5851 Arauco Road
P.O. Box 667
Grayling, MI 49738 USA

Phone: (989) 344 3900

www.arauco-na.com

arauco

April 21st, 2020

Michigan Department of Environment, Great Lakes, and Energy
Cadillac Office (Northern Lower Peninsula)
120 W Chapin Street
Cadillac, MI 49601-2158

Subject: Renewable Operating Permit Initial Application

Dear Shane Nixon,

Please find attached the Renewable Operating Permit Initial Application for Arauco North America Incorporated – Grayling PB, located in Michigan. This report consist of the ROP application forms, HAP calculation data, Permit 59-16D and multiple plans as required by our permit and the PCWP MACT.

I certify based on information and belief formed after reasonable inquiry, the statements and information in this letter and the attachments are true, accurate, and complete. If you have any questions, or need futher information, please contact me at 989-344-3903 or at charles.detiege@arauco.com.

Sincerely,

Charles Detiege
Environmental, Health, and Safety Manager
Arauco North America, Inc

Cc: Rich Weber – Arauco – NA, E,H&S Director
John Bird – Arauco – NA, Corporate Environmental Manager
Rob Dickman – EGLE, Air Permit Inspector

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Attachements:

- ROP Application
- HAP Calculaiton
- Permit 59-16D
- Fugitive Dust Plan
- Wood Fuel Procurement and Monitoring Plan
- MACT Startup, Shutdown and Malfunction Plan
- Malfuction Abatement Plan Finishing
- Malfuction Abatement Plan RICE
- Malfuction Abatement Plan Lamination
- Malfuction Abatement Plan Milling & Drying
- Malfuction Abatement Plan Forming & Pressing

Puite, Tammie (EGLE)

From: Charles Detiege <charles.detiege@arauco.com>
Sent: Wednesday, April 22, 2020 5:07 PM
To: EGLE-ROP
Cc: Dickman, Rob (EGLE); Nixon, Shane (EGLE); tvantil@comcast.net; Rich Weber; John Bird
Subject: Initial ROP Application for Arauco NA in Grayling, Michigan
Attachments: Renewal Operating Permit Initial Application Letter 04212020.pdf; Renewal Operating Permit Initial Application Form 04212020.pdf; HAP PTE 2020.pdf; 59-16D(mu) Permit to Install.pdf; Fugitive Dust Plan.pdf; Wood Fuel Procurement and Monitoring Plan.pdf; MACT Startup Shutdown and Malfunction Plan.pdf; MAP Finishing.pdf; MAP RICE.pdf; MAP Lamination.pdf; MAP Milling_Drying.pdf; MAP Forming_Pressing.pdf

Dear Mr. Nixon,

Please find the attached Initial Application for a Renewal Operating Permit for the Arauco North America, Inc. facility at Grayling, MI.

If you have any questions or concerns, please feel free to reach out to me at any time. Also, I will be mailing two hard copies of the application tomorrow to the district office. If you would like the hard copies mailed somewhere else, please let me know.

Best Regards,

arauco

Charles Detiege
EH&S Manager - Grayling
5851 Arauco Road,Grayling, MI 49738
Office: (989) 344-3903 **Cell:(989) 745-5855**
www.arauco.com

Please Note my Email as change to Charles.detiege@arauco.com

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
ASC-001 APPLICATION SUBMITTAL AND CERTIFICATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

Source Name: Arauco	SRN: P0699	Section Number (if applicable):

Identify the items that are included as part of your administratively complete application in the checklist below. For your application to be complete, it must include information necessary to evaluate the source and to determine all applicable requirements. Answer the compliance statements as they pertain to all the applicable requirements to which the source is subject. A Responsible Official must sign and date this form.

Listing of ROP Application Contents. See the initial application instructions for guidance regarding which forms and attachments are required for your source. Check the box for the items included with your application.

☒	Completed ROP Initial Application Forms (required)	☐	Copies of all Consent Orders/Consent Judgments
☐	MAERS Forms (to report emissions not previously submitted)	☐	Compliance Plan/Schedule of Compliance
☒	HAP/Criteria Pollutant Potential to Emit Calculations	☐	Acid Rain Initial Permit Application
☐	Stack information	☐	Cross-State Air Pollution Rule (CSAPR) Information
☒	Copies of all active Permit(s) to Install (required)	☐	Additional Information (AI-001) Forms
☐	Compliance Assurance Monitoring (CAM) Plan	☒	Paper copy of all documentation provided (required)
☒	Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	☒	Electronic documents provided (optional)
☐	Confidential Information	☐	Other, explain:

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in Permits to Install, this application and other applicable requirements that the source is subject to. ☒ Yes ☐ No

This source will continue to be in compliance with all of its applicable requirements, including those contained in Permits to Install, this application and other applicable requirements that the source is subject to. ☒ Yes ☐ No

This source will meet, in a timely manner, applicable requirements that become effective during the permit term. ☒ Yes ☐ No

The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing Permits to Install, this application and all other applicable requirements that the source is subject to.

If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.

Name and Title of the Responsible Official (Print or Type)

Matthew Gibbon, Plant Manager

As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.

Signature of Responsible Official	Date
	APRIL 17/20

For Assistance
Contact: 800-662-9278

www.michigan.gov/egle

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
SI-001 SECTION INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

SECTION INFORMATION	
Section Name	
Section Description (Including address if different from Source address identified on the S-001 Form)	
Emission Units Included In This Section	
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**
EU-	**EU-**

☐ Check if an AI-001 Form is attached to provide more information for SI-001. Enter AI-001 Form ID: **AI-**

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
S-001 STATIONARY SOURCE INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

SOURCE INFORMