

**LANE REGIONAL AIR PROTECTION AGENCY  
TITLE V OPERATING PERMIT**

**REVIEW REPORT**

**Flakeboard America Limited -- Eugene MDF  
50 North Danebo Avenue  
Eugene, Oregon 97402**

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**PERMITTEE IDENTIFICATION**

1. Flakeboard – Eugene MDF (the facility or Flakeboard) operates a medium density fiberboard (MDF) manufacturing facility at 50 North Danebo Avenue in Eugene, Oregon.

**PROPOSED PERMIT ACTION**

2. The facility submitted application number 54493 on November 19, 2007 for a compliance extension request for the installation of controls required by the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Plywood and Composite Wood Products (PCWP) Maximum Achievable Control Technology (MACT) standard of 40 CFR 63 Subpart DDDD. The facility also submitted application number 552794 on March 11, 2008 for a Significant Modification to their Oregon Title V Operating Permit. The principal purposes of the modifications are to incorporate the requirements PCWP MACT.

**FACILITY DESCRIPTION**

3. Medium-density fiberboard is produced by the facility in a sequence of steps that include receipt of raw materials by truck, sorting and cleaning of the raw materials (wood chips), milling of oversize materials (hogging), washing, steaming, refining (mechanical reduction of chips to fiber), addition of binder and drying, and then forming and pressing of the refined fiber into the desired board products. Board materials are trimmed both before and after pressing and then sanded following the press. Raw materials are hardwood or softwood chips, sawdust shavings and ‘urban wood’ which is hogged pallets and other waste woods from commercial activities in the Willamette Valley. This Title V permit was first issued to Willamette Industries, Inc., Eugene MDF Division, on May 21, 2001, and scheduled to expire on May 22, 2011. The medium density fiberboard facility was purchased by Weyerhaeuser Company in June 2002 and by Flakeboard America Ltd in 2006.

**MODIFICATIONS TO THE PERMIT**

4. The following table includes the changes made to the permit for this modification:

Permit Condition	Change
Permit Title Page	Replaced signature description from “Sandra Lopez, Operations Manager” to “Merlyn L. Hough, Director”
Table of Tables Page, Table 12	Replaced “Dryer-2” with “Blender-1”
List of Abbreviations Page	Replaced ODEQ HAP rule reference with corresponding LRAPA HAP rule reference. Added definitions for “PCWP”, “RCDME”, and “VHAP”.
Condition 3, Table 1	Added the term “pressurized refiner” to EU Dryer-1 description. Added new row for new EU Blender-1. Added biofilter control device to EU

Permit Condition	Change
	Press-1. Updated baghouse PCD-ID's and EU descriptions.
Old Condition 4 and Old Table 2	Deleted Alternative Operating Scenario for a "boiler to be installed during the permit term" (Boiler-4). The facility will need to receive approval to construct and a permit modification to install a new boiler.
Emission Limits and Standards, Old Table 3/New Table 2	Deleted general references to PCWP MACT and Boiler MACT requirements. Renumbered subsequent tables accordingly.
Old Condition 13	Deleted entire condition. The general requirements for the facility to comply with the PCWP MACT were deleted as these are proposed to be replaced by facility-specific requirements.
Old Condition 14	Deleted PCWP MACT "Notifications" section for reason stated above.
Old Condition 15	Deleted entire condition. The general requirements for the facility to comply with the Boiler MACT were removed as per the vacatur of the standard by EPA.
Old Condition 16	Deleted the boiler MACT "Notifications" section for reason stated above.
Condition 12, Table 3	Revised the Short-term PSEL values and replaced "Dryer-2" with "Blender-1" to be consistent with the facility's application.
Condition 13, Table 4	Revised the Annual PSEL values and replaced "Dryer-2" with "Blender-1" to be consistent with the facility's application.
Condition 14.a., Table 5	Added "Blender-1" to the Natural Gas Used process parameter row. Replaced Dryer-2 with Blender-1 in Furnish Dried row.
Condition 14.c, Table 6	For Boilers-2, Sanderdust: revised CO emission factor from 7.27 to 22.67 lb/BDT to reflect recent emission factor verification testing results and revised the requirement for testing from "within 180 days of permit issuance" to "within 180 days of initial combustion of sanderdust/fines fuel firing during current permit."
Condition 14.c, Table 6	For Boilers-2, Sanderdust: revised NOx emission factor from 26.19 to 69.34 lb/BDT to reflect recent emission factor verification testing results and revised the requirement for testing from "within 180 days of permit issuance" to "within 180 days of initial combustion of sanderdust/fines fuel firing during current permit."
Condition 14.c, Table 6	For Dryer-1VOC: revised furnish emission factor

