
Secondary Refining	NA	NONE	NA
Retention Aid Tank	NA	NONE	NA
UST air sparging (remediation)	NA	NONE	NA .
Bowser Lube System	NA	NONE	NA
Paper Machine Process Sewers/Drains	ÑA	NONE	NA
Freeman Press	NA.	NONE	NA
OCC Rejects Belt Conveyor	NA	NONE	NA

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 5 of 37 Pages

Emissions Unit/Devices	EU ID	Pollution Control Device	PCD ID
Clippings Process Sewers	NA	NONE	NA
Boiler Ash Sluice Pit	NA	NONE	NA
Steam Plant Process Sewers/Drains	NA	NONE	NA
Influent Pump Station Headworks	NA	NONE_	NA
Effluent Pump Station	NA	NONE	NA

EMISSION LIMITS AND STANDARDS

The following tables contain summaries of applicable requirements other than the Plant Site Emission Limits (PSEL), along with the monitoring methods for the emissions units to which those requirements apply.

FACILITY WIDE SUMMARY

inprinction contained		Pollutant/ Parameter Limit/Standard		Monitoring Requirements		
				Method	Condition Number	Frequency
340-208-0210(1)	4	odors and other fugitives	No nuisance	Recordkeeping	29	by complaint
340-208-0210(2)	5	fugitive dust	NA	Recordkeeping	30	quarterly
340-228-0100	6	residual fuel oil	1,75% sulfur	Recordkeeping	31	by batch
340-228-0110(1)	7	distillate fuel oil, ASTM Grade 1	0.3% sulfur	Recordkeeping	31	by batch
340-228-0110(2)	8	distillate fuel oil, ASTM Grade 2	0.5% sulfur	Recordkeeping	31	by batch
340-111-0020(2)(c) 40 CFR 279.1	9	used oil	non-hazardous waste	Recordkeeping	31, 32	by batch
340-222-0040	10	oil soaked absorbent material	< 1% of Btu heat input	Recordkeeping	33	on occurrence
40 CFR Part 68	11	Accidental release prevention	See rule	Recordkeeping	11	See rule

4. The permittee shall not allow the emission of odorous matter or other fugitive emissions so as to create nuisance conditions off the permittee's property. Nuisance conditions will be verified by the Department. The creation of nuisance conditions may, in addition to any other action the Department may take, result in a permit modification to require a compliance schedule to control the nuisance conditions. [08/23/91 ACDP 06-0015, Condition 9]

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 6 of 37 Pages

- 5. No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated; without taking reasonable precautions to prevent particulate matter from becoming airborne. [OAR 340-208-0210(2)]
- 6. The permittee shall not use any residual fuel oil containing more than 1.75 percent sulfur by weight [OAR 340-228-0100].
- 7. The permittee shall not use any distillate fuel oil containing more than 0.3 percent sulfur by weight for ASTM Grade 1 [OAR 340-228-0110(1)].
- 8. The permittee shall not use any distillate fuel oil containing more than 0.5 percent sulfur by weight for ASTM Grade 2 [OAR 340-228-0110(2)].
- 9. The permittee shall only burn used oil that meets the definition of OAR 340-111-0020(2)(c) and 40 CFR 279.1. [OAR 340-111-0020(2)(c) and 40 CFR 279.1]
- 10. The permittee is allowed to burn small amounts (less than 1% of Btu heat input) of waste material such as oil soaked absorbent materials and sawdust from incidental spills. [OAR 340-226-0140(4)]
- 11. Should the source become subject to the accidental release prevention regulations in 40 CFR Part 68, then the permittee shall submit a Risk Management Plan (RMP) by the date specified in Section 68.10.

BOILERS, EU STM-E-1 and STM-E-2 SUMMARY

EU ID	Applicable Requirement			Limit/ Action Level	Monitoring Requirements		
					Method	Permit Condition	Frequency
STM-E-1 and STM-E-2	340-208-0110(1)(5)	12	opacity	40% 3 minutes in 60 minutes	I&M periodic monitoring	34, 38, 39	continuous
	340-228-0210(1)(a)	13	PM/PM ₁₀	0.2 gr/dscf 3-hour average	ST periodic monitoring/ I&M periodic monitoring	34, 38, 39	Twice/ Continuous parameter monitoring
	340-224-0070(1) PSD limit	14	SO ₂	1776 lbs/day	Recordkeeping/ ST periodic monitoring/ I&M periodic monitoring	35, 36, 38, 39	daily/ twice/ annually
	340-224-0070(1) PSD limit	15	SO₂	173 tons/yr	Recordkeeping/ ST periodic monitoring/ I&M periodic monitoring	35, 36, 38, 39	daily/ twice/ annually
	340-222-0040	16	occ	35% by heat input, daily average	Recordkeeping	37	Daily
	340-222-0040	17	occ	30% by heat input, annual average	Recordkeeping	37	Daily

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 7 of 37 Pages

EU ID	Applicable Requirement	Permit Condition	Pollutant/ Parameter	Limit/ Action Level		Monitoring	Requirements
					Method	Permit Condition	Frequency
	340-226-0120(1)(b)	18	flow rate	104-148 gpm STM- E-1, 36-70 gpm STM- E-2, PMAL 1-hour ave	Continuous parametric monitoring	40	Continuously
	340-226-0120(1)(b)	19	exhaust temperature	125-159 °P STM-E-1, 115-170 °F STM-E-2 PMAL 1- hour ave	Continuous parametric monitoring	41	Continuously
	340-226-0120(1)(b)	20	oxygen	5-14 % excess O ₂ STM-B-1, 4.5-14 % excess O ₂ STM-E-2, PMAL 1-hour ave	Continuous parametric monitoring	42	Continuously

- 12. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions units STM-E-1 or STM-E-2 for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 40% opacity, excluding uncombined water. Opacity shall be measured in accordance with condition 34. [OAR 340-208-0110(1)(b)]
- 13. The permittee shall not cause or allow the emission of particulate matter in excess of 0.2 grain per dry standard cubic foot, from emissions units STM-E-1 or STM-E-2, corrected to 12% CO₂, as a three-hour average. Particulate matter emissions shall be measured in accordance with condition 34. [OAR 340-228-0210(1)(a)]
- 14. The permittee shall not emit more than a total of 1,776 pounds per day of sulfur dioxide from emissions units STM-E-1 and STM-E-2. Sulfur dioxide emissions shall be measured in accordance with condition 35. [OAR 340-224-0070(1) BACT, PSD limit]
- 15. The permittee shall not emit more than a total of 173 tons per year of sulfur dioxide from emissions units STM-E-1 and STM-E-2. Sulfur dioxide emissions shall be measured in accordance with condition 35. [OAR 340-224-0070(1) BACT, PSD limit]
- 16. The permittee shall not burn more than 35% by heat input value of old corrugated cardboard (OCC) rejects in emissions units STM-E-1 and STM-E-2 on a daily basis. [OAR 340-222-0040]
- 17. The permittee shall not burn more than 30% by heat input value of old corrugated cardboard (OCC) rejects in emissions units STM-E-1 and STM-E-2 on an annual basis. [OAR 340-222-0040]
- 18. In addition to the limits and standards in conditions 12 through 15, the permittee shall take corrective action any time the #1 Boiler Burley scrubber (PCD STM1-S-P-001-C) solution flow rate deviates from the range of 104-148 gpm as an hourly average, or #2 Boiler Burley scrubber (PCD STM2-S-P-002-C) solution flow rate deviates from the range of 36-70 gpm as an hourly average. These deviations and the corrective actions shall be recorded in accordance with condition 40.b. The deviation from an action level shall not necessarily be considered a violation of this permit. [OAR 340-226-0120(1)(b)]

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 8 of 37 Pages

19. In addition to the limits and standards in conditions 12 through 15, the permittee shall take corrective action any time the #1 Boiler Burley scrubber (PCD STM1-S-P-001-C) exhaust temperature deviates from the range of 125 - 159 degrees F, or the #2 Boiler Burley scrubber (PCD STM2-S-P-002-C) exhaust temperature deviates from the range of 115 - 170 degrees F. These deviations and the corrective actions shall be recorded in accordance with condition 41.b. The deviation from an action level shall not necessarily be considered a violation of permit. [OAR 340-226-0120(1)(b)]

20. In addition to the limits and standards in conditions 12 through 15, the permittee shall take corrective action any time the emissions unit STM-E-1 excess oxygen level deviates from the range of 5.0 - 14.0 % O₂, or emissions unit STM-E-2 excess oxygen level deviates from the range of 4.5 - 14.0 % O₂. These deviations and the corrective actions shall be recorded in accordance with condition 42.b. The deviation from an action level shall not necessarily be considered a violation of this permit. [OAR 340-226-0120(2)(d)]

OTHER EMISSIONS UNITS SUMMARY

EU ID	Applicable Requirement	Permit Condition	Pollutant/ Parameter	Limit	Monitoring R		equirements
	.s.e				Method	Permit Condition	Frequency
PAMO-E-3 CLIP-E-1 WWTO-E-1	340-208- 0110(2)(b)	21	opacity	20% 3 minutes in 60 minutes	I&M recordkeeping	43	quarterly
MISC-E-2 FUG-E-505 FUG-E-506 FUG-E-507 FUG-E-508	340-208- 0110(2)(b)	21	opacity	20% 3 minutes in 60 minutes	I&M recordkeeping	44	weekly

21. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions units PAMO-E-3, MISC-E-2, FUG-E-505, FUG-E-506, FUG-E-507, FUG-E-508, CLIP-E-1, or WWTO-E-1 for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water. Opacity shall be measured in accordance with condition 52. [OAR 340-208-0110(2)(b)]

INSIGNIFICANT ACTIVITIES SUMMARY

Applicable Requirement	Condition Number	1 '			nents	
				Method	Condition Number	Frequency
340-208-0110(2)(b)	22	Opacity	20%	Not required	NA	NA
340-228-0210(1)(b)	23	PM/PM ₁₀	0.1 gr/dscf	Not required	53	NA
340-226-0210	24	PM/PM ₁₀	0.1 gr/dscf	Not required	53	NA

22. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from any categorically insignificant activity or any activity included in the aggregate insignificant emissions. Opacity shall be measured in accordance with Condition 52. [OAR 340-208-

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 9 of 37 Pages

0110(2)(b)]

- 23. The permittee shall not cause or allow the emission of particulate matter, for any three-hour average period, in excess of 0.1 grains per dry standard cubic foot, corrected to 12% CO₂, from any fuel burning equipment and refuse burning equipment that is a categorically insignificant activity or any activity included in the aggregate insignificant emissions. Particulate matter emissions shall be measured in accordance with Condition 52. [OAR 340-228-0210(1)(b)]
- 24. The permittee shall not cause or allow the emission of particulate matter, for any three-hour average period, in excess of 0.1 grains per dry standard cubic foot, from any non-fugitive air contaminant source other than fuel burning and refuse burning equipment that is a categorically insignificant activity or any activity included in the aggregate insignificant emissions. Particulate matter emissions shall be measured in accordance with Condition 52. [OAR 340-226-0210(2)]

PLANT SITE EMISSION LIMITS

25. The short term plant site emissions (pounds/day) shall not exceed the following [OAR 340-222-0020 and 340-222-0040]:

EU ID	Pollutant	Short Term PSEL	Monitoring Requirements		
			Method	Condition Number	
Facility-Wide	СО	11508	Recordkeeping	45	
	NO _x	3139	Recordkeeping	45	
	PM/PM ₁₀	3518	Recordkeeping	45	
	SO ₂	1776	1776 Recordkeeping		
	TRS	100	Recordkeeping	45	
	voc	3072	Recordkeeping/ MB Recordkeeping	45/49	
	Pb	0.01	Recordkeeping	45	
Unassigned	со	0	NA	NA	
	NO _x	0	NA	NA _	
:	PM/PM ₁₀	0	NA	NA	
1	SO ₂	5135	NA	NA	
	TRS	60	NA	NA	
	VOC	609	NA	NA	
	Pb	0	NA	NA	

26. The annual plant site emissions (tons/year) shall not exceed the following [OAR 340-222-0020 and 340-222-0040]:

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 10 of 37 Pages

EU ID	Pollutant Annual PSEL		Monitoring Requirements		
			Method	Condition Number	
Facility-Wide	СО	1282	Recordkeeping	45	
	NO _x	287	Recordkeeping	45	
	PM/PM ₁₀	550	Recordkeeping	45	
	SO ₂	173	Recordkeeping	45	
	TRS	14	Recordkeeping	45	
	VOC	297	Recordkeeping/ MB Recordkeeping	45/49	
	Pb	0.01	Recordkeeping	45	
Aggregate and Insignificant	со	1	Recordkeeping	50	
	NO _x	. 1	Recordkeeping	50	
	PM/PM ₁₀	1	Recordkeeping	50	
	SO ₂	1	Recordkeeping	50	
	TRS	1	Recordkeeping	50	
	VOC	1	Recordkeeping	50	
Unassigned	CO	0	NA	NA	
	NO _x	. 0	NA	NA	
	PM/PM ₁₀	0	NA	NA	
	SO ₂	0	NA	NA	
	TRS	6	NA	NA	
	VOC	151	NA	NA	
	Pb	0	NA	NA	

^{27.} Unassigned PSELs are available for internal use by the permittee for increases of emissions upon receipt of written approval by the Department.

^{28.} The annual Plant Site Emission Limits of hazardous air pollutants for fee purposes only are the following [OAR 340-222-0060]:

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 11 of 37 Pages

EU ID	Hazardous Air Pollutant	tons/year
STM-E-1 STM-E-2	Hydrogen Chloride	14
STM-E-1 STM-E-2	Methylene Chloride	2

MONITORING REQUIREMENTS [OAR 340-218-0050(3)(a)]

Facility Wide Emissions Limits and Standards:

- 29. The permittee shall maintain a log recording all written complaints, or complaints received via telephone or facsimile by the responsible official or a designated appointee, that specifically refer to a complaint of odor or fugitive emissions or opacity from the permitted facility for monitoring pertaining to condition 4. The log shall also record permittee's actions to investigate, make a determination as to the validity of the complaint, and resolve the problem within two (2) working days of receiving the complaint or within such longer time (not to exceed five (5) working days) as is reasonably necessary. If more than five (5) working days are needed to resolve the problem, the permittee shall notify the Department within the five (5) day period.
- 30. At least once each calendar quarter at approximately 90 day intervals, the permittee shall inspect the facility for airborne particulate matter for monitoring pertaining to condition 5 and take corrective action if necessary. Inspection and maintenance records shall be recorded in a log as follows:
 - 30.a Inspection records shall be comprised of dates and times of any visible emissions observed.
 - 30.b Maintenance activity records shall be comprised of any preventative or corrective action taken as a result of the quarterly inspections.
- 31. The permittee shall monitor the sulfur content of each batch of oil (used, residual, ASTM Grade 1, ASTM Grade 2, or blends of the listed oils) received for monitoring pertaining to conditions 6 through 8 by:
 - 31.a obtaining a sulfur analysis certificate from the vendor for each batch; or
 - analyzing or having analyzed by a contract laboratory a monthly composite of representative samples taken by the permittee from each batch of fuel received. Liquid fuels shall be analyzed using ASTM D129-64, D4057-81, D4294, D1552-90 or an equivalent method approved in writing by the Department.
 - 31.c A batch is defined as a shipment to the oil storage tank located in Coos Bay unless one of the following occurs:
 - 31.c.i. If the tank in Coos Bay is unavailable, a batch is defined as each truck that is received at the mill unless the vendor certifies another alternative tank as a 'batch' in another location and provides the same level of QA/QC data.
 - 31.c.ii. If a new batch of oil is received and there is remaining oil in the onsite tank, the sulfur content of the oil remaining in the tank shall be included in the calculation of sulfur content of a new batch of oil.
- 32. The permittee shall monitor the quality of each batch of used oil received for monitoring pertaining to condition 9 by obtaining a certificate from the vendor for each batch or analyzing or having analyzed by a contract laboratory a monthly composite of representative samples taken by the permittee from each batch of fuel received.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 12 of 37 Pages

33. The permittee shall monitor and record the number of oil soaked pigs and the amount of sawdust from incidental spills upon occurrence for monitoring pertaining to condition 10.