Permit Condition	Change
	from 2.40 to 1.65 lbs/BDT furnish
Condition 14.c, Table 6	Deleted Dryer-2 emission factors and replaced with Blender -1 emission factors. Dryer-2 is no longer an emission unit.
Condition 14.c, Table 6	For Mat-1, deleted baghouse 10 reference since it is no longer in operation.
Condition 14.c, Table 6	For Press-1, revised VOC (normal operations) emission factor from 0.414 to 0.246 lb/MSF $\frac{3}{4}$ " basis. Added new row for VOC RCDME (routine control device maintenance exemption).
Condition 14.c, Table 6	For Press-1, revised NOx (normal operations) emission factor from 0.030 to 0.027 lb/MSF $\frac{3}{4}$ " basis. Added new row for VOC RCDME.
Condition 16.a and 16.a.i.	Revised the requirement for testing from "within 180 days of permit issuance" to "within 180 days of initial combustion of sanderdust/fines fuel firing during current permit."
Old Conditions 26-29 and Old Table 10	Removed conditions and table associated with Boiler-4.
Condition 22.a.i	Replaced the inspection requirement from "During each regularly scheduled maintenance outage of the dryer..." to "At least quarterly".
New Condition 24	Inserted applicable Dryer-1 PCWP MACT requirements.
Table 10 and Conditions 25-27.	Replaced Dryer-2 with Blender-1 and changed the CAM "limit/standard" column from "highest and best" to "indicator range" to more accurately describe the monitoring. Changed the upper pressure drop range for BL BH-1 from 3.0 to 6.0 inches of water as per facility request.
New Condition 31	Inserted applicable Press-1 PCWP MACT requirements. Some requirements also include reference to Dryer-1.
Condition 34	Changed the BH-1 lower pressure drop range from 0.3 to 0.1 inches of water and the lower range for BH-12 from 0.5 to 0.1 inches of water upon facility request.
Table 16	Replaced Dryer-2 with Blender-1
New Condition 44	Inserted applicable PCWP MACT Miscellaneous Coating Operations requirements.
Table 19	Changed the Press-1 monitoring point from Press Baghouse to Press Biofilter.
Table 20	Replaced Dryer-2 with Blender-1 and added the Blender-1 monitoring point.
Condition 51	Replaced permit deviation reporting "prompt" time from 7 to 15 days as per ODEQ rule change.

Permit Condition	Change
New Condition 60.g	Added a PCWP MACT compliance reporting requirement.
Old Condition 69	Deleted non-applicable requirement condition as suggested by EPA during the review of LRAPA's Title V program.

## DISCUSSION

5. On July 30, 2004, EPA published the PCWP MACT. The facility is a major source of HAPs and operates affected units and activities as listed below. As an existing facility, the MDF plant was required to be in compliance with the applicable requirements of this rule by October 1, 2007, with the exception of an LRAPA-approved extension to complete controls to meet a standard, not to exceed one (1) year. The US Circuit Court of Appeals decision on June 19, 2007 removed a low-risk demonstration alternative from the PCWP MACT upon which the facility was relying to meet the October 1, 2007 compliance date. On January 18, 2008 the facility received an LRAPA-approved one-year extension (not to exceed October 1, 2008) for the installation of controls to meet the PCWP MACT.
6. Because the facility is a major source of HAPs, the 40 CFR Part 63 Subpart DDDDD – NESHAPs for Industrial, Commercial and Institutional Boilers and Process Heaters (Boiler MACT) had applied to the boilers at the facility. However, on June 8, 2007 the U.S. Court of Appeals vacated and remanded the Boiler MACT. As a result, the initial compliance dates are no longer in force and all Boiler MACT conditions were removed.
7. In obtaining building permits for components of the system to attain PCWP compliance, the facility ran into delays that make it very likely that the facility will not be able to comply with the October 1, 2008 deadline established by the extension. The facility anticipates the press biofilter will be fully commissioned by November 15<sup>th</sup>, 2008 and the new blender system commissioned by December 31, 2008. The facility requested on June 2, 2008 a compliance schedule placed into the permit so that it was apparent to all that the deadline would not be met and to provide assurance as to when the controls and blender system will be in place. LRAPA noted that OAR 340-218-0040(3)(n)(C)(iii) pertains to compliance schedules for sources not in compliance at the time of permit issuance. Since the facility is currently not out of compliance with the PCWP MACT, there is uncertainty associated with the compliance schedule dates suggested by the facility. It was recommended by LRAPA and EPA that a compliance schedule as part of a Stipulated Final Order (SFO) be used in lieu of a potentially premature compliance schedule in the permit.
8. Applicable PCWP MACT requirements have been placed into the permit. Permit Conditions 24 and 31 contain the specific emission limits, operating requirements and reporting requirements required under the PCWP MACT.
9. The affected emission units and activities are subject to the PCWP MACT (see the PCWP MACT for definitions of terms quoted in 7.a through 7.h below). A more detailed discussion of these affected emission units and activities as they relate to the PCWP MACT is included in subsequent review report items.

- a. Dryer-1 “primary tube dryer”.
  - b. Press-1 “reconstituted wood product press”, and
  - c. “Group 1 miscellaneous coating operations”.
10. Press-1 is the board press at the facility. As part of the requirements contained in the PCWP MACT (40 CFR Part 63 Subpart DDDD), the facility installed a new biofiltration unit in 2008. Press-1 emissions are controlled by the biofiltration unit (P-1 Biofilter) for HAPs control in addition to, and downstream from, the existing press enclosure and baghouse system (P-1 Baghouse System) for particulate control.
  11. The P-1 Biofilter will have a two-stage bioscrubber followed by the biofiltration unit. Design air flow rate is 70,000 ACFM and operating temperature range will be 68F to 105F.
  12. Dryer-1 is the tube-style furnish dryer, and is heated by a Coen multi-fuel burner. As part of the Blender-1 process change in 2008 to reduce overall formaldehyde emissions and comply with PCWP MACT, the resin will be injected post-dryer. Thus, the resinated fibers will no longer be processed at elevated temperatures.
  13. Blender-1 is a new source that is installed as part of the 2008 changes for PCWP MACT compliance. Dryer-2 was removed as an emission unit from the permit as part of this change; Dryer-2 became an unheated pneumatic fiber transfer system associated with Blender-1. Blender-1 resinates and conditions wood fiber after it has passed through Dryer-1 and prior to mat formation. Blender-1 consists of a resin atomization and injection system with a low-heat conditioning chamber. Heat is provided to the conditioning chamber with an 18 MM Btu (maximum) direct-fire natural gas burner operating normally at 11 MM Btu to maintain a fiber conditioning temperature of approximately 104 degrees F. After fiber separation through a high-efficiency cyclone, Blender-1 air is emitted to the atmosphere through a baghouse system (BH BL-1). The resinated and conditioned fiber is pneumatically transferred to the existing fiber bin prior to mat forming. The air from this transfer is emitted to the atmosphere via an existing baghouse (BH-11) prior to the fiber bin. The maximum design capacity of Blender-1 is 58,600 lb/hr of resinated/conditioned wood fiber. Under the PCWP MACT, Blender-1 is not an applicable emission unit and is exempt from the PCWP MACT requirements.
  14. AI is the emission unit for aggregate insignificant activities. As specified by the PCWP MACT, the facility is required to use only non-HAP coatings for all group-1 miscellaneous coating operations as defined in 63.2292. The facility is also required to keep records showing that only non-HAP coatings are used.

**PLANT SITE EMISSION LIMITS**

15. The following table includes the PSELs.

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limit (PSEL)			PTE (tons/yr)
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	
PM	212	212	212	90.1	71	-19.1	71
PM <sub>10</sub>	165	165	165	87.8	70	-17.8	70
CO	559	559	559	276.0	205	-71	205
NO <sub>x</sub>	169	169	169	208	208	0	208
SO <sub>2</sub>	2.7	2.7	2.7	2.2	1.6	-0.6	1
VOC*	338.8	338.8	287.3	304	252	-52	252
Pb	0.008	0.008	0.008	0.003	0.0018	0	0.0018

\*The VOC Netting Basis was reduced proportional to the amount of Volatile Hazardous Air Pollutants (VHAPs) reduced as required by the PCWP MACT.