Emissions Unit Emissions Limits and Standards:

Emissions units: Power Boilers STM-E-1 and STM-E-2

- 34. The following procedures and test methods shall be used for monitoring pertaining to conditions 12, 13, 25, and 26 for emissions units STM-E-1 and STM-E-2 at monitoring points STM1-S-P-001-C and STM2-S-P-002-C (Burley scrubber exhaust stacks):
 - 34.a All source testing shall be performed in accordance with the Department's Source Sampling Manual or an alternative method approved in writing by the Department in the Quality Assurance Plan. All source testing shall be conducted while the boiler is operating at a minimum of 90% of the normal maximum steaming rate. For purposes of this permit, the normal maximum steaming rate is defined as the 90th percentile of all hourly steam rates during a 12-month period of time immediately preceding the source test.
 - 34.b The Department shall be notified, in writing, at least 15 days prior to any source test. Instead of the 15-day prior notification, the permittee may submit a source test schedule for the year for the routine source testing. The permittee shall notify the Department only upon any changes to the routine source testing schedule or if other than the permittee performs the testing.
 - 34.c Before each source test, the permittee shall verify that the exhaust flows from the Burley scrubbers (STM1-S-P-001-C and STM2-S-P-002-C) on STM-E-1 and STM-E-2 are non-cyclonic flows.
 - 34.d At least two of the four stacks (i.e., A, B, C, and D) shall be tested simultaneously during each source test run. The testing sequence shall be as follows: AB, AC, BD, CD equaling eight total tests. A velocity traverse shall be conducted on the untested stacks either 30 minutes before, or within 30 minutes after, or during the other tests. Emission rates and concentrations shall be determined for each stack test. Multiple results for each stack shall be averaged and total source mass emission rates will be the sum of the individual average stack mass emission rates.
 - 34.e If the exhaust flow on any Burley scrubber is found to be cyclonic, a combined Texas Method 78-35.2, Method for Sampling Cyclonic Flow, from the Texas Air Control Board and DEQ Method 5 shall be used to measure particulate matter emissions on the Burley scrubbers (STM1-S-P-001-C and STM2-S-P-002-C) on STM-E-1 and STM-E-2. DEQ Method 5 alone shall be used if the flow is found to be non-cyclonic. The testing shall be conducted twice during the permit term. Successive source tests shall be at least 2 years apart.
 - 34.f During the source tests required by condition 34.e, the permittee shall record the scrubber solution flow rate, exhaust temperature, and excess oxygen levels.
 - 34.g During the source tests required by condition 34.e, the permittee shall conduct visible emissions observations using EPA Method 9 during each of the eight different source test runs, unless weather conditions are such that it is not possible to read opacity.
 - 34.h During each test, the permittee shall record the following information:
 - 34.h.i. paperboard production, hog fuel usage, oil usage, old corrugated cardboard (OCC) reject usage, and steam production; and

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 13 of 37 Pages

- 34.h.ii. Burley scrubber solution flow rates, exhaust temperature levels, and fan flows (dscfm).
- 34.i A report including the following information shall be submitted to the Department for review and approval within 60 days of completing a source test, unless otherwise approved by the Department:
 - 34.i.i. the results of the source test;
 - 34.i.ii. the results of the visible emissions observations;
 - 34.i.iii. measured scrubber solution flow rates, exhaust temperatures, and excess oxygen levels during the tests;
- 35. The following equations and procedures shall be used to determine compliance with conditions 14 and 15 for emissions units STM-E-1 and STM-E-2 or equivalent methods approved in writing by the Department:
 - 35.a The permittee shall use the following equation to calculate the predicted sulfur emissions:

$$S = (Mh \times Sh) + (Mocc \times Socc) + (Mo \times So)$$

where:

S = predicted sulfur emissions, lbs/hour;

Mh = mass of hog fuel burned, lbs/hour (bone dry);

Sh = sulfur content of hog fuel burned, lb S/lb hog fuel;

Mocc = mass of OCC rejects burned, lbs/hour (bone dry);

Socc = sulfur content of OCC rejects burned, lb S/lb OCC rejects;

Mo = mass of oil burned, lbs/hour; and

So = sulfur content of oil burned, lb S/lb oil.

- 35.a.i. The mass of hog fuel burned, (Mh), shall be measured with the hog fuel conveyor belt weightometer scales on a daily basis. The moisture content of hog fuel burned shall be measured using TAPPI Method T-258-om89 once per week. A composite sample of hog fuel shall be collected once each week by putting approximately equal quantities of material from at least four (4) locations in the hog fuel pile in a bag. After mixing, three samples will be withdrawn for analysis and reporting. The dry weight shall be used for the daily calculations for the following week. The daily dry weight rate shall be converted to an hourly rate for the equation in condition 35.a.
- 35.a.ii. The sulfur content of hog fuel burned, (Sh), shall be measured using ASTM D3177-75 or D4239-85 once each quarter. A composite sample of hog fuel shall be collected on a daily basis for one week for the quarterly analysis.
- 35.a.iii. The gross calorific value of hog fuel burned shall be measured using ASTM D2015-77 or D3286-85 once each quarter. A composite sample of hog fuel shall be collected on a daily basis for one week for the quarterly analysis.
- 35.a.iv. The mass of OCC rejects burned, (Mocc), shall be measured with the OCC rejects weighing system on a daily basis. The moisture content of OCC rejects burned shall be measured using ASTM D-3173-73 or TAPPI Method T-258-om89 once per week. A composite sample of OCC rejects shall be collected once each week by putting approximately equal quantities of OCC material from at least four (4) locations in the hog fuel pile in a bag. After mixing, three samples will be withdrawn for analysis and reporting. The dry weight shall be used for the daily calculations for the following week. The daily dry weight rate shall be converted to an hourly rate for the equation in condition 35.a.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 14 of 37 Pages

- 35.a.v. The sulfur content of OCC rejects burned, (Socc), shall be measured using ASTM D1552-90 or D4239-85 once each quarter. A composite sample of OCC rejects shall be collected on a daily basis for one week for the quarterly analysis.
- 35.a.vi. The gross calorific value of (OCC) rejects burned shall be measured using ASTM D2015 or D3286-85 once each quarter. A composite sample of OCC rejects shall be collected on a daily basis for one week for the quarterly analysis.
- 35.a.vii. The mass of oil burned, (Mo), shall be calculated based on the amount of oil burned each day, recorded from the oil flow meters and actual density of the oil. The density of each batch of oil shall be measured using ASTM D240-76 or ASTM D1298-85. The daily rate shall be converted to an hourly rate for the equation in condition 35.a.
- 35.a.viii. The sulfur content of oil burned, (So), shall be obtained from the sulfur analysis certificate provided by the vendor for each batch of oil or from an analysis performed by the permittee or a contract laboratory in accordance with condition 31.
- 35.a.ix. The gross calorific value of each batch of oil burned shall be obtained from the vendor or measured using ASTM D240-92.
- 35.a.x. The predicted sulfur emissions shall be scaled to 128 MMBtu/hour energy input.
- 35.b If the predicted sulfur emissions calculated in condition 35.a, scaled to 128 MMBtu/hour energy input, are greater than or equal to 13 lbs/hr S and less than or equal to 38 lbs/hr S, the permittee shall use the following equation to calculate the sulfur emissions:

$$Sc = 0.9 \times [14.66 - 1.12 \times S + 0.04123 \times S^{2}]$$

where:

Sc = calculated sulfur emissions, lbs/hour; S = predicted sulfur emissions, lbs/hour, as calculated in condition

= predicted sultur emissions, los/nour, as calculated in condition 35.a; and

0.9 = (1 - 0.1), removal efficiency of Burley scrubber (10%).

- 35.b.i. The calculated sulfur emissions shall be scaled back to the actual hourly energy input using the gross calorific value of each fuel measured in accordance with conditions 35.a.iii, 35.a.vi, and 35.a.ix.
- 35.b.ii. The calculated hourly sulfur emissions shall then be converted to daily sulfur dioxide emissions by multiplying by 24 hours/day and [64 lbs SO₂/mole/32 lbs S/mole].
- 35.b.iii. The daily sulfur dioxide emissions shall be added to calculate the annual sulfur dioxide emissions.
- 35.c If the predicted sulfur emissions calculated in condition 35.a, scaled to 128 MMBtu/hour energy input, are less than or equal to 13 lbs/hr S or greater than or equal to 38 lbs/hr S, the calculated sulfur emissions are assumed to be the same as the predicted sulfur emissions.
 - 35.c.i. The predicted hourly sulfur emissions shall then be converted to daily sulfur dioxide emissions by using the following equation:

 $S_{daily} = 0.9 \times [S \times 24 \text{ hours/day} \times (64 \text{ lbs } SO_2/\text{mole/32 lbs S/mole})]$

where:

0.9 = (1 - 0.1), removal efficiency of Burley scrubber (10%).

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 15 of 37 Pages

- 35.c.ii. The calculated sulfur emissions shall be scaled back to the actual hourly energy input using the gross calorific value of each fuel measured in accordance with conditions 35.a.iii, 35.a.vi, and 35.a.ix.
- 36. The following procedures and test methods shall be used to verify the equation that determines calculated sulfur emissions in condition 35.b for emissions units STM-E-1 and STM-E-2:
 - 36.a All source testing shall be performed in accordance with the Department's Source Sampling Manual or an alternative method approved in writing by the Department in the Quality Assurance Plan.
 - 36.b The Department shall be notified, in writing, at least 15 days prior to any source test.
 - 36.c EPA Method 6 or an equivalent method approved in writing by the Department shall be used on each boiler twice during the permit term.
 - 36.c.i. Sulfur dioxide concentrations shall be measured simultaneously on the inlet and the outlet of one of the four stacks.
 - 36.c.ii. A velocity traverse shall be conducted on the untested stacks either 30 minutes before or within 30 minutes after the source test. The concentration from the tested stack shall be used with the total flow rate from all four stacks to calculate the mass emission rate.
 - 36.c.iii. The removal efficiency of each of the Burley scrubbers shall be determined from the inlet and outlet source testing.
 - 36.d The permittee shall calculate the sulfur dioxide emissions using the equations in conditions 35.a and 35.b and the fuel mixtures measured during the source test.
 - 36.d.i. If the sulfur dioxide emissions measured by the source test are less than the calculated sulfur dioxide emissions from the equation plus ten (10) percent, the permittee shall continue to use the equation in condition 35.b to predict sulfur dioxide emissions.
 - 36.d.ii. If the sulfur dioxide emissions measured by the source test are greater than or equal to the calculated sulfur dioxide emissions from the equation plus ten (10) percent, the permittee shall develop a new equation with all existing source test data and calculate the square of the correlation coefficient (R²) value.
 - 36.d.ii.(1) If the R² value is greater than or equal to 0.86, the permittee shall use the new equation to calculate sulfur dioxide emissions within 60 days of the source test date.
 - 36.d.ii.(2) If the R² value is less than 0.86, the permittee shall do one of the following:
 - 36.d.ii.(2)(a) assume stoichiometric conversion of the sulfur in the oil being fired by using the equation in condition 35.a for future monitoring;
 - 36.d.ii.(2)(b) submit a compliance schedule to install a continuous sulfur dioxide emissions monitor on emissions units STM-E-1 and STM-E-2 to the Department within 90 days of the source test date; or

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 16 of 37 Pages

- 36.d.ii.(2)(c) perform additional quarterly source testing to determine daily emissions and use the material balance equation in condition 35.a to determine annual emissions. The scrubber removal efficiency measured by condition 36.c.iii may be applied to the results from the material balance equation to determine annual emissions.
- 36.d.ii.(3) Condition 36.d.ii.(2)(b) may be implemented at any time and all other SO₂ monitoring conditions will be waived once the continuous SO₂ emission monitor is installed and operating.
- 36.e A report including the following information shall be submitted to the Department for review and approval within 60 days of completing the source test, unless otherwise approved by the Department:
 - 36.e.i. the results of the source test;
 - 36.e.ii. the amount, sulfur content, and gross calorific value of each fuel burned during the source test;
 - 36.e.iii. the steam production;
 - 36.e.iv. the Burley scrubber parameters, including pH;
 - 36.e.v. the boiler operating parameters;
 - 36.e.vi. the predicted and calculated sulfur dioxide emissions using the equations in conditions 35.a and 35.b and the fuel mixtures measured during the source test; and
 - 36.e.vii. the new equation and the square of the correlation coefficient (R2) value, if required.
- 37. The permittee shall monitor the amount of OCC rejects burned in emissions units STM-E-1 and STM-E-2 daily by using the weights of the fuels measured in conditions 35.a.i, 35.a.iv and 35.a.vii and the gross calorific values measured in conditions 35.a.iii, 35.a.vi, and 35.a.ix for monitoring pertaining to condition 16. The permittee shall average each of the daily amounts of OCC rejects burned during the year to calculate the annual average amount of OCC rejects for monitoring pertaining to condition 17. The amount of OCC rejects burned shall be calculated by using the following equation:

% OCC rejects =	100 *		 lbs	iry OCC rejects × Bta dry OCC rejects	ı/lbs				
	{	lbs dry OCC rejects × Btu/lbs dry OCC rejects	+	lbs oil × Btu/lb oil	+	lbs dry ho	g fuel × Btu/li fuel	b dry hog	}

- 38. The permittee shall perform at least semi-annual inspections of the #1 boiler Burley scrubbers, STM1-S-P-001-C and the #2 boiler Burley scrubbers, STM2-S-P-002-C for water spray nozzle integrity for monitoring pertaining to conditions 12 through 15. The permittee shall also perform these inspections each time either boiler and Burley scrubbers are shut down for repair or maintenance.
 - 38.a Records of the date, time, water flow rate and temperature, recorded on inspection forms.
 - 38.b Maintenance activity records of any preventative or corrective action taken as a result of the inspections, recorded in a maintenance log.
- 39. The permittee shall perform at least annual inspections of the boiler multiclones, STM1-S-P-001-C and STM2-S-P-002-C, for wear, plugging, abrasion, and integrity for monitoring pertaining to conditions 12 through 15. The permittee shall maintain the following records to document compliance with this condition:
 - 39.a Records of the date, time, and results of the inspection, recorded on inspection forms.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 17 of 37 Pages

- 39.b Maintenance activity records of any preventative or corrective action taken as a result of the inspections, recorded in a maintenance log or on a work order kept in the files.
- 40. The permittee shall continuously monitor the scrubber solution flow rate of the #1 and #2 boiler Burley scrubbers, PCD STM1-1-S-P-001-C and STM2-S-P-002-C, for monitoring pertaining to condition 18. Real time data for the scrubber solution flow rate shall be displayed at least once every minute that each boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that each boiler is in operation. Minimum data availability shall be 75% of the operating hours per day for 90% of the operating days per quarter. Monitor availability shall be determined excluding periods of calibrations and routine maintenance. The permittee shall operate the flow rate monitors in substantial accordance with the manufacturer's written instructions. The permittee shall maintain the following records to document compliance with this condition:
 - 40.a The permittee shall calculate the scrubber solution flow as an hourly arithmetic average from the continuous parameter monitoring system data.
 - 40.b The permittee shall also monitor deviations of the emission action level for PCD STM1-S-P-001-C and STM2-S-P-002-C and the corrective actions taken and record this information in a maintenance log.
- 41. The permittee shall continuously monitor the exhaust temperature of the #1 and #2 boiler Burley scrubbers, PCD STM1-S-P-001-C and STM2-S-P-002-C, for monitoring pertaining to condition 19. Real time data for the exhaust temperature levels shall be displayed at least once every minute that each boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that each boiler is in operation. Minimum data availability shall be 75% of the operating hours per day for 90% of the operating days per quarter. Monitor availability shall be determined excluding periods of calibrations and routine maintenance. The permittee shall operate the temperature monitors in substantial accordance with the manufacturer's written instructions.
 - 41.a The permittee shall calculate the exhaust temperature as an hourly arithmetic average from the continuous parameter monitoring system data.
 - 41.b The permittee shall also monitor and record deviations of the emission action level for PCD STM1-S-P-001-C and STM2-S-P-002-C and the corrective actions taken, recorded in a maintenance log.
- 42. The permittee shall install, calibrate, maintain, and record the output of a continuous parameter monitoring system (CPMS) in substantial accordance with the manufacturer's written instructions for measuring excess oxygen on emissions unit STM-E-1 and STM-E-2 for monitoring pertaining to condition 20. Real time data for the excess oxygen shall be displayed at least once every minute that each boiler is in operation. Hourly averages of the data shall be recorded once each clock hour that each boiler is in operation. Minimum data availability shall be 75% of the operating hours per day for 90% of the operating days per quarter. Monitor availability shall be determined excluding periods of calibrations and routine maintenance.
 - 42.a The permittee shall calculate the excess oxygen as an hourly arithmetic average from the continuous parameter monitoring system data.
 - 42.b The permittee shall also monitor and record deviations of the emission action level for STM-E-1 and STM-E-2 and the corrective actions taken in a maintenance log.