**COMPONENTS OF THE PSEL and UNASSIGNED EMISSIONS**

16. The following table includes the components of the PSEL and Unassigned Emissions.

Pollutant	Assigned PSEL		Unassigned Emissions (tons/yr)
	(tons/yr)	(Short-Term Units) (lbs/mo)	
PM	71	17,202	141
PM <sub>10</sub>	70	16,792	95
CO	205	52,511	354
NO <sub>x</sub>	208	60,982	0
SO <sub>2</sub>	1.6	441	1.1
VOC	252	64,942	35.3
Pb	0.0018	1.0	0.0062

**SIGNIFICANT EMISSION RATE**

17. The proposed PSEL for each pollutant is not greater an SER over the previous netting baseline as shown below.

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 <sub>10</sub>	15	0	0	0
CO	100	0	0	0
NO <sub>x</sub>	40	39	0	39
SO <sub>2</sub>	40	0	0	0
VOC	40	0	0	0
Pb	0.6	0	0	0

18. The proposed VOC netting basis is reduced by 51.5 tons after October 1, 2008 in accordance with OAR 340-200-0020(71) because VOCs have been reduced as required by the VHAP reductions specified in the PCWP MACT rule.

**HAZARDOUS AIR POLLUTANTS**

19. The following is the potential to emit (tons per year) of the facility for hazardous air pollutants listed in Section 112(b) of the 1990 Clean Air Act Amendments (CAAA). The potential to emit hazardous air pollutants is greater than the major source thresholds of ten (10) tons per year for any single HAP and 25 tons per year for total HAPs. The emission totals below reflect the most current information available including the reductions in formaldehyde and methanol from the implementation of the PCWP MACT. As part of the PCWP MACT the facility estimates total HAP will be reduced by 63.9 tons/year (from reductions of 38.2 tons/year formaldehyde and 25.7 tons/year methanol).

Pollutant	Potential To Emit (tons/year)
1,1,1-Trichloroethane	0.0038
1,4-Dioxane	0.00091
2-Butoxy Ethanol	0.0007

Pollutant	Potential To Emit (tons/year)
Acetaldehyde	1.42
Acrolein	0.604
Arsenic Compounds	0.00027
Benzene	0.521
Beryllium Compounds	0.0000135
Biphenyl	0.000098
Cadmium Compounds	0.0000503
Chromium Compounds	0.0185
Ethyl Benzene	0.00941
Ethylene Glycol	0.013
Formaldehyde	10.7
Glycol Ethers	0.0043
Hexane	0.001
Hydrochloric Acid	1.79
Hexachlorobenzene	0.0000009
Lead	0.000783
Manganese Compounds	0.0272
Mercury Compounds	0.0000246
Methanol	56.8
Methylene Chloride	0.012
Methyl Isobutyl Ketone	0.961
Naphthalene	0.0821
Nickel Compounds	0.0114
Phenol	2.83
Polycyclic Organic Matter	0.00771
Propionaldehyde	0.0547
Selenium Compounds	0.0000344
TCDB-p-dioxin	0.0000000576
Toluene	0.115
Xylene	0.0122
<b>Total HAPs</b>	<b>76.0</b>

### **PCWP MACT (40 CFR Part 63 Subpart DDDD)**

20. The facility is subject to the PCWP MACT and has chosen a compliance option to reduce overall formaldehyde emissions by 90% (Table 1B, Row 5 of the PCWP MACT). A biofiltration system was installed to control emissions from Press-1. In conjunction with the biofilter, a process change and continued use of an existing Wet ESP are used to meet the required 90% reductions required. The facility changed the point at which the wood fiber is resinated by creating Emission Unit Blender-1 (Blender-1) and eliminating the Dryer-1 resination system. What was called Dryer-2 is now a tube-type pneumatic wood fiber conveyance system and is no longer an emission unit. In order to show the 90% overall formaldehyde reductions, historic emission rates (prior to the Blender-1 resination process change) are evaluated by way of source testing and this historic rate is used as the emission rate input (“ERin”) in the equation to evaluate the 90% formaldehyde reduction. Prior to startup of the new resination system, the facility is required to perform testing for the three primary MDF product categories and averaging the results to determine ERin as a function of production. The facility chose to meet the PCWP MACT requirements by way of implementing the following (only those PCWP MACT requirements and changes that are somewhat site-specific are listed below):
- 20.a. Changing the resination application point to downstream of the dryer (Dryer-1);
  - 20.b. Using an add-on control device (Press-1 Biofilter) on the press exhaust (Press-1);
  - 20.c. Continued use of the existing wet-scrubbers (Wet ESP #1 and #2) on Dryer-1;
  - 20.d. Required analysis of the Wet ESP #1 and #2 air and water exhaust as a source of HAP emissions;
  - 20.e. Follow the 63.2268 requirements for initial compliance demonstration for a wet control device;
  - 20.f. Petition EPA under Table 2, Row 4 for site-specific operating parameters;

### **NON-APPLICABLE REQUIREMENTS**

21. The facility is not subject to Section 129 of the Federal Clean Air Act (FCAA) for solid waste combustion.
22. At the time of this permit modification, the facility has been determined to be an applicable source under 40 CFR Part 63 Subparts A, DDDD, and DDDDD. There are no other Part 63 Regulations for which the facility is subject.
23. At the time of this permit modification, the facility is subject to the 40 CFR Part 60 Subpart A requirements only. There are no other Part 60 Regulations (NSPS) for which the facility is subject.

### **GENERAL BACKGROUND INFORMATION**

24. The Eugene MDF facility produces a medium-density fiberboard for a variety of end uses from either hardwood or softwood chips, sawdust shavings or from ‘urban wood’ which is recovered

from pallets and other wood packaging waste wood generated in the Willamette Valley. After initial washing, sorting, and separation of non-wood material, the raw material is steam-softened and reduced to fiber in a pressurized disc refiner. The relatively moist material exiting the refiner is blown through the dryer. The tube-type dryer is directly heated by exhaust gas from the Coen burner which can fire sanderdust or natural gas. After primary moisture reduction is accomplished, the fiber passes into a tube-type pneumatic fiber transfer system and then to a blender. The blender resinates and conditions the wood fiber and consists of a resin atomization and injection system with a low-heat conditioning chamber. Fiber at appropriate moisture content then enters an unheated pneumatic transport system to the formers and is shaped into an oversize mat and trimmed and conveyed into the steam heated press. In the press, the mat is compressed to the desired thickness and the resin added back at the refiner cures. The resulting board is trimmed again, and prepared for market by sanding, stacking and banding. The facility was converted from a particleboard plant to MDF production in 1995:

## CONSTRUCTION

25. 2008- NC200529-A08 was given as approval to construct for the installation of the bio-filtration unit and the post-dryer resination and low-heat conditioning system as part of the facility's plan to attain compliance with the PCWP MACT.

## PUBLIC NOTICE

26. The draft permit significant modification for incorporation of the PCWP MACT requirements was on public notice from **August 6, 2008** to **September 5, 2008**. A public hearing was not requested but one was held on September 11, 2008, in the LRAPA Meeting Room at 1010 Main Street, Springfield, Oregon. The hearing was scheduled to provide additional assurance of permit issuance by the October 1, 2008 PCWP MACT compliance date. Zero (0) members of the public attended however one (1) party provided written comments via mail the next day (September 12, 2008). Following are responses to the nine (9) comments raised by the commenter and the comment number from the letter received is noted next to "Issue Raised". A hard copy of the cover letter and actual comments received is attached to this review report.

## Comments and Reponses

27. Issue Raised (1): Lynne Paretchan of Perkins Coie legal firm in Portland ("Lynne Paretchan" or "the commenter") commented that allowing "the permittee to move the measurement of HAP emissions from the dryers, which requires control under the HAP rule", to devices downstream of the dryers that do not require control under the rule constitutes circumvention under 40 CFR §63.4 and that the "emission reduction should take into account the increase in total HAP emissions at the downstream devices including the blender/former and metering systems."

Response: The facility has chosen to use the "Add-on Control Systems Compliance Option" and under that option the Blender is not an applicable "process unit". Dryer-1 and Press-1 are applicable process units. EPA has stated that a facility is compliant with the PCWP MACT Add-on Control System Option if the emissions from the applicable process units are controlled by one or more control devices. There is no requirement that Dryer-1 be controlled to the Table 1B

levels by a single dedicated control device. Nor is there any requirement that the facility control emissions from process units not subject to control requirements. We believe that the commenter's confusion may have been attributable to the biofilter not having been identified in Table 1 as controlling resin related emissions that previously would have been emitted at Dryer-1. Table 1 will be revised to list the biofilter as a control for the Dryer-1 emissions to reflect the shift in emissions to that control point. Emissions from Dryer-1 and Blender-1 are required by the proposed permit to be measured.