Emissions units: Paper Machine PAMO-E-3, Repulping CLIP-E-1 and Wastewater Treatment WWTO-E-1

43. The permittee shall monitor visible emissions from emissions units PAMO-E-3, CLIP-E-1, and WWTO-E-1 in accordance with the Department's Source Sampling Manual, and the following procedures, test methods, and frequencies for monitoring pertaining to condition 21:

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 18 of 37 Pages

- 43.a At least quarterly, the permittee shall conduct a six-minute visible emission survey of each monitoring point of emissions units PAMO-E-3, CLIP-E-1, and WWTO-E-1 following the general procedures outlined in EPA Method 22. Condensed water vapor is not considered an emission for the purposes of this survey method. The visible emission surveys shall be performed by employees or contractors of the permittee who have been trained in the general procedures for determining the presence of visible emissions, but they do not have to be EPA Method 9 certified. The permittee shall record in a log the results of this inspection.
- 43.b If visible emissions from emissions units PAMO-E-3, CLIP-E-1, and WWTO-E-1 are identified for more than 5% of the survey time (18 seconds), modified EPA Method 9 shall be used to determine opacity in accordance with the Department's Source Sampling Manual. The Method 9 opacity shall be conducted on the affected monitoring point within 24 hours. Each modified Method 9 observation period shall be for a minimum of six minutes unless any one reading is greater than 20% opacity, in which case the observation period shall be for a minimum of 60 minutes or until a violation of the emissions standards identified in condition 21 is documented, whichever is a shorter period.
- 43.c Prior notification and a pre-test plan are not required to be submitted to the Department for each visible emissions survey or Method 9 test.

Emissions units: Landfill MISC-E-2, Hog Fuel Pile FUG-E-505, Hog Fuel Distribution FUG-E-506, Paved Roads FUG-E-507 and Unpaved Roads FUG-E-508

- 44. Instead of conducting modified EPA Method 9 or 22 testing on fugitive emissions units MISC-E-2, FUG-E-505, FUG-E-506, FUG-E-507 and FUG-E-508, the permittee shall maintain records of the following inspection and maintenance activities for monitoring pertaining to condition 21:
 - 44.a At least weekly, the permittee shall visually survey the facility for any sources of excessive fugitive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that leave the plant site boundaries. The person conducting this survey does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9 including using the proper location to observe visible emissions. If sources of excess fugitive emissions are identified during the survey, the permittee shall use water or a chemical treatment to minimize the fugitive emissions, unless cold weather would make this activity result in hazardous conditions.
 - 44.b At least weekly, the permittee shall remove earth and other material from paved roads with a sweeper, unless it is determined that the activity is not necessary because no visible emissions are observed during the day or because there is precipitation during the day, or the activity would create a hazardous situation.

Plant Site Emission Limit Monitoring

- 45. The permittee shall determine compliance with the Plant Site Emission Limits established in conditions 25 and 26 of this permit by conducting monitoring in accordance with the following procedures, test methods, and frequencies:
 - 45.a The permittee shall use a combination of production rates with emission factors (condition 45.f), SO₂ emission monitoring (condition 35) and material balance (condition 49) to calculate the facility-wide plant site emissions.
 - 45.b For the emissions units listed in condition 45.f, the permittee shall calculate the short term and annual plant site emissions using the following equation and multiplying the process parameter by the emission factor listed below for each pollutant:

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 19 of 37 Pages

 $E = \Sigma (P_{eu} \times EF_{eu})$

where:

E = Emissions, pounds/day or tons/year

P_{eu} = Process parameter for each emissions unit, units/day or

units/year as identified in condition 45.f, and

EF_{eu} = Emission factor for each emissions unit, pounds/units as

identified in condition 45.f.

45.c The permittee shall maintain daily and annual records of the process parameters identified in condition 45.f

- 45.d The daily and annual VOC plant site emissions calculated using material balance in condition 49 shall be added to the VOC plant site emissions calculated in 45.b for monitoring compliance with the facility-wide VOC PSEL.
- 45.e The daily and annual SO₂ plant site emissions calculated using equations in condition 35 shall be used for monitoring compliance with the facility-wide SO₂ PSEL.

Permit No.: 06-0015
Expiration Date: 07-01-04
Page 20 of 32 Pages

45.f The permittee shall maintain daily and annual records of the following process parameters:

once	Method 25A	Ib/BDT	0.29	0.29	bone dry tons	recycled pulp	voc	CLIP-E-1 thickener/ screens
	Not required	lb/1000gal	2e-05	2e-05	gallons	oil	Pb	
	Not required	1b/BDT	5e-05	5e-05	bone dry tons	hog fuel/OCC	Pb	
	Not required	Ib/1000gal	0.14	0.14	gallons	oii	νос	•
	Not required	lb/BDT	0.71	0.74	bone dry tons	hog fuel/OCC	VOC .	
twice	DEQ Method 5	1b/1000gal	22.58	22.58	gallons	où	PM/PM ₁₀	
twice	DEQ Method 5	lb/BDT	2.05	2.11	bone dry tons	hog fuel/OCC	PM/PM ₁₀	
twice	Method 7E	lb/1000gal	30.22	31.57	gallons	OÌ.	NO _x	
twice	Method 7E	1b/BDT	3.55	3.75	bone dry tons	hog fuel/OCC	NO _x	
twice	Method 10	1b/1000gal	8.4	10.3	gallons .	o <u>i</u>	CO .	1
twice	Method 10	ID/BDT	17.6	28.1	bone dry tons	hog fuel/OCC	. co	STM-E-2
	Not required	15/1000gal	2e-05	2e-05	gallons	oil	₽b	
	Not required	Ib/BDT	5e-05	5e-05	bone dry tons	hog fuel/OCC	Ър	
	Not required	1b/1000gal	0.14	0.14	gallons	o <u>i</u>	VOC	
одсе	Method 25A	њ/вDТ	0.08	0.16	bone dry tons	hog fuel/OCC	VOC	
twice	DEQ Method 5	lb/1000gal	22.58	22.58	gallons	oil	PM/PM ₁₀	·
twice	DEQ Method 5	Ib/BDT	2.31	2.61	bone dry tons	hog fuel/OCC	PM/PM ₁₀	
twice	Method 7E	1b/1000gaI	30.22	31.57	gallons	o <u>i</u> l	NO.	
twice	Method 7E	1b/BDT	4.18	4.94	bone dry tons	hog fuel/OCC	NO _x	
twice	Method 10	1b/1000gal	8.4	10.3	gallons	oil	co	
twice	Method 10	1b/BDT	11.3	14.1	bone dry tons	hog fuel/OCC	СО	STM-E-1
Frequency	Test Method							-
tion Testing	EF Verification Testing	Units	Annual EF	Short Term EF	Units	Process Parameter	Pollutant	OT DE

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 21 of 32 Pages

EU ID Pollutant hydropulper VOC TRS PAMO VOC TRS WWT0-1 VOC TRS MISC-E-2 PM/PM ₁₀ FUG-E-505 hog fuel/OCC pile VOC	t Process Parameter	Copies I			·	RF Verification Testing	on Testing
──╟─ ╵ ┠──┴─╟──┴─╟───┴─╟ ─			Short Term EF	Anmal EF	Units		
├──╵ ┠ ──┴─╂┈╶┖┈╏┈╏ ── ─	-					Test Method	Frequency
	recycled pulp	bone dry tons	2.0e-02	2.0e-02	Ib/BDT	Not required	i i
	recycled pulp	bone dry tons	7.5e-04	7.5e-04	Ib/BDT		
	paper	bone dry tons	62.0	0.79	16/BDT		
	paper	bone dry tons	0.015	0.015	TGB/dI		
- 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	recycled pulp	bone dry tons	0.26	0.26	lb/BDT	Not required	
	recycled pulp	bone dry tons	9.0c-02	9,0e-02	1b/BDT	Not required	
	paper	bone dry tons	0.01	0.01	15/BDT	Not required	
	paper	bone dry tons	60.0	0.09	16/BDT	Not required	
	hog fuel/OCC	bone dry tons	0.14	0.14	TG8/41	Not required	
20	hog fuel/OCC	bone dry tons	0.02	0.02	t5/BDT	Not required	
truck dump VOC	hog fuel/OCC	bone dry tons	0.014	0.014	lb/BDT	Not required	
belt conveyor VOC	hog fuel/OCC	bone dry tons	0.014	0.014	1b/BDT	Not required	
disk screen VOC	hog fuel/OCC	bone dry tons	0.014	0.014	lb/BDT	Not required	
land spreading PM/PM ₁₀	paper	bone dry tons	0.009	00:00	Ib/BDT	Not required	
truck dump PM/PM ₁₀	hog fuel/OCC	bone dry tons	0.069	690.0	Ib/BDT	Not required	
belt conveyor PM/PM ₁₀	hog fuel/OCC	bone dry tons	0.04	0.04	Ib/BDT	Not required	
disc screen PM/PM ₁₀	hog fuel/OCC	bone dry tons	0.04	0.04	1b/BDT	Not required	
land spreading TRS	paper	bone dry tons	0.01	0.01	lb/BDT	Not required	
FUG-E-507 PM/PM10	paper	bone dry tons	0.28	0.28	1b/BDT	Not required	
FUG-E-508 PM/PM ₁₀	paper	bone dry tons	0.05	0.05	lb/BDT	Not required	

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 22 of 37 Pages

- 46. The permittee shall maintain a system that tracks all the emissions from each emissions unit that comprise the facility-wide daily PSEL. The system shall perform the calculations required in condition 45.b and perform the summation. The system shall be available for inspection by Department personnel.
- 47. The permittee shall conduct emission factor verification tests in accordance with the Department's Source Sampling Manual for the PM/PM₁₀, CO, NO_x, SO₂, and VOC emission factors listed for emissions units using the test methods and minimum test frequencies listed above in condition 45.f.
 - 47.a Source testing shall be conducted at the worst case fuel combinations.
 - 47.b The source test procedures in conditions 34.a through 34.d shall also be followed.
 - 47.c When more than one test is required during the permit term, the tests shall be separated by a minimum period of 12 months.
 - 47.d The testing required in condition 34 may be used to satisfy this requirement in full or in part,
 - 47.e EPA Method 10 shall be used to measure CO emissions.
 - 47.f EPA Method 7E shall be used to measure nitrogen oxides emissions.
 - 47.g EPA Method 25A shall be used to measure volatile organic compound emissions.
 - 47.h The permittee shall submit a source test plan in accordance with the Department's Source Sampling Manual 60 days before burning wastewater treatment sludge in the hog fuel boilers, emissions units STM-E-1 and STM-E-2. The source test plan shall include a sludge sampling method. The source test shall be used to establish emission factors for all criteria pollutants while burning sludge.
 - 47.i The permittee shall notify the Department at least 15 days prior to conducting any emission factor verification tests by submitting a source test plan in accordance with the Department's Source Sampling Manual. The permittee is not required to submit a source test plan if a plan has already been approved for the emissions unit and the pollutant to be tested.
 - 47.j The permittee shall submit a summary of all emission factor verification tests to the Department within 60 days of any test. The summary shall include the following information:
 - 47.j.i. Emissions unit and monitoring point identification;
 - 47.j.ii. Emission factors in the same units as in the table in condition 45.f:
 - 47.j.iii. Emission results in pounds per hour;
 - 47.j.iv. Process parameters during the test (e.g., material throughput, types and amounts of fuels, heat input, etc.); and
 - 47.j.v. Control device operating parameters.
- 48. The emissions factors listed in condition 45.f are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs shall only be determined by the calculations contained in conditions 45 and 49 of this permit using the measured process parameters recorded during the reporting period and the emission factors contained in condition 45.f.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 23 of 37 Pages

- 49. The permittee shall monitor compliance with the daily and annual VOC PSEL established in conditions 25 and 26 for emissions unit PAMO-E-3 using the following calculations:
 - 49.a The permittee shall maintain records of the amount of mineral spirits and solvent felt wash used each day.
 - 49.b The VOC content of the materials shall be determined by material safety data sheets. If a range of VOC content is given, the middle of the range shall be used to calculate emissions.
 - 49.c Compliance with the PSEL for emissions unit PAMO-E-3 shall be monitored using the following equation:

 $V = \%V_u \times M_u \times d \times [(12 \text{ g/mole C})/\text{molecular weight of solvent}] \times \# \text{ carbon/molecule}]$

where:

V = volatile organic compounds emissions, lbs/day and tons/year; %V_u = percent VOC of material used in the process, wt/wt;
M_u = material used in the process, gallons/day and gallons/year; and d = density of material used in process, lb/gallon.

- 49.d The daily and annual VOC plant site emissions calculated using material balance shall be added to the VOC plant site emissions calculated in condition 45.b for monitoring compliance with the facility-wide VOC PSEL.
- 50. Once during each permit term, the emissions from the activities included under the aggregate insignificant emissions limits in condition 26 shall be estimated in accordance with OAR 340-218-0040(3)(c)(E). The emissions estimation may coincide with the permit renewal application.
- 51. A comprehensive Quality Assurance Plan (QAP) for all emissions monitoring shall be maintained by the permittee. The QAP shall include all elements required to insure the integrity of all required emissions and ambient monitoring data. At least annually, the Department shall be notified of any changes to the QAP.

TEST METHODS AND PROCEDURES [OAR 340-218-0050(1)]

52. Although testing is not required by this permit for the permit conditions listed below, if source testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods and averaging times to measure the pollutant emissions:

Permit Condition	Emissions Unit ID	Test Method	Averaging Time	Special Conditions
23	insignificant activities	DEQ Methods 5, 7, or 8	average of three one- hour test runs	DEQ Method 8 is for sources with exhaust gases at essentially ambient conditions (e.g., material handling cyclones); DEQ Method 7 is for direct contact combustion of other heat sources (e.g., particle and veneer dryers); DEQ Method 5 is for indirect contact fuel burning equipment (e.g., boilers) and any other source.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 24 of 37 Pages

Permit Condition	Emissions Unit ID	Test Method	Averaging Time	Special Conditions
21, 22	PAMO-E-3, MISC-E-2, FUG-E-505, FUG-E-506, FUG-E-508, CLIP-E-1, WWTO-E-1, and insignificant activities	Modified EPA Method 9	aggregate of three minutes in any 60 minute period	Each Modified Method 9 observation shall represent a period of 15 seconds for the purpose of determining the aggregate amount of time in a 60 minute period that the visible emissions are greater than the opacity limit. For the Modified EPA Method 9 tests, each observation period shall be a minimum of six (6) minutes unless any one reading is greater than the emissions limit for the emissions unit, then the observation period shall be a minimum of 60 minutes or until a violation of the emissions standard has been documented; whichever is a shorter period.
14	STM-E-1, STM-E-2	EPA Methods 6 or 6C	average of three one- hour test runs	

All testing shall be conducted in accordance with the Department's Source Sampling Manual unless otherwise specified in the special conditions column of the table above.

RECORDKEEPING REQUIREMENTS [OAR 340-218-0050(3)(b)]

- 53. The permittee shall maintain records of required monitoring information that include the following [OAR 340-218-0050(3)(b)(A)]:
 - 53.a the date, place as defined in the permit, and time of sampling or measurements;
 - 53.b the date(s) analyses were performed;
 - 53.c the company or entity that performed the analyses;
 - 53.d the analytical techniques or methods used;
 - 53.e the results of such analyses;
 - 53.f the operating conditions as existing at the time of sampling or measurement; and
 - 53.g the records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibrations drift checks).
- 54. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit shall also be retained for five (5) years.

Error! Bookmark not defined.REPORTING REQUIREMENTS [OAR 340-218-0050(3)(c)]

55. The permittee shall submit four (4) copies of the semi-annual monitoring report, covering the period from January 1 to June 30, using Department approved forms, by July 30, unless otherwise approved in writing by the Department. One copy of the report shall be submitted to the Air Quality Division, two copies to the regional office, and one copy to the EPA Region X office. The semi-annual monitoring report shall include the semi-annual compliance certification.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 25 of 37 Pages

- 56. The permittee shall submit four (4) copies of the annual monitoring report, using Department approved forms, by March 15. One copy of the report shall be submitted to the Air Quality Division, two copies to the regional office, and one copy to the EPA Region X office.
- 57. The annual monitoring report shall consist of:
 - 57.a specific annual reporting requirements:
 - 57.a.i. annual records of production;
 - 57.a.ii. annual records of the amount of fuels used;
 - 57.a.iii. hours of operation;
 - 57.b the emission fee report;
 - 57.c the excess emissions upset log; [OAR 340-214-0340] and
 - 57.d the second semi-annual compliance certification, covering the period from July 1 to December 31. [OAR 340-218-0080]
- 58. <u>Excess Emissions Reporting</u> [OAR 340-214-0300 through 340-214-0360]
 - 58.a. The permittee shall report all excess emissions in accordance with OAR 340-214-0300 through 340-214-0360. In summary, the permittee shall immediately (i.e., as soon as possible but in no case more than one hour after the beginning of the excess emission period) notify the Department by telephone or in person of any excess emission, other than pre-approved startup, shutdown, or scheduled maintenance. Notification shall, to the extent reasonably ascertainable at the time of notification, include the source name, nature of the emissions problem, name of the person making the report, name and telephone number of the contact person for further information, date and time of the onset of the upset condition, whether or not the incident was planned, the cause of the excess emission (e.g., startup, shutdown, maintenance, breakdown, or other), equipment involved in the upset, estimated type and quantity of excess emissions, estimated time of return to normal operations, efforts made to minimize emissions, and a description of remedial actions to be taken. Follow-up reporting shall be made in accordance with Department direction and OAR 340-214-0330(2) and 340-214-0340.
 - 58.b. Notification shall be made to the appropriate regional office. Current Departmental telephone numbers are:

Portland (503)229-5554 Medford (541)776-6010 Bend (541)388-6146 Pendleton (541)276-4063 Salem (503)378-8240

- 58.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during nonbusiness hours, weekends, or holidays, the permittee shall immediately notify the Department by calling the Oregon Accident Response System (OARS). The current number is 1-800-452-0311.
- 58.d. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee shall submit startup, shutdown, or scheduled maintenance procedures used to minimize excess emissions to the Department for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures shall be received by the Department in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee shall abide by the approved procedures and have a copy available at all times.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 26 of 37 Pages

- 58.e. The permittee shall notify the Department of planned startup/shutdown or scheduled maintenance events only if required by permit condition or if the source is located in a nonattainment area for a pollutant which may be emitted in excess of applicable standards.
- 58.f. The permittee shall maintain and submit to the Department a log of planned and unplanned excess emissions, on Department approved forms, in accordance with OAR 340-214-0340.
- 59. Permit Deviation Reporting [OAR 340-218-0050(3)(c)(B)]

The permittee shall promptly report, by telephone or in person, any deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Deviations are instances when any permit condition is violated. "Prompt" is defined as within seven (7) days of the deviation.

- 60. Other reporting requirements include the following:
 - 60.a. initial source test plans for each emissions unit and pollutant to be tested and requested revisions to the source test plan, thereafter;
 - 60.b. sulfur emissions predictive equation verification; and
 - 60.c. emission factor verification testing summaries.
- 61. Addresses of regulatory agencies are:

DEQ - Western Region

DEQ - Air Quality Division

Air Operating Permits

201 W Main St, Suite 2-D

811 SW Sixth Avenue

US Environmental Protection Agency

Medford, OR 97501Portland, OR 97204

Mail Stop OAQ-108

(541) 776-6010

(503) 229-5359

1200 Sixth Avenue Seattle, WA 98101

NON-APPLICABLE REQUIREMENTS [OAR 340-218-0110]

OARs and federal rules currently determined not applicable to the permittee are listed below:

62. The following OARs are not applicable because the source is not in the source category cited in the rules:

Divisions 202, 204, 210, 216, 230, 234, 236, and 238 340-218-0090, 0100, 340-220-0150 340-222-0050, 0060, 340-226-0130 340-232-0040 through 340-232-0240. 340-244-0100 through 340-244-0180, 340-248-0010, 340-248-0210 through 340-248-0280, 340-258-0110 through 340-258-0400,

340-260-0010 through 340-260-0040.

63. The following OARs are not applicable because the source does not have specific emissions units cited in the rules:

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 27 of 37 Pages

340-226-0310, 0400, 340-228-0200, 340-260-0030.

64. The following OARs are not applicable because the source is outside the special control area, non-attainment area or county cited in the rules:

Divisions 206, 240, and 242 340-208-0500 through 340-208-0670, 340-214-0200, 0210, 0220, 340-224-0050, 0090, 340-268-0030, 0040.

65. The following OARs are not applicable because the source does not burn the fuel type cited in the rules:

340-228-0120

66. The following OARs are not applicable because the source made no changes that would trigger the rule procedural requirements:

340-200-0050, 340-218-0120 through 340-218-0220 340-220-0050, 0180, 340-244-0200, 0210, 0220.

67. The following OARs are not applicable because the rules apply only to the Department and regional authorities:

340-212-0150, 340-214-0350, 340-218-0210, 340-222-0010, 340-226-0110, 0130, 0140.

68. The following federal requirements are not applicable because the source is not in the source category cited in the rules:

40 CFR Parts 50 through 58,

40 CFR Parts 60 (except subpart A and appendices), 61 (except subparts A and M and appendices), 63 (except subpart A and appendices) 65 through 67, 68, 69 through 70,

40 CFR Parts 72, 73, 75, and 77 (Acid Rain),

40 CFR Parts 78 through 82, 85 through 89,

Section 129 of the FCAA, Solid Waste,

Section 183(e) of the FCAA, Consumer and commercial products,

Section 183(f) of the FCAA, Tank Vessels,

40 CFR Part 55, Outer Continental Shelf Sources.

Permit No.: 06-0015 Expiration Date: 07-01-04

Page 28 of 37 Pages

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in the permit shall have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the version of the following materials are effective as of the dates noted unless otherwise specified in the permit:

- a. Source Sampling Manual; January 23, 1992 State Implementation Plan Volume 3, Appendix A4:
- Continuous Monitoring Manual; January 23, 1992 State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee shall comply with all conditions of the federal operating permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G4. Credible Evidence: [OAR 340-214-0120]

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements

G5. <u>Certification</u> [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(d), and 340-218-0080(2)]

Any document submitted to the Department or EPA pursuant to this permit shall contain certification by a responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee shall promptly, upon discovery, report to the Department a material error or omission in these records, reports, plans, or other documents.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 29 of 37 Pages

G6. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

G7. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR 340-248-0210 through 340-248-0280 and OAR 340-248-0100 through 340-248-0180 (state-only enforceable)]

The permittee shall comply with OAR 340-248-0210 through 340-248-0280, OAR Chapter 340-248-0020 through 340-264-0200, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G8. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G9. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. such applicable requirements are included and are specifically identified in the permit,
 - ii. the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit shall alter or affect the following:
 - i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. the applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. the ability of the Department to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by the Department.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 30 of 37 Pages

G10. <u>Inspection and Entry</u> [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department of Environmental Quality, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. enter upon the permittee's premises where an Oregon Title V operating permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit:
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. as authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G11. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee shall pay an annual base fee and an annual emission fee for all regulated air pollutants except for carbon monoxide, any class I or class II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act, or any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the Federal Clean Air Act. The permittee shall submit payment to the Department of Environmental Quality, Business Office, 811 SW 6th Avenue, Portland, OR 97204, within 30 days of the date the Department mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes shall be submitted in writing to the Department of Environmental Quality. Payment shall be made regardless of the dispute. User-based fees shall be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G12. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee shall monitor for, and record, any off-permit change to the source that:
 - i. is not addressed or prohibited by the permit;
 - ii. is not a Title I modification;
 - iii. is not subject to any requirements under Title IV of the FCAA;
 - iv. meets all applicable requirements;
 - v. does not violate any existing permit term or condition; and
 - vi. may result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), shall be submitted to the Department and the EPA.
- c. The permittee shall keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of condition G11 shall not extend to off-permit changes.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 31 of 37 Pages

G13. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee shall monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. violate an applicable requirement;
 - ii. contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. be a Title I modification.
- b. A minimum 7-day advance notification shall be submitted to the Department and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of condition G11 shall not extend to section 502(b)(10) changes.

G14. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit shall be requested and granted in accordance with OAR 340-218-0150. The permittee shall promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. sale or exchange of the activity or facility.

G15. Minor Permit Modification [OAR 340-218-0170]

The permittee shall submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G16. Significant Permit Modification [OAR 340-218-0180]

The permittee shall submit an application for a significant permit modification in accordance with OAR 340-218-0180

G17. Staying Permit Conditions [OAR 340-218-0050(6)(e)]

Notwithstanding condition G14 and G15, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G18. Construction/Operation Modification [OAR 340-218-0190]

No permittee shall construct or make modifications required to be reviewed under OAR 340-218-0190, the construction/operation modification rules, without receiving a Notice of Approval in accordance with OAR 340-218-0190. The permittee should allow 60 days for Department review of applications for a construction/operation modification if public notice is not required, or 180 days if public notice is required.

Permit No.: 06-0015 Expiration Date: 07-01-04

Page 32 of 37 Pages

G19. New Source Review Modification [OAR 340-224-0010]

No permittee shall construct or make modifications required to be reviewed under New Source Review (OAR 340-224-0010(1)) without receiving an Air Contaminant Discharge Permit (ACDP) (OAR 340-216-0010). The permittee should allow 180 days for Department review of an ACDP application for New Source Review.

G20. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

It shall not be a defense for a 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.

G21. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records required to be retained by the permit.

G22. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the Department.
- b. A permit shall be reopened and revised under any of the circumstances listed in OAR 340-028-218-0020a).
- c. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.

G23. <u>Severability Clause</u> [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G24. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted as described below.
- b. Applications for renewal shall be submitted at least 12 months before the expiration of this permit, unless the Department requests an earlier submittal. If more than 12 months is required to process a permit renewal application, the Department shall provide no less than six (6) months for the owner or operator to prepare an application. Provided the permittee submits a timely and complete renewal application, this permit shall remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G25. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

Permit No.: 06-0015 Expiration Date: 07-01-04

Page 33 of 37 Pages

G26. Property Rights [OAR 340-200-0020(9)(c) and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G27. Permit Availability [OAR 340-200-0020(9)(c) and 340-218-0120(2)]

The permittee shall have available at the facility at all times a copy of the Oregon Title V Operating Permit and shall provide a copy of the permit to the Department or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Department of Environmental Quality Western Region - Medford 201 W Main Street, Suite 2-D Medford, OR 97501 Telephone: (541) 776-6010

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 34 of 37 Pages

Attachment 1 Cross-reference from New Rule Numbers to Old Rule Numbers (Effective October 14, 1999)

	A11-	<u>.</u>			= .	
New Rule Number	Old Rule Number	New Rule Number	Old Rule Number		New Rule Number	Old Rule Number
00-0020	020-0205	208-0010	030-0010	1	212-0220	028-1220
0-0020	028-0110	208-0100	021-0012		212-0230	028-1230
0-0030	020-0003	208-0110	021-0015		212-0240	028-1240
0-0040	020-0047	208-0200	021-0055		212-0250	028-1250
0-0050	028-0700	208-0210	021-0060		212-0260	028-1260
0-0100	020-0200	208-0500	030-0400		212-0270	028-1270
-0110	020-0210	208-0510	030-0410		212-0280	028-1280
)-0120	020-0215	208-0520	030-0420		214-0100	028-0200
2-0010	031-0005	208-0530	030-0430		214-0110	028-0300
2-0050	031-0010	208-0540	030-0440		214-0120	028-0310
2-0060	031-0015	208-0550	030-0450		214-0130	028-0400
2-0070	031-0020	208-0560	030-0460		214-0200	028-1500
-0080	031-0025	208-0570	030-0470		214-0210	028-1510
-0090	031-0030	208-0580	030-0480		214-0220	028-1520
2-0100	031-0040	208-0590	030-0490		214-0300	028-1400
2-0110	031-0045	208-0600	030-0500		214-0310	028-1410
-0120	031-0050	208-0610	030-0510		214-0320	028-1420
0130	031-0055	208-0620	030-0520		214-0330	028-1430
0200	031-0100	208-0630	030-0530		214-0340	028-1440
-0210	031-0110	208-0640	030-0540		214-0350	028-1450
0220	031-0115	208-0650	030-0600		214-0360	028-1460
-0010	031-0500	208-0660	030-0610		216-0010	028-1700
0020	031-0510	208-0670	030-0620		216-0020	028-1720
0030	031-0520	210-0010	028-0200		216-0040	028-1770
0040	031-0530	210-0100	028-0500		216-0050	028-1710
-0050	031-0120	210-0110	028-0510		216-0060	028-1725
0060	031-0130	210-0120	028-0520		216-0070	028-1730
-0070	021-0010	210-0200	028-0800		216-0080	028-1740
-0080	024-0301	210-0210	028-0810		216-0090	028-1750
-0090	022-0470	210-0220	028-0820		216-0100	028-1790
-0010	027-0005	212-0110	028-0900		218-0010	028-2100
0030	027-0010	212-0120	028-1100		218-0020	028-2110
0040	027-0012	212-0130	028-1110		218-0040	028-2120
0050	027-0015	212-0140	028-1120		218-0050	028-2130
-0060	027-0025	212-0150	028-1130		218-0060	028-2140
0070	027-0035	212-0160	028-1140		218-0070	028-2150
3-0010	021-0005	212-0200	028-1200		218-0080	028-2160
8-0010	021-0050	212-0210	028-1210		218-0090	028-2170