28. Issue Raised (2): The commenter believes that the emission unit formerly identified as "Dryer-2" is a "secondary tube dryer" and that it should be required to be controlled under the PCWP MACT add-on control systems compliance option.

Response: The emission unit formerly identified as "Dryer-2" is considered a "pneumatic fiber transport system" and has been exempted as a process unit as per the definition of "tube dryer". The definition states that tube dryers (tube dryers are affected process units) "do not include pneumatic fiber transport systems that use temperature and humidity conditioned pneumatic system supply air in order to prevent cooling of the wood fiber as it moved through the process." The temperatures in the pneumatic fiber transport system do not reach levels high enough to appreciably reduce the moisture of wood fibers as they are conveyed through the system. The temperature of the fibers entering and air exiting the pneumatic transport system has been measured at 130 and 90 degrees Fahrenheit, respectively. The inlet to the transport system is ambient air typically at ambient temperatures and only occasionally enhanced with indirect steam heat during the coldest days of the winter to get the air closer to average ambient temperature. By contrast, the inlet temperature of the primary dryer system (Dryer-1) is approximately 380 degrees Fahrenheit, dropping to 130 degrees Fahrenheit before the air and fiber are separated prior to the "secondary dryer tube" (pneumatic transport conveyer).

29. Issue Raised (3): Lynne Paretchan asserts that the draft permit incorrectly allows for the combined use of the emissions averaging and add-on control systems as two different compliance options under the PCWP MACT. Lynne Paretchan further states that the permittee must measure debit and credit sources for six total HAPs (as defined in 40 CFR 63.2292), including increased methanol emissions from the blender (Blender-1), and that periodic mass emission reduction calculations must be required.

Response: The commenter incorrectly states that the permit proposes to allow the facility to use the emissions averaging option. While the PCWP MACT does allow an emissions averaging option, that is not what is identified in the proposed permit. The proposed permit identifies the Add-on Control Systems compliance option. EPA approved the compliance demonstration method in the proposed permit as consistent with the Add-on Control Systems compliance option, including the use of historic (source test) emission rates to be verified by further testing, in a December 2007 telephone conference. The PCWP MACT rule prohibits the use of two different compliance options as is suggested by the commenter. Although Blender-1 is not an applicable process unit under the PCWP MACT, the emissions from Blender-1 are accounted for in the VOC PSEL and testing of Blender-1 is required within 180 days of startup to verify the VOC emissions including the speciation of Methanol and Formaldehyde. Based upon the results of that test, additional testing may be required for Blender-1 by LRAPA.

30. Issue Raised (4): Lynne Paretchan notes that the “Production Based Compliance Option does not allow the use of control systems” and commented that “the draft permit improperly allows for non-concurrent inlet/outlet testing and does not address the deficiencies of the add-on control device” [e.g. WESP #1 and WESP #2 on Dryer-1].

Response: The facility has chosen an Add-on Control Device Option and to not pursue a Production Based Compliance Option. Further, Table 2, Row 4 of the PCWP MACT clearly provides for the use of a “control device other than a thermal oxidizer, catalytic oxidizer, or biofilter”. Item 20 in the proposed review report explains the LRAPA and EPA-approved use of the WESPs as the primary PCWP control device for Dryer-1. The permit requires testing of the WESP #1 and WESP#2 air and water exhaust as a source of HAP (formaldehyde) emissions. EPA has stated that the intent of Table 1B was not to require separate control devices for each affected process unit but rather that one control device could be used to control multiple units. The facility is proposing to utilize a biofilter as its primary control and the WESPs as secondary controls. Together they must achieve the required control efficiency for the affected process units. The testing conducted on these control devices will verify whether the facility is in compliance with the standards and the permittee has provided reasonable support for assuming that the system can meet the control requirements.

31. Issue Raised(5): Lynne Paretchan notes that EPA has stated that the “MACT floor determinations and compliance options were based upon the full flow of emissions” (see FR 45970). The commenter also states that the “draft permit improperly allows the permittee to determine compliance based on different mass emissions (dryer outlet pre-construction vs. dryer outlet post-construction) and that this approach goes against the MACT floor determinations that were based upon the full flow from a process unit.

Response: EPA’s response in the Federal Register about the MACT floor determinations and compliance options being based upon “full flow of emissions” was in the context that the PCWP MACT rule language is intended to prevent sources from partitioning emissions from a single process unit and then applying different control options to each portion of the emission stream. The facility has chosen a single control option and the permit does not apply different control options to each portion of a partitioned emissions stream. Additionally, the testing required by the permit requires the facility to evaluate emissions at full flow prior to the startup of the new blending system and after the startup of the new blending system.