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 35 of 37 Pages

New Rule Number	Old Rule Number						
222-0060	028-1050	230-0150	025-0885	234-0110	025-0015	238-0010	025-0505
222-0070	028-1060	230-0200	025-0890	234-0120	025-0020	238-0020	025-0515
224-0010	028-1900	230-0210	025-0895	234-0130	025-0025	238-0040	025-0510
224-0030	028-1910	230-0220	025-0900	234-0140	025-0027	238-0050	025-0530
224-0040	028-1920	230-0230	025-0905	234-0200	025-0155	238-0060	025-0535
224-0050	028-1930	230-0300	025-0950	234-0210	025-0165	238-0070	025-0800
224-0060	028-1935	230-0310	025-0960	234-0220	025-0170	238-0080	025-0805
224-0070	028-1940	230-0320	025-0970	234-0230	025-0175	238-0090	025-0520
224-0080	028-1950	230-0330	025-0980	234-0240	025-0180	238-0100	025-0740
224-0090	028-1970	230-0340	025-0990	234-0250	025-0185	240-0010	030-0005
224-0100	028-1990	230-0350	025-1000	234-0260	025-0190	240-0020	030-0007
224-0110	028-2000	230-0360	025-1010	234-0270	025-0205	240-0030	030-0010
226-0010	021-0005	230-0400	025-0750	234-0310	025-0224	240-0100	030-0012
226-0100	028-0600	230-0410	025-0750	234-0320	025-0226	240-0110	030-0015
226-0110	028-0610	232-0010	022-0100	234-0330	025-0228	240-0120	030-0021
226-0120	028-0620	232-0020	022-0104	234-0340	025-0230	240-0130	030-0025
226-0130	028-0630	232-0030	022-0102	234-0350	025-0232	240-0140	030-0030
226-0140	028-0640	232-0040	022-0104	234-0360	025-0234	240-0150	030-0031
226-0200	021-0012	232-0050	022-0106	234-0400	025-0355	240-0160	030-0035
226-0210	021-0030	232-0060	022-0107	234-0410	025-0360	240-0170	030-0040
226-0300	021-0035	232-0070	022-0110	234-0420	025-0370	240-0180	030-0043
226-0310	021-0040	232-0080	022-0120	234-0430	025-0380	240-0190	030-0044
226-0320	021-0045	232-0085	022-0125	234-0500	025-0310	240-0200	030-0046
226-0400	028-1030	232-0090	022-0130	234-0510	025-0315	240-0210	030-0050
228-0010	021-0012	232-0100	022-0137	234-0520	025-0320	240-0220	030-0055
228-0020	021-0005	232-0120	022-0140	234-0530	025-0325	240-0230	030-0065
228-0020	022-0005	232-0130	022-0150	236-0010	025-0105	240-0240	030-0067
228-0020	022-0050	232-0140	022-0153	236-0010	025-0260	240-0250	030-0070
228-0100	022-0010	232-0150	022-0160	236-0100	025-0255	240-0260	030-0111
228-0110	022-0015	232-0160	022-0170	236-0120	025-0265	240-0270	030-0115
228-0120	022-0020	232-0170	022-0175	236-0130	025-0270	240-0300	030-0200
228-0130	022-0025	232-0180	022-0180	236-0140	025-0280	240-0310	030-0205
228-0200	022-0055	232-0190	022-0183	236-0150	025-0285	240-0320	030-0210
228-0210	021-0020	232-0200	022-0186	236-0200	025-0405	240-0330	030-0215
228-0300	022-0075	232-0210	022-0190	236-0220	025-0415	240-0340	030-0220
230-0010	025-0850	232-0220	022-0200	236-0230	025-0430	240-0350	030-0225
230-0020	025-0852	232-0230	022-0210	236-0300	025-0070	240-0360	030-0230
230-0030	025-0750	232-0240	022-0220	236-0310	025-0055	240-0400	030-0300
230-0030	025-0855	234-0010	025-0005	236-0320	025-0060	240-0410	030-0310
230-0030	025-0950	234-0010	025-0150	236-0330	025-0065	240-0420	030-0320
230-0100	025-0860	234-0010	025-0220	236-0410	025-0110	240-0430	030-0330
230-0110	025-0865	234-0010	025-0305	236-0420	025-0115	240-0440	030-0340
230-0120	025-0870	234-0010	025-0350	236-0430	025-0120	242-0010	030-0800
230-0130	025-0875	234-0010	025-0410	236-0440	025-0125	242-0020	030-0810
230-0140	025-0880	234-0100	025-0010	236-0500	025-0745	242-0030	030-0820

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 36 of 37 Pages

New Rule Number	Old Rule Number	New Rule Number	Old Rule Number	New Rule Number	Old Rule Number	New Ru Number	
242-0040	030-0830	242-0610	022-0710	248-0230	032-5605	252-029	0 020-1070
242-0050	030-0840	242-0620	022-0740	248-0240	032-5610	254-001	
242-0060	030-0850	242-0630	022-0760	248-0250	032-5620	254-002	
242-0070	030-0860	242-0700	022-0900	248-0260	032-5630	254-003	
242-0080	030-0870	242-0710	022-0910	248-0270	032-5640	254-004	
242-0090	030-0880	242-0720	022-0920	248-0280	032-5650	254-005	0 020-0120
242-0100	030-0890	242-0730	022-0930	250-0010	020-1500	254-006	
242-0110	030-0900	242-0740	022-0940	250-0020	020-1520	254-007	0 020-0130
242-0120	030-0910	242-0750	022-0950	250-0030	020-1510	254-008	0 020-0135
242-0130	030-0920	242-0760	022-1100	250-0040	020-1530	256-001	0 024-0005
242-0140	030-0930	242-0770	022-1110	250-0050	020-1540	256-001	4
242-0150	030-0940	242-0780	022-1120	250-0060	020-1550	256-010	0 024-0010
242-0160	030-0950	242-0790	022-1130	250-0070	020-1560	256-011	
242-0170	030-0960	244-0010	032-0100	250-0080	020-1570	256-012	
242-0180	030-0970	244-0020	032-0110	250-0090	020-1580	256-013	
242-0190	030-0980	244-0030	032-0120	250-0100	020-1590	256-014	0 024-0030
242-0200	030-0990	244-0040	032-0130	250-0110	020-1600	256-015	
242-0210	030-1000	244-0050	032-0140	252-0010	020-0710	256-016	
242-0220	030-1010	244-0100	032-0300	252-0020	020-0730	256-020	
242-0230	030-1020	244-0110	032-0310	252-0030	020-0720	256-021	
242-0240	030-1030	244-0120	032-0320	252-0040	020-0740	256-030	
242-0250	030-1040	244-0130	032-0330	252-0050	020-0750	256-0310	•
242-0260	030-1050	244-0140	032-0340	252-0060	020-0760	256-032	
242-0270	030-1060	244-0150	032-0350	252-0070	020-0770	256-0336	4
242-0280	030-1070	244-0160	032-0360	252-0080	020-0780	256-0340	
242-0290	030-1080	244-0170	032-0370	252-0090	020-0790	256-0350	
242-0300	030-1100	244-0180	032-0380	252-0100	020-0800	256-0360	
242-0310	030-1110	244-0200	032-0500	252-0110	020-0810	256-0370	
242-0320	030-1160	244-0210	032-0505	252-0120	020-0820	256-0386	0 024-0320
242-0330	030-1120	244-0220	032-0510	252-0130	020-0830	256-0390	024-0325
242-0340	030-1130	244-0220	032-5520	252-0140	020-0840	256-0400	024-0330
242-0350	030-1140	244-0230	032-5400	252-0150	020-0850	256-0410	
242-0360	030-1150	248-0010	032-5590	252-0160	020-0860	256-0420	024-0335
242-0370	030-1170	248-0010	033-0020	252-0170	020-0870	256-0430	
242-0380	030-1180	248-0100	033-0010	252-0180	020-0880	256-0440	
242-0390	030-1190	248-0110	033-0030	252-0190	020-0890	256-0450	024-0355
242-0400	030-0700	248-0120	033-0040	252-0200	020-0900	256-0460	
242-0410	030-0710	248-0130	033-0050	252-0210	020-0910	256-0470	
242-0420	030-0720	248-0140	033-0060	252-0220	020-1000	258-0010	
242-0430	030-0730	248-0150	033-0070	252-0230	020-1010	258-0100	
242-0440	030-0740	248-0160	033-0080	252-0240	020-1020	258-0110	
242-0500	022-0400	248-0170	033-0090	252-0250	020-1030	258-0120	
242-0510	022-0401	248-0180	033-0100	252-0260	020-1040	258-0130	
242-0520	022-0402	248-0210	032-5600	252-0270	020-1050	258-0140	
242-0600	022-0700	248-0220	032-5604 -	252-0280	020-1060	258-0150	

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 37 of 37 Pages

New Rule Number	Old Rule Number	New Rule Number	Old Rule Number
258-0160	022-0510	264-0060	023-0042
258-0170	022-0520	264-0070	023-0043
258-0180	022-0530	264-0080	023-0045
258-0190	022-0540	264-0100	023-0055
258-0200	020-0136	264-0110	023-0060
258-0210	022-0550	264-0120	023-0065
258-0220	022-0560	264-0130	023-0070
258-0230	022-0570	264-0140	023-0075
258-0240	022-0580	264-0150	023-0080
258-0250	022-0590	264-0160	023-0085
258-0260	022-0600	264-0170	023-0090
258-0270	022-0610	264-0180	023-0100
258-0280	022-0620	264-0190	023-0105
258-0290	022-0630	264-0200	023-0115
258-0300	022-0640	266-0010	026-0001
258-0310	022-0650	266-0020	026-0003
258-0400	022-0300	266-0030	026-0005
260-0010	022-0405	266-0040	026-0010
260-0020	022-0410	266-0050	026-0012
260-0030	022-0415	266-0060	026-0013
260-0040	022-0420	266-0070	026-0015
262-0010	034-0001	266-0080	026-0031
262-0020	034-0005	266-0090	026-0033
262-0030	034-0010	266-0100	026-0035
262-0040	034-0015	266-0110	026-0040
262-0050	034-0020	266-0120	026-0045
262-0100	034-0045	266-0130	026-0055
262-0110	034-0050	268-0030	028-1980
262-0120	034-0060	268-0040	028-1960
262-0130	034-0070		
262-0200	034-0150		
262-0210	034-0155		
262-0220	034-0160		
262-0230	034-0165		
262-0240	034-0170		
262-0250	034-0175		
262-0300	034-0200		
262-0310	034-0205		
262-0320	034-0210		
262-0330	034-0215		
264-0010	023-0022		
264-0020	023-0025		
264-0030	023-0030		
264-0040	023-0035		
264-0050	023-0040		_

Page 1 of 19 Pages

Department of Environmental Quality OREGON TITLE V OPERATING PERMIT REVIEW REPORT

Western Region 201 W Main Street, Suite 2-D Medford, OR 97501 Telephone: (541) 776-6010

Weyerhaeuser Company Containerboard Packaging P. O. Box 329 North Bend, OR 97459

PSEL	SOURCE			AMB	COMPL	SPEC	RE	POR'	r		EXC	ESS				SIZE	
CRED	TEST	COMS	CEMS	MON	SCHED	COND	A	S	Q	М	R	N	NSPS	NSR	PSD	TV	A2
	х				-	ļ	X	X			Х					Х	

TABLE OF CONTENTS

PERMITTEE IDENTIFICATION	. 2
OPERATING SCENARIO DESCRIPTION	. 2
EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION	. 5
EMISSION LIMITS AND STANDARDS	. 8
PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REVIEW	. 10
PLANT SITE EMISSION LIMITS	. 13
MONITORING REQUIREMENTS	. 28
RECORDKEEPING REQUIREMENTS	. 29
REPORTING REQUIREMENTS	. 29
GENERAL BACKGROUND INFORMATION	. 29
COMPLIANCE HISTORY	. 30
	21

Page 2 of 19 Pages

INTRODUCTION

1. This is a renewal of the Oregon Title V Operating Permit No. 06-0015 for Weyerhaeuser Company that was issued on July 1, 1996, and scheduled to expire on July 1, 1999. A complete and timely renewal application was submitted by the permittee, so the existing permit will remain in effect until this renewal is issued. Provided below are the changes made to the previous permit:

- 1.a. Condition #2 was changed to reflect EPA approval of revisions to the SIP and Section 111(d) plan, and renumbering of the Oregon Administrative Rules.
- 1.b. Condition #11 was added to include the requirement to develop a Release Management Plan if the source falls under the requirements of 112r.
- 1.c. Condition #12 was deleted at the request of the permittee since it was not required by rule, but was carried over from the ACDP permit where it had been erroneously included.
- 1.d. Conditions #18, #19, and #20 were amended to add the specific scrubber flow rates, scrubber exit temperature, and boiler residual oxygen rates that trigger responses by the permittee.
- 1.e. Conditions #25 and #26 were amended to move the unassigned portion of the PSEL for PM/PM10, NO_x and CO to the facility-wide PSEL. This was needed because more steam was needed than was anticipated (the permittee had little experience with operating without pulping prior to submitting their original TV application).
- 1.f. Condition 35.f. was removed, because method 9 readings for the boilers' exhaust were not required after the action levels in conditions #18, #19, and #20 were established.
- 1.g. Condition 35.i. was changed to reflect data availability requirements in line with the guidelines used by EPA in the most recent NSPS documents.
- 1.h. Conditions #35.j., #35.n.iv., and #35.n.v. were removed, because the required activities have been completed.
- 1.i. Condition #35.o. was removed, because the requirements related to the response to excursions from the action level ranges were addressed in conditions #18, #19, and #20.
- 1.j. Condition #37.c. was changed to reduce the frequency of required source tests to verify the SO₂ emission formula. The tests conducted during the first TV permit term all showed the formula to be valid; therefore, two tests per permit term to assure that nothing has happened to change the validity of the formula should be sufficient.
- 1.k. Conditions #37.d. and #37.e. were removed because the required activities have been completed.
- 1.1. Conditions #37.h. and 48.j. were amended to require source test reports to be submitted within 60 days of the tests rather than the 45 day limit previously required. The permittee has had difficulty meeting the 45 day limit, which has resulted in reports being submitted without sufficient time for review.
- 1.m. Condition #60.was amended to change the mailing address for EPA.
- 1.n. Old general condition G4 has been moved to the monitoring section of the permit and replaced with a credible evidence general condition.
- 1.o. Old general conditions G6 and G7 have been moved to the reporting section of the permit.

.

Review Report Permit Number: 06-0015 Application No.: 017021 Page 3 of 19 Pages

- 1.p. General condition G17 has been added.
- 1.q. Old general condition G21 has been deleted and incorporated into general condition G18.
- 1.r. General condition G27 has been added.
- 2. In accordance with OAR 340-218-0120(1)(f), this review report is intended to provide the legal and factual basis for the permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.

PERMITTEE IDENTIFICATION

3. Weyerhaeuser Company, North Bend Containerboard operates a paper mill located in Coos County, Oregon. The facility lies along the northern arm of Coos Bay and is located about one mile north of North Bend, the nearest town. The facility's primary product is "corrugated medium" paperboard (the "wavy" part in the middle of a piece of corrugated container material).

FACILITY DESCRIPTION/OPERATING SCENARIO DESCRIPTION

- 4. The North Bend facility comprises the following processes.
 - 4.a. Woodyard
 - 4.b. Clippings (Secondary Fiber)
 - 4.c. Paper Machine
 - 4.d. Steam Plant
 - 4.e. Wastewater Treatment
 - 4.f. Other Miscellaneous Activities
- 5. The Oregon Title V Operating Permit operating scenario has been given the designated identification number "BASE-1." The BASE-1 operating scenario was designed to incorporate all of the emission units, production activities, and ancillary activities at the mill. This one scenario represents worst-case emissions at the facility and is designed so that existing mill equipment and current process configurations can be fully used to their design potential for maximum mill operational flexibility over the 5-year term of the permit. The following operating scenario discussion is not intended to be a comprehensive description of all production activities at the mill nor a detailed description of all activities and processes that meet the criteria for classification as categorically insignificant activities or aggregate insignificant activities, which by definition do not result in significant pollutant emissions.
- 6. The North Bend Mill shut down the pulp mill in May, 1995. The North Bend Mill has continued to operate the secondary fiber operation, the paper machines, and all supporting operations since May, 1995.

7. Woodyard

- 7.a. The woodyard consists of hog fuel dumps, conveying systems, and hog fuel storage piles. Hog fuel is brought in from outside the mill.
- 7.b. Woodyard emissions have been divided into three basic emission units. These emissions are described and estimated in the units listed below.

Page 4 of 19 Pages

7.c. FUG-E-505 includes fugitive volatile organic compound (VOC), total suspended particulate (TSP), and particulate matter less than 10 micrometers (μm) in aerodynamic diameter (PM₁₀) emissions from hog fuel storage piles.

- 7.d. FUG-E-506 includes fugitive VOC, TSP, and PM₁₀ emissions from all woodyard raw material handling systems, including loading, unloading, blow lines, conveyors, and other miscellaneous transfer and related activities.
- 7.e. WDYC-E-1 includes area fugitive and point source emissions of VOC, TSP, and PM₁₀ from miscellaneous woodyard sources.

Secondary Fiber (Clippings)

8. The North Bend Mill recycles old corrugated container (OCC) material and waste paper, both of which are classified as "secondary fiber" or post consumer recyclable waste. Bales containing the recyclable fiber are cut and fed into the east and west hydropulper conveyors. The bales are conveyed to the pulper tubs, where any large foreign material is removed. The material is mechanically repulped and passes through numerous cleaning devices to remove additional debris such as sand, rocks, staples, and plastic. The acceptable fiber is screened and thickened and ready for storage until used in paper making. Various additives are used in the secondary fiber area.

The mill also has processed wax-coated secondary fiber. The VOC emission testing that has been done at the mill and the emission factors used for VOCs in both the secondary fiber and the paper machine areas in this application incorporate the VOC emissions that occur when wax-coated secondary fiber is run. The factors have been set at this higher level to give the mill the operational flexibility to run this material through the recycle pulping process.

For the most part, the clippings area has insignificant emissions of VOC compounds. Most of the pulp handling and screening equipment in the area meets the criteria for the categorical insignificant activities exemption, namely, stock cleaning and pressurized pulp washing; pulp and repulping tanks; stock chests and pulp handling equipment; and white water storage tanks. The clippings area has been grouped into one emission unit, CLIP-E-1, that includes the hydropulpers and associated equipment, the drum thickener, and the DSM screens, as indicated in the next paragraph.

CLIP-E-1 includes emissions of VOC compounds from the secondary fiber devices that did not meet the categorically insignificant exemption criteria. There are no air pollution control devices for this unit.

Paper Machine

9. The North Bend mill has a single paper machine that produces various grades of paper from both recycled secondary fiber and purchased furnish. Pulp is pulled from high-density storage tanks, and after refining is passed through stages of centrifugal cleaning before it is pumped to the headbox. From the headbox, the pulp slurry is sent out onto a Fourdrinier forming wire, where dewatering and sheet formation take place. Gravity dewatering is followed by vacuum dewatering in the final section of the Fourdrinier. After leaving the Fourdrinier wire, the sheet enters a press section, where additional water removal occurs as the paper sheet is passed through a series of press nips. The paper passes from the press section into the drying section, where it is fed through heated dryers. The paper at this point is then fed through heavy iron rollers and "calendared" to achieve desired finished qualities. The paper is wound onto large reels, cut, rewound to meet customers' order specifications, and weighed before being wrapped and shipped.

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 36 of 37 Pages

New Rule Number	Old Rule Number	New Rule Number	Old Rule Number	New Rule Number	Old Rule Number	New Rule Number	Old Rule Number
242-0040	030-0830	242-0610	022-0710	248-0230	032-5605	252-0290	020-1070
242-0050	030-0840	242-0620	022-0740	248-0240	032-5610	254-0010	020-0100
242-0060	030-0850	242-0630	022-0760	248-0250	032-5620	254-0020	020-0105
242-0070	030-0860	242-0700	022-0900	248-0260	032-5630	254-0030	020-0110
242-0080	030-0870	242-0710	022-0910	248-0270	032-5640	254-0040	020-0115
242-0090	030-0880	242-0720	022-0920	248-0280	032-5650	254-0050	020-0120
242-0100	030-0890	242-0730	022-0930	250-0010	020-1500	254-0060	020-0125
242-0110	030-0900	242-0740	022-0940	250-0020	020-1520	254-0070	020-0130
242-0120	030-0910	242-0750	022-0950	250-0030	020-1510	254-0080	020-0135
242-0130	030-0920	242-0760	022-1100	250-0040	020-1530	256-0010	024-0005
242-0140	030-0930	242-0770	022-1110	250-0050	020-1540	256-0010	024-0305
242-0150	030-0940	242-0780	022-1120	250-0060	020-1550	256-0100	024-0010
242-0160	030-0950	242-0790	022-1130	250-0070	020-1560	256-0110	024-0015
242-0170	030-0960	244-0010	032-0100	250-0080	020-1570	256-0120	024-0020
242-0180	030-0970	244-0020	032-0110	250-0090	020-1580	256-0130	024-0025
242-0190	030-0980	244-0030	032-0120	250-0100	020-1590	256-0140	024-0030
242-0200	030-0990	244-0040	032-0130	250-0110	020-1600	256-0150	024-0035
242-0210	030-1000	244-0050	032-0140	252-0010	020-0710	256-0160	024-0040
242-0220	030-1010	244-0100	032-0300	252-0020	020-0730	256-0200	024-0100
242-0230	030-1020	244-0110	032-0310	252-0030	020-0720	256-0210	024-0200
242-0240	030-1030	244-0120	032-0320	252-0040	020-0740	256-0300	024-0300
242-0250	030-1040	244-0130	032-0330	252-0050	020-0750	256-0310	024-0306
242-0260	030-1050	244-0140	032-0340	252-0060	020-0760	256-0320	024-0307
242-0270	030-1060	244-0150	032-0350	252-0070	020-0770	256-0330	024-0308
242-0280	030-1070	244-0160	032-0360	252-0080	020-0780	256-0340	024-0309
242-0290	030-1080	244-0170	032-0370	252-0090	020-0790	256-0350	024-0312
242-0300	030-1100	244-0180	032-0380	252-0100	020-0800	256-0360	024-0314
242-0310	030-1110	244-0200	032-0500	252-0110	020-0810	256-0370	024-0318
242-0320	030-1160	244-0210	032-0505	252-0120	020-0820	256-0380	024-0320
242-0330	030-1120	244-0220	032-0510	252-0130	020-0830	256-0390	024-0325
242-0340	030-1130	244-0220	032-5520	252-0140	020-0840	256-0400	024-0330
242-0350	030-1140	244-0230	032-5400	252-0150	020-0850	256-0410	024-0332
242-0360	030-1150	248-0010	032-5590	252-0160	020-0860	256-0420	024-0335
242-0370	030-1170	248-0010	033-0020	252-0170	020-0870	256-0430	024-0337
242-0380	030-1180	248-0100	033-0010	252-0180	020-0880	256-0440	024-0340
242-0390	030-1190	248-0110	033-0030	252-0190	020-0890	256-0450	024-0355
242-0400	030-0700	248-0120	033-0040	252-0200	020-0900	256-0460	024-0357
242-0410	030-0710	248-0130	033-0050	252-0210	020-0910	256-0470	024-0360
242-0420	030-0720	248-0140	033-0060	252-0220	020-1000	258-0010	022-0450
242-0430	030-0730	248-0150	033-0070	252-0230	020-1010	258-0100	022-0440
242-0440 242-0500	030-0740	248-0160	033-0080	252-0240	020-1020	258-0110	022-0460
	022-0400	248-0170	033-0090	252-0250	020-1030	258-0120	022-0490
242-0510	022-0401	248-0180	033-0100	252-0260	020-1040	258-0130	022-0500
242-0520	022-0402	248-0210	032-5600	252-0270	020-1050	258-0140	022-0503
242-0600	022-0700	248-0220	032-5604 -	252-0280	020-1060	258-0150	022-0507

Permit No.: 06-0015 Expiration Date: 07-01-04 Page 37 of 37 Pages

New Rule Number	Old Rule Number		lew Rule lumber	Old Rule Number
258-0160	022-0510		64-0060	023-0042
258-0100	022-0510		64-0070	023-0042
258-0170	022-0520		64-0080	023-0045
258-0190	022-0540		64-0100	023-0055
258-0190	020-0136		64-0110	023-0055
258-0210	022-0550	. –	64-0120	023-0065
258-0220	022-0560		64-0130	.023-0070
258-0230	022-0570	_	64-0140	023-0075
258-0240	022-0580	_	64-0150	023-0080
258-0250	022-0590		64-0160	023-0085
258-0260	022-0600		64-0170	023-0090
258-0270	022-0610		64-0180	023-0100
258-0280	022-0620	2	64-0190	023-0105
258-0290	022-0630		64-0200	023-0115
258-0300	022-0640	2	66-0010	026-0001
258-0310	022-0650		66-0020	026-0003
258-0400	022-0300	2	66-0030	026-0005
260-0010	022-0405	2	66-0040	026-0010
260-0020	022-0410	2	66-0050	026-0012
260-0030	022-0415	2	66-0060	026-0013
260-0040	022-0420	2	66-0070	026-0015
262-0010	034-0001	2	66-0080	026-0031
262-0020	034-0005	2	66-0090	026-0033
262-0030	034-0010	2	66-0100	026-0035
262-0040	034-0015	2	66-0110	026-0040
262-0050	034-0020	2	66-0120	026-0045
262-0100	034-0045	2	66-0130	026-0055
262-0110	034-0050	2	68-0030	028-1980
262-0120	034-0060	2	68-0040	028-1960
262-0130	034-0070			
262-0200	034-0150			
262-0210	034-0155			
262-0220	034-0160			
262-0230	034-0165			
262-0240	034-0170			
262-0250	034-0175			
262-0300	034-0200			
262-0310	034-0205			
262-0320	034-0210			
262-0330	034-0215			
264-0010	023-0022			
264-0020	023-0025			
264-0030	023-0030			
264-0040	023-0035			
264-0050	023-0040			-

Review Report Permit Number: 06-0015 Application No.: 017021 Page 5 of 19 Pages

Some of the additional activities that occur in the paper machine area include use of solvent felt cleaners to keep "stickies" and deposits from building up on the wire, various additions of biocides in controlled doses to control biological activity in the stock, and addition of chemical additives to the process.

For purposes of the Title V permit application, the paper machine area and all of the supporting activities associated with the machine have been included in a single emission unit. The emissions unit incorporates devices, activities, and emission points that are associated with the "wet end" of the machine, through the dewatering, vacuum, and press sections of the machine and the "dry end" of the paper machine, including the drying and finished handling of the paper. PAM0-E-3 also includes emission of VOCs from the use of solvent felt cleaners.

There are no control devices for these emission units.

VOC emissions for the baseline period are based on limited actual stack testing conducted at the mill during 1992 and 1993 while recyclable wax-coated boxes were pulped and run. Mineral spirits and solvent felt wash were not used on the paper machine during the source testing so VOC emissions from material balance were not double counted.

Steam Plant

10. The steam plant is the primary source of energy used by the North Bend Mill. Steam is generated in two boilers. The boilers have nameplate ratings of 100,000 pounds of steam per hour (Boiler #1) and 130,000 pounds of steam per hour (Boiler #2). Studies on older boilers have shown that nameplate ratings do not necessarily represent the true capacity of the units, and data suggest that operations at 125 percent of nameplate ratings are achievable. Boiler #1 was installed in 1961 and Boiler #2 in 1964. Both boilers still have the original controls largely intact. These boilers burn combinations of hog fuel (wood waste), oil (residual, distillate, and specification used oil), and OCC rejects. The seasonal weather changes in the coastal climate and the historical limited availability of certain fuels make the burning of variable fuel combinations critical to the operational flexibility of the mill.

Each boiler is equipped with a Burley wet scrubber for control of particulate matter emissions. Air for the boilers is preheated before it enters the boilers. The combustion air is drawn through the firebox by an induced draft fan. The air passes through a bank of inertial multiclone separators for particulate removal and then is scrubbed by the Burley wet scrubbers. Boiler routine maintenance includes cleaning of grates and blowdown of tubes once per shift.

Steam generated by the boilers is used throughout the mill. Water for the boilers is pretreated to remove minerals and contaminants that would otherwise cause scaling in the boiler tubes. Organic compounds are removed by activated carbon. The water is demineralized with a zeolite system and preheated before being introduced into the boiler. Water treatment activities meet the criteria of categorically insignificant activities, have insignificant emissions, and have not been quantified in the application.

- 10.a. The following list provides emission units and control equipment for the steam plant area, along with the PSEL pollutants emitted from these units:
 - 10.a.i. STM-E-1: Boiler #1 combustion processes, with emissions of VOCs, nitrogen oxides (NO_x), TSP, PM₁₀, CO, SO₂, and lead from four stacks;
 - 10.a.ii. STM-E-2: Boiler #2 combustion processes, with emissions of VOCs, NO_x, TSP, PM₁₀, CO, SO₂, and lead from four stacks;
 - 10.a.iii. STM1-X-X-001-C: #1 multiclone inertial separators;
 - 10.a.iv. STM2-X-X-002-C: #2 multiclone inertial separators;

Review Report Permit Number: 06-0015

Application No.: 017021

Page 6 of 19 Pages

10.a.v. STM1-S-P-001-C: #1 Burley wet scrubber; and

10.a.vi. STM2-S-P-002-C: #2 Burley wet scrubber.

Wastewater Treatment

11. The purpose of the mill's wastewater treatment facility is to collect and treat all process wastewater. The mill's present wastewater treatment system includes a clarifier, solids pressing, settling basins, an aeration basin, a large polishing lagoon, and finally an ocean outfall located about 1 mile offshore.

The mill's wastewater flows from the various process areas to a pump station, a clarifier, and settling basins. After 3 to 5 days, the wastewater is pumped to an aerated basin approximately 3 miles west of the mill. The aeration basin provides nominal oxygenation of the wastewater for biological treatment. After treatment in the aeration basin (installed in 1989), the wastewater is discharged at the ocean outfall.