32. Issue Raised(6): The commenter states that “in this draft permit, an add-on control device designed to destroy or secure HAPs does not exist and is not being required” and that “overall total HAP emission reduction must also be measured, and must include the overall increase in total HAP emissions at the downstream device (blender baghouse(s)/former/metering system).”

Response: The facility has chosen to install a new biofiltration unit to remove HAPs currently emitted from the press and the dryer and to maintain the existing Wet ESPs on Dryer-1 in conjunction with a process change that has inherently lower emissions. The PCWP MACT rule recognizes that Wet ESPs are not designed primarily to remove HAPs and the proposed permit requires the facility to petition for site-specific operating parameters to be established during the performance test as per Table 2 Row 4 in the PCWP MACT. The Add-on Control Systems Compliance Option 5 (reduce formaldehyde emissions by 90 percent) does not require the facility to analyze HAPs from blenders. Although, as stated in the response to comment 3 (Item 29 in the

Public Notice section of this review report), the permit requires the VOC emission factor (including the speciation of methanol) to be verified by testing within 180 days of startup of Blender-1.

33. Issue Raised (7): In a nearly identical point raised by Lynne Paretchan in other comments, the commenter states that tube dryers are emission units that require control and that the permit should require Blender-1's emissions to be counted or addressed in the overall compliance approach.

Response: Please refer to the responses to previous similar comments, in that the WESPs are the primary PCWP MACT control device for Dryer-1. Designation and authorization of the WESPs requires the development of site-specific operating parameters for the WESPS such as water feed and recirculation rates.

34. Issue Raised (8): The commenter states that the facility cannot determine continuous compliance with a 90% reduction of formaldehyde across the dryers. And, similar to the comment raised in Item 31 to this review report [Issue Raised(5)] above, Lynne Paretchan states that the permittee must be required to measure inlet and outlet stacks concurrently and repeat the testing within 2 years.

Response: Please note that EPA has clarified that the PCWP MACT rule for the Add-on Compliance Systems Compliance option requires an overall reduction of HAP emissions from all affected process units at a facility and not a reduction for each process unit as suggested by the commenter. This facility will reduce HAP emissions from the current configuration through the combined use of WESPs and the biofilter. The permittee will have to demonstrate compliance with the Table 1B requirements utilizing the proposed methodology. EPA explained that aspect of the rule and approved the proposed compliance approach, including the use of historic emission rates verified by further testing, in a December 2007 telephone conference.

35. Issue Raised (9): Lynne Paretchan suggests that operating parameters (resin addition, temperature, etc.) for "the dryer" must be established since there is "no HAP control device" controlling Dryer-1 emissions and that continuous compliance should be established by the installation of a total hydrocarbon continuous emission monitoring system (THC CEM).

Response: EPA notes on FR45969 that facilities using a Wet ESP to meet one of the Add-on Control Systems Compliance options can petition for approval of site-specific operating requirements to be used in demonstrating continuous compliance. EPA further notes that facilities using a Wet ESP may use a THC CEM but that a THC CEM is not required. In addition, EPA notes that facilities using Wet ESPs as the sole means of reducing HAP emissions must submit with their Notification of Compliance Status a plan for review and approval to address how organic HAP captured in the wastewater from the Wet ESPs are contained or destroyed to minimize re-release to the atmosphere such that the desired emission reduction is obtained. Although the WESPs are not the sole means of reducing HAP emissions, the permit contains both the requirements to petition for site specific operating parameters and to submit a plan to analyze and minimize organic HAP captured in WESP #1 and WESP #2 wastewater. LRAPA believes site-specific operating parameters (e.g., water feed and recirculation rates) can be effectively used to demonstrate continuous compliance for the WESPs at this facility but will review the facility's plan to address organic HAPs captured in the wastewater as well as testing results and evaluate the issue further.

## **EPA REVIEWS**

36. The proposed significant permit modification *was* sent to EPA on September 24, 2008, for a 45-day review period. LRAPA requested and EPA agreed to an expedited review because no comments requiring change to the permit were received from the public and no substantive changes were made. The public has 105 days (45-days EPA review period plus 60 days) from the date the proposed permit was sent to EPA to appeal the permit with EPA.

Max/cmw  
9/30/08