For the application, all wastewater treatment activities have been grouped into one emission unit, WWTO-E-1, for which emissions have been modeled. WWTO-E-1 includes emissions of VOCs and TRS compounds from the wastewater treatment system, including dredging of the settling basins, dewatering of sludge, and other wastewater treatment activities. VOC and TRS emissions were reduced significantly when the mill was converted to a 100% secondary fiber mill in May, 1995

Other Miscellaneous Activities

- 12. The following activities also occur:
 - 12.a. MISC-E-2: An onsite landfill is used to dispose of box recycling clippings, including wire, plastic, fiber, sand and dirt, and other miscellaneous mill cleanup solid wastes of similar character including asbestos.
 - 12.b. FUG-E-507 (paved road fugitive dust emissions): The mill uses a number of modes of transportation to provide raw materials and support activities in the manufacture of paper. A significant percentage of these activities occur on paved roads and generate emissions of fugitive particulate matter (TSP and PM₁₀). Calculation of emissions has been based on an average year and estimated total miles traveled on in-mill paved roads.
 - 12.c. FUG-E-508 (unpaved road fugitive dust emissions): The method for calculating emissions from unpaved roads is similar to that used to calculate emissions from paved roads (see discussion above for FUG-E-507).

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

The emissions units regulated by this permit are the following [OAR 340-218-0040(3)]:

Emissions Unit	EU Capacity	EU ID	Pollution Control Device	Design Parameters	PCD ID
West Hydropulper	600 BDT/day	CLIP-E-i	NONE	NA ¹	NA

Review Report Permit Number: 06-0015 Application No.: 017021 Page 7 of 19 Pages

Emissions Unit	EU Capacity	EU ID	Pollution Control Device	Design Parameters	PCD ID
(CLIP-E-U-002f)					-
East Hydropulper (CLIP- E-U-001f)	600 BDT/day				
Rotary Drum Thickener (CLIP-E-F-004)	400 BDT/day				
DSM Screens (CLIP-E-F-005)	300 BDT/day				
Saveall (PAMO-A-F-012)	300 BDT/day	PAMO-E-1	NONE	NA	NA
Solvent Felt Washing (PAMO-A-F-023)	20 gal/day				
Head Box (PAM-E-U-001a)	1000 BDT/day				
Fourdrinier (PAMO-E-U-001b)	1000 BDT/day				
#1 Couch Vacuum Pump (PAMO-E-U-003a)	900 hp			·	
#2 Couch Vacuum Pump (PAMO-E-U-003b)	900 hp				
#3 Couch Vacuum Pump (PAMO-E-U-003c)	900 hp				
#1 Fourdrinier Vacuum Pump (PAMO-E-U-003d)	400 hp				
Vacuum Pump Flume (PAMO-E-U-003e)	75 hp				
Herrington UHLE Vacuum Pump (PAMO-E-U-004a)	700 hp				
Slotted UHLE Vacuum Pump (PAMO-B-U-004b)	700 hp			:	
#2 Fourdrinier Vacuum Pump (PAMO-E-U-004c)	700 hp				
Pickup Roll Vacuum Pump (PAMO-E-U- 005a)/Center Roll Vacuum Pump (PAMO-E-U-005b)	900 hp				
East ENP ² UHLE Box	200 hp				

¹PAMO-E-1 and PAMO-B-2 were combined into PAMO-E-3 in the permit. PAMO-E-3 is an emissions unit where material balance is used to calculate VOC emissions from all the individual devices/processes that make up the paper machine. ²ENP means extended nip press.

Review Report Permit Number: 06-0015 Application No.: 017021 Page 8 of 19 Pages

					
Emissions Unit	EU Capacity	EU ID	Pollution Control Device	Design Parameters	PCD ID
Vacuum Pump (PAMO-E-U-006a)					
Dry End Section (PAMO-E-U-007a)	150,000 lb/hr steam				
2nd Press Top Rolt Vacuum Pump (PAMO-E-U-006b)	400 hp				
Pickup Roll Fan (PAMO-S-I-016)	30 hp				
Transfer Roll Fan (PAMO-S-I-017)	7.5 hp				
Dryers (PAMO-E-U-007a)	150,000 lbs/hr steam	PAMO-E-2	NONE	NA	NA
#1 Boiler	192.1 MMBtu/hr 105,000 lb/hr steam	STM-E-1	#1 Burley Scrubbers (4)	70-90% efficiency, 70- 125 gpm, 50-90 psig, 40,000-60,000 dscfm, 2-5" water	STM1-X-X-001-
			#1 Multiclones	90% efficiency, 72,500 acfm, 2-10" water	STM1-S-P-001-C
#2 Boiler (STM2-E-U-002)	237.8 MMBtu/hr 130,000 lb/hr steam	STM-E-2	#2 Burley Scrubbers (4)	70-90% efficiency, 70- 125 gpm, 50-90 psig, 40,000-60,000 dscfm, 2-5" water	STM2-X-X-002-
			#2 Multiclones	90% efficiency, 72,500 acfm, 2-10" water	STM2-S-P-002-C
#1 Settling Basin (WWTO-A-F-001)	3.5 MGD	WWT0-E-1	NONE	NA	NA .
#2 Settling Basin (WWTO-A-F-002)	3.5 MGD		NONE	NA .	NA
Aerated Lagoon (WWTO-A-F-003)	3.5 MGD	-	NONE	NA	NA
Polishing Basin (WWTO-A-F-004)	3.5 MGD		NONE	NA	NA
Primary Clarifier (WWTO-A-P-006)	3.5 MGD		NONE	NA	NA
Landfill (WWTO-A-F-011)	1,300 BDT/yr	MISC-E-2	NONE	NA	NA .
Hog Fuel Pile	504 BDT/day 20'H * 138'W * 440'L	FUG-E-505	NONE	NA	NA
Hog Fuel Distribution:	504 BDT/day	FUG-E-506	NONE	NA	NA

Review Report

Permit Number: 06-0015 Application No.: 017021

Page 9 of 19 Pages

Emissions Unit	EU Capacity	EU ID	Pollution Control Device	Design Parameters	PCD ID
Truck Dump			NONE	NA	NA
Loader/Spreader			NONE	NA	NA
Drag Chain Conveyor			NONE	NA	NA
Disc Screening			NONE	NA	NA
Belt Conveyor	:		Shrouded Belt Conveyor	NA	NA
Land Spreading			NONE	NA	NA
Paved Roads	4.	FUG-E-507	Sweeping	NA	NA
Unpaved Roads		FUG-E-508	Watering	NA	NA
Aggregate Insignificant Ac	tivities:				
Woodyard Process Sewers/Drains	NA	NA	NONE	NA	NA
Primary Refining	NA	NA	NONE	NA	NA
Tertiary Refining	NA	NA	NONE	NA	NA
Secondary Refining	NA	NA	NONE	NA	NA
Retention Aid Tank	NA	NA	NONE	NA	NA
UST air sparging (remediation)	NA	NA	NONE	NA	NA
Bowser Lube System	NA	NA	NONE	NA	NA
Paper Machine Process Sewers/Drains	NA	NA	NONE	NA	NA
Freeman Press	NA	NA	NONE	NA	NA
OCC Rejects Belt Conveyor	NA	NA	NONE	NA	NA
Clippings Process Sewers	NA .	NA	NONE	NA	NA
Boiler Ash Sluice Pit	NA	NA	NONE	NA	NA
Steam Plant Process Sewers/Drains	NA	NA	NONE	NA	NA
Influent Pump Station Headworks	; NA	NA	NONE	NA	NA
Effluent Pump Station	NA	NA -	NONE	NA	NA

EMISSION LIMITS AND STANDARDS

BACT Monitoring Requirements

- 14. In order to demonstrate ongoing BACT achievement, Weyerhaeuser has developed customized equations based on Sulfur content and input rates of fuels. These equations were developed using stoichiometry and source tests results. Compliance demonstration will consist of continuous fuel input monitoring, routine sampling of fuel (HF & OCC) moisture content, periodic fuel heating values (HF, OCC & oil) as well as periodic source testing and fuel heating values to maintain or improve reliability of the custom equations.
 - 14.a. The following conditions are being used to demonstrate compliance with BACT:
 - 14.a.i. Conditions 15 and 16 contain the daily and annual SO₂ Plant Site Emission Limits

Page 10 of 19 Pages

14.a.ii. Condition 37 contains the equation that Weyerhaeuser has proposed to calculate SO₂ emissions. The Department is requiring that Weyerhaeuser validate the equation twice during the permit term by performing source testing when firing the boilers on various fuel mixtures.

PLANT SITE EMISSION LIMITS

15. Plant Site Emissions Limit discussion:

	Baseline	Netting Baseline		Plant Site	Plant Site Emission Limit (PSEL)			
	Emission			Previous	Proposed	PSEL	}	
	Rate	Previous	Proposed	PSEL	PSEL	Increase	PTE	
Pollutant	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	
PM/PM ₁₀	551	551	551	551	551	0	NA NA	
СО	1283	1283	1283	1283	1283	0	NA	
NO _x	238	288	288	288	288	0	NA	
SO ₂	33	174	174	174	174	0	NA	
VOC	449	449	449	449	449	0	NA	

NA: Since this source is considered a major source, there is no need to determine the potential to emit (PTE).

15.a. The baseline emission rate is the actual emissions during 1977 and the netting baseline is the same as the baseline emission rate unless there has been a major modification that triggered new source review. For this facility, new source review was triggered for SO₂ and NO_x in 1993 and was addressed in the previous permit.

COMPONENTS of the PSEL

Since the baseline period, there have been significant changes to the facility. The elimination of the pulping operation and the shutdown of the spent liquor incinerator reduced emissions from the baseline. Some of these reductions have been reassigned to other operations that have increased since baseline, and some of the baseline emissions are now unassigned PSEL. The facility has no credits. The short term emissions are also shown. Unlike the annual PSEL, which is set at the projected production levels, the short term PSEL is generally established at the maximum capacity of the emissions units for the short term time period.

	Assigned PSEL		Unassigned PSEL	Credits	
Pollutant	(tons/yr)	(lb/day)	(tons/yr)	(tons/yr)	
PM/PM ₁₀	551	3518	0	0 .	
СО	1283	11508	0	0	
NO _x	288	3139	0	0	
SO ₂	174	1776	0	0	
TRS	15	100	6	0	
VOC	298	3072	151	0	

Review Report

Permit Number: 06-0015 Application No.: 017021 Page 11 of 19 Pages

SIGNIFICANT EMISSION RATE

17. The proposed PSEL is equal to the netting baseline for all pollutants, as shown below. Since none of the pollutant increases are greater than the Significant Emission Rate (SER), the increases are approved without further air quality analysis or evaluation of the impacts.

Pollutant	SER	Requested increase over previous netting baseline	Increase due to utilizing capacity that existed in the baseline period	Increase due to physical changes or changes in the method of operation
PM	25	0	0	0
PM ₁₀	15	0	0	0
СО	100	0	0	0
NO,	40	0	0	0
SO ₂	40:	0	0	0
voc	40	0	0	0

PLANT SITE EMISSIONS MONITORING

18. The permittee is required to calculate pollutant emissions using established emission factors and actual production or material throughput data. The parameters to be monitored include steam from the boilers as well as boiler fuel usage and the sulfur content of the fuel oil. The bone dry tons throughput for much of the equipment and the paper production also need to be measured and recorded.

Emission factor verification tests are required for carbon monoxide, nitrogen oxides, and particulate matter from the boiler emissions units. This information is used to verify the emission factors currently used to establish the PSEL and for measuring pollutant emissions. Once the tests are completed, the Department will review the data and make any necessary adjustments to the PSEL.

UNASSIGNED PSEL

19. The decreases in Plant Site Emission Limits from the baseline emissions are unassigned PSELs which are available for use by the permittee for a previously permitted activity upon receipt of written approval from the Department

AGGREGATE INSIGNIFICANT EMISSIONS

- 20. The emissions from the following activities are included in the aggregate insignificant emissions:
 - 20.a. UST air sparging (remediation)
 - 20.b. Paper Machine Process Sewers/Drains
 - 20.c. Freeman Press
 - 20.d. Clippings Process Sewers/Drains
 - 20.e. Boiler Ash Sluice Pit
 - 20.f. Steam plant Process Sewers/Drains
 - 20.g. Influent Pump Station Headworks
 - 20.h. Effluent Pump Station
- 21. The emissions from the activities included in the aggregate insignificant emissions are the following:

Page 12 of 19 Pages

EU ID	Pollutant	Production Rate	Units	Emission Factor	Units	pounds/year
Paper Machine Process Sewers/Drains	SO ₂	100	dscf/min	1	ppm	10
Influent Pump Station Headworks	SO ₂	100	dscf/min	1	ppm	10
Effluent Pump Station	SO ₂	100	dscf/min	1	ppm	10
					SO₂ TOTAL	30
UST air sparging (remediation)	voc	100	dscf/min	1	ppm	10
Paper Machine Process Sewers/Drains	VOC	100	dscf/min	1	ppm	. 10
Freeman Press	voc	100	dscf/min	1	ppm	10
Clippings Process Sewers/Drains	VOC	100	dscf/min	i	ppm	10
Boiler Ash Sluice Pit	voc	100	dscf/min	1	ppm	10
Steam plant Process Sewers/Drains	VOC	100	dscf/min	1	ppm	10
Influent Pump Station Headworks	VOC	100	dscf/min	1	ppm	10
Effluent Pump Station	voc	100	dscf/min	1	ppm	10
			·		VOC TOTAL	80
Boiler Ash Sluice Pit	TRS	100	dscf/min	. 1	ppm	6
Steam plant Process Sewers/Drains	TRS	100	dscf/min	1	ppm	6
Influent Pump Station Headworks	TRS	100	dscf/min	1	ppm	6
Effluent Pump Station	TRS	100	dscf/min	1	ppm	. 6
				-	TRS TOTAL	24

CATEGORICALLY INSIGNIFICANT ACTIVITIES

- 22. Weyerhaeuser has the following categorically insignificant activities onsite:
 - 22.a. Constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under Divisions 20 through 32 of this chapter, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year
 - 22.b. Evaporative and tail pipe emissions from on-site motor vehicle operation
 - 22.c. Distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr
 - 22.d. Natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr
 - 22.e. Office activities
 - 22.f. Food service activities
 - 22.g. Janitorial activities
 - 22.h. Personal care activities

Review Report

Permit Number: 06-0015 Application No.: 017021 Page 13 of 19 Pages

- 22.i. Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance
- 22.j. On-site recreation facilities
- 22.k. Instrument calibration
- 22.1. Maintenance and repair shop
- 22.m. Automotive repair shops or storage garages
- 22.n. Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment
- 22.o. Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems
- 22.p. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities
- 22.q. Temporary construction activities
- 22.r. Warehouse activities
- 22.s. Accidental fires
- 22.t. Air vents from air compressors
- 22.u. Air purification systems
- 22.v. Continuous emissions monitoring vent lines
- 22.w. Demineralized water tanks
- 22.x. Pre-treatment of municipal water, including use of deionized water purification systems
- 22.y. Electrical charging stations
- 22.z. Fire brigade training
- 22.aa. Instrument air dryers and distribution
- 22.bb. Process raw water filtration systems
- 22.cc. Blueprint making
- 22.dd. Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking
- 22.ee. Electric motors
- 22.ff. Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids
- 22.gg. On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles
- 22.hh. Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment
- 22.ii. Pressurized tanks containing gaseous compounds
- 22.jj. Storm water settling basins
- 22.kk. Fire suppression and training
- 22.11. Payed roads and payed parking lots within an urban growth boundary
- 22.mm. Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils
- 22.nn. Health, safety, and emergency response activities
- 22.00. Emergency generators and pumps used only during loss of primary equipment or utility service
- 22.pp. Non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems
- 22.qq. Non-contact steam condensate flash tanks
- 22.rr. Non-contact steam vents on condensate receivers, deaerators and similar equipment
- 22.ss. Boiler blowdown tanks
- 22.tt. Ash piles maintained in a wetted condition and associated handling systems and activities
- 22.uu. Oil/water separators in effluent treatment systems

Page 14 of 19 Pages

22.vv. Combustion source flame safety purging on startup
 22.ww. Broke beaters, pulp and repulping tanks, stock chests and pulp handling equipment, excluding thickening equipment and repulpers

22.xx. Stock cleaning and pressurized pulp washing, excluding open stock washing systems

HAZARDOUS AIR POLLUTANTS

The following hazardous air pollutants are estimated by Weyerhaeuser Company to be emitted: 23.

Pollutant	Potential to Emit (tons/yr)
Acetophenone	4.4E-03
Acetaldehyde	19
Acrolein	9.2E-02
Benzene	11
Carbon disulfide	0.4
Chloroform	5.5E-02
Chloromethane	0.1
Cumene	2.2E-02
Di-n-butylphthalate	6.8E-02
Ethyl benzene	4.7E-03
Formaldehyde	2
Hydrogen chloride	14
Methanol	78
Methyl ethyl ketone	1
Methyl isobutyl ketone	1
Methylene chloride	2
Naphthalene	1
N-hexane	1
Poly aromatic hydrocarbons	1
Phenol	4.8E-02
Styrene	3.0E-02
Trichloroethane(1,1,1)	0.2
Toluene	0.1
Trichloroethylene	8.7E-03

Review Report Permit Number: 06-0015 Application No.: 017021 Page 15 of 19 Pages

Pollutant	Potential to Emit (tons/yr)
Xylenes	3.6E-02
Antimony	2.9E-04
Arsenic	2.8E-03
Cadmium	4.7E-06
Chromium	1.5E-02
Cobalt	3.1E-03
Lead	1.7E-03
Manganese	9.3E-02
Mercury	2.4E-02
Nickel	6.3E-02
Phosphorus	11
Selenium	1.9E-02
2,3,7,8 TCDD	1.2E-08
TO	OTAL (TONS PER YEAR) 143

24. A PSEL was established for the hydrogen chloride and methylene chloride emissions for fee purposes since they would not be included in the particulate or volatile organic compound PSELs.

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)

25. The Maximum Achievable Control Technology standard that will apply to Weyerhaeuser Company will be the Industrial Boiler MACT, scheduled to be promulgated by 11/15/00. At that time, the MACT standard will be incorporated into this permit by reopening since there will be more than three (3) years left remaining in the permit term.

TOXIC AND FLAMMABLE SUBSTANCE USAGE

26. The following toxic substances are used at Weyerhaeuser in the approximate quantities listed below:

TOXIC SUBSTANCE USAGE								
CAS Number	Chemical name	Insignificant	1,001-10,000 lb/yr	10,001-20,000 lb/yr	20,001-50,000 lb/yr	>50,000 lb/yr		
79061	acrylamide	х	<u> </u>		-	<u> </u>		
79107	acrylic acid	х		-	<u> </u>	_		
7429905	aluminum	x	<u> </u>			-		
7664417	ammonia	х		-	<u> </u>			
7440382	arsenic	х						
7440393	barium	х				-		

Page 16 of 19 Pages

	TOXIC SUBSTANCE USAGE							
CAS Number	Chemical name	Insignificant	1,001-10,000 lb/yr	10,001-20,000 lb/yr	20,001-50,000 lb/yr	>50,000 lb/yr		
7440417	beryllium	x						
7440439	cadmium	х						
7440473	chromium	х	 -	·	-			
7440484	cobalt	x	··					
7440508	copper	х	<u>-</u>		-			
124403	dimethylamine	x			_			
106898	epichlorohydrin	х						
107153	ethylenediamine	х						
7439921	lead	х			-			
7439965	manganese	x	<u>=</u>		,			
7439976	mercury	х	.					
7440020	nickel	х						
7697372	nitric acid	х	-			-		
7664382	phosphoric acid	х		-				
74986	propane				·	х		
7782492	selenium	х						
7440224	silver	х						
7664939	sulfuric acid	х			_			
7440280	thallium	x						
7440622	vanadium	х						
7440666	zinc	x		-				

STRATOSPHERIC OZONE-DEPLETING SUBSTANCES

Weyerhaeuser does not manufacture, sell, distribute, or use any stratospheric ozone-depleting substances except as contained in refrigeration and fire suppression equipment. Use of these materials is not regulated and can continue until supplies are depleted. These materials will be recycled by authorized vendors until replacements are developed. As such, the 1990 Clean Air Act, as amended, Sections 601-618, do not apply to the facility.

MONITORING REQUIREMENTS

28. Section 70.6(a)(3)(i) requires that all monitoring and analysis procedures or test methods required under applicable requirements be contained in Title V permits. In addition, where the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the

Review Report Permit Number: 06-0015 Application No.: 017021 Page 17 of 19 Pages

permit.

The requirement to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. Where compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by a lack of a regular program of monitoring and where periodic testing or monitoring is not otherwise required by the applicable requirement, then in this instance, the status quo (i.e., no monitoring) will meet section 70.6(a)(3)(i).

COMPLIANCE ASSURANCE MONITORING:

29. Weyerhaeuser has determined that only STM-E-1 and STM-E-2, Boilers #1 and #2, are subject to CAM because the potential uncontrolled particulate emissions are greater than 100 tons per year from each, and the units are subject to emissions standards for particulate matter. Pursuant to 40 CFR Part 64 and OAR 340-212-0200 through 340-212-0280, Weyerhaeuser submitted a CAM plan for the particulate emissions standard that applies to the boilers (the plan is included in the application as form CP709). The plan has been reviewed and is approved as follows:

Wet scrubbers are used to control particulate emissions from the boilers. However, proper operation of the wet scrubbers by themselves is not enough to provide a reasonable assurance of compliance with the particulate matter concentration limit. While the collection efficiency of the wet scrubbers may be relatively constant, if they are operated properly, increased inlet particulate matter loading due to the boilers' operation could result in outlet emissions greater than the standard. As a result, it is necessary to monitor both the control device performance and the operation of the boilers. Therefore, Weyerhaeuser proposes to monitor the wet scrubbers' outlet temperatures and scrubber solution flow rates to ensure that they are performing properly, and boiler excess oxygen as an indicator of good combustion practices. In addition, the multiclones will be periodically inspected for any internal damage that could affect the collection efficiency.

The CAM plan includes action levels for the wet scrubber outlet temperature range of 125 to 159 degrees Fahrenheit for Boiler #1, and 115 to 170 degrees Fahrenheit for Boiler #2, based on historical data. The wet scrubber flow rate action level ranges are 104 to 148 gallons per minute for Boiler #1, and 36 to 70 gallons per minute for Boiler #2. Deviations from these ranges trigger the requirement for Weyerhaeuser to take corrective actions to return the scrubber parameters to the established ranges, and to document the actions taken. The scrubber outlet temperature and scrubber flow rate will be measured continuously and recorded as hourly averages.

In some cases, visible emissions can be a good indicator of particulate emissions. However, for combustion devices that burn mixtures of fuels and fuels of variable quality (i.e., the Btu and moisture content can vary considerably), the characteristics of the particulate matter emissions may change such that the visible emissions do not correlate well with particulate concentrations. For this reason, good combustion practices as indicated by excess oxygen appears to be a better means for providing a reasonable assurance of compliance with the particulate standard instead of visible emissions. Weyerhaeuser proposes to monitor boiler excess oxygen and take corrective action whenever there is an excursion of the action level range. Excess oxygen will be monitored continuously and the data will be averaged and recorded hourly. The action level range for Boiler #1 is 5.0 to 14.0 percent residual oxygen, and the action level for Boiler #2 is 4.5 to 14.0 percent residual oxygen.

Review Report Permit Number: 06-0015 Application No.: 017021 Page 18 of 19 Pages

OTHER MONITORING

- 30. The boilers at the Weyerhaeuser facility have visible emissions limitations of 40% opacity. Visible emissions observations for both the boilers will be difficult to make because of the wet plumes. In addition, the weather conditions in the North Bend area, especially during the winter time, are not conducive to making visible emissions observations. Therefore, the permittee was required to conduct visible emissions observations during the first particulate source test with the parameter action levels discussed in the CAM section, set at the minimum set points for both the Burley scrubbers. Since the visible emissions were within the 40% opacity limit, the permittee will no longer be required to conduct EPA Method 9 testing. Continuous monitoring of the parameter actions levels should be sufficient to ensure compliance.
- 31. The permittee is required to inspect and determine whether the paper machine, repulping, and wastewater treatment system are in compliance with the opacity limit. EPA Method 22 is required because it is not believed that this emissions unit will have high opacities.
- 32. Emission factor verification testing is required in order to improve the database of emission factors. As stated in the permit, the emission factors are not enforceable limits unless otherwise specified (e.g., grain loading). If the emission factor verification testing determines that the emission factor should be much higher than what was used in the permit, the Department will investigate the reasons of the discrepancy. If the permittee was not operating efficiently, the Department may initiate an enforcement action. If the permittee was operating efficiently and the discrepancy in emission factors is due to process or source test variability, the Department will administratively amend the permit or wait until permit renewal to change the emission factor. The permittee would continue to use the emission factor in the permit for monitoring compliance.

RECORDKEEPING REQUIREMENTS

33. The permittee is required to keep all records listed in the recordkeeping requirements of the permit for 5 years from the date of generation of the record.

REPORTING REQUIREMENTS

34. The permittee is required to submit the semi-annual monitoring report and the annual monitoring report.

GENERAL BACKGROUND INFORMATION

- 35. The proposed permit is a renewal for an existing Title V Permit which was issued on 07/01/96 and was originally scheduled to expire on 07/01/99.
- Other permits issued or required by the Department of Environmental Quality for this source include an NPDES permit (NPDES 100850), stormwater permit (96255), and solid waste permit (SW1142). Weyerhaeuser Company is also registered with the Department as a small quantity hazardous waste generator, ORD 009047523.
- 37. A Land Use Compatibility Statement (LUCS) was submitted by Weyerhaeuser allowing outright use. The LUCS was signed on 09/20/93 by Coos County Assistant Director.
- 38. This source is located in an area that is in attainment for all pollutants.

Review Report

Permit Number: 06-0015 Application No.: 017021

Page 19 of 19 Pages

- 39. The source is not located within 100 kilometers of a Class I air quality protection area.
- 40. The source is not subject to federal New Source Performance Standards (NSPS) because no construction has taken place that would trigger the standards.
- 41. The production capacity is approximately 1000 bone dry tons per day and 343,100 bone dry tons per year.
- 42. The plant is operated 24 hours per day, 7 days per week, and 52 weeks per year.

COMPLIANCE HISTORY

- 43. The facility was inspected on 09/09/99 and 09/15/98 and was found to be in compliance.
- 44. During the prior permit period, no complaints were received.

PUBLIC NOTICE

- 45. The draft permit renewal was placed on public notice from August 2, 2000, to September 5, 2000, and no comments were received.
- 46. There are no affected states within 50 miles of the facility.

,

Permit No.: 06-0015 Expiration Date: 07/01/13

Page 1 of 3

EMISSION REDUCTION CREDIT PERMIT

Department of Environmental Quality
Western Region
750 Front Street NE
Suite 120
Salem, Oregon 97301-1039
(503)378-8240

This permit is being issued in accordance with the provisions of ORS 468A.040 and OAR 340-268-0030.

ISSUED TO:

INFORMATION RELIED UPON:

Weyerhaeuser P.O. Box 329

Application No.:

Not applicable

North Bend, OAR 97459

Date Received: 12/18/03

SITE LOCATION:

Jordan Point North Bend, OR 97459

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

John B. Becker, Western Region Air Quality Manager

Dated

Permit No.: 06-0015 Expiration Date: 07/01/13

Page 2 of 3

1.0 EMISSION REDUCTION CREDITS

1.1. Emission Reduction Credits

Pollutant	Emission Reduction Credit (tons per year)
CO	620
SO ₂	116
NO _X	202
PM ₁₀	167
VOC	113
TRS	12

1.2. Expiration Date

July 1, 2013

2.0 EMISSION REDUCTION CREDIT TERMS

2.1. Generating emission reduction credits

- a. The reductions are permanent, because the source has surrendered their permit, and cannot operate at this location without applying for a new permit.
- b. The reductions are real, because they are based on actual emissions occurring at the facility during a 12 consecutive month period during the 24 month period prior to shutdown.
- c. The reductions are quantifiable, because they have been calculated using actual production records and measurements at the facility or accepted emission factors developed through source testing at Weyerhaeuser or at locations with similar processes.
- d. The reductions are enforceable, because the source has surrendered their permit to operate the paper mill.
- e. The reductions are surplus, because no permit term, rule or plan required Weyerhaeuser to cease operations or reduce emissions at this location, and Weyerhaeuser was operating in compliance with all permit terms and rules prior to the shutdown.
- f. The emission reductions are in an amount of 10 tons per year or greater as required by OAR 340-268-0030(c).

Permit No.: 06-0015 Expiration Date: 07/01/13

Page 3 of 3

2.2. Using emission reduction credits

Emission reduction credits may be used for:

- a. A new source at the site provided the permittee applies for and obtains an Air Contaminant Discharge Permit in accordance with OAR 340 division 216; or
- b. They may be transferred to another source as offsets pursuant to the New Source Review program (OAR 340 division 224) and the Net Air Quality Benefit requirements of OAR 340-225-0090.
- 2.3. Notification for using emission reduction credits

The Department provides for the allocation of emission reduction credits in accordance with the uses specified by the holder of the emission reduction credits. The holder of emission reduction credits must notify the Department in writing when they are transferred to a new owner or site. Any use of emission reduction credits must be compatible with local comprehensive plans, statewide planning goals, and state laws and rules.

2.4. Unused emission reduction credits

Emission reduction credits that are not used prior to the expiration date will expire and revert to the air shed.

2.5. Other activities

No air contaminant sources are allowed at the site without prior approval by the Department in accordance with the Notice of Intent to Construct regulations in OAR 340 division 210 or the Air Contaminant Discharge Permit regulations in OAR 340 division 216, whichever is applicable.

Department of Environmental Quality
Western Region
Air Quality Program

EMISSION REDUCTION CREDIT PERMIT REVIEW REPORT

Weyerhaeuser Company P.O. Box 329 North Bend, OAR 97459

Weyerhaeuser Company owned and operated a facility in North Bend, Oregon that produced medium for use in the making of cardboard boxes. The facility was permitted under Oregon Title V Operating Permit Number 06-0015. On August 20, 2003, the Department received notification that the facility was permanently shut down on June 30, 2003. The permittee requested that the Title V permit be canceled and an Emission Reduction Credit Permit be issued for banking the shutdown credits.

This Emission Reduction Credit Permit establishes the emission reduction credits based on the highest actual emissions during a 12 consecutive month period during the 24 months immediately preceding the application for credits. The period selected was May 2002 through April 2003. Most of the emissions were from the two boilers at the facility that were fired on a combination of hog fuel, old corrugated cardboard rejects, and used oil. The stack parameters are summarized in the table below. By issuing this permit, the credits are available for use at this site or can be transferred to another site as offsets in accordance with the New Source Review program (OAR 340 division 224) and the Net Air Quality Benefit requirements of OAR 340-225-0090 for up to 10 years from the shutdown. The credits will expire on July 1, 2013. The Emission Reduction Credit Permit is issued in accordance with OAR 340-268-0030.

Emissions unit description	EU ID	Device description	Flow rate (dscfm)	Stack Height	Temp. °F
Boilers	STM-E-1	Babcock and Wilcox boiler	44,200	110 feet	131-156
	STM-E-2	Babcock and Wilcox boiler	44,400	90 feet	125-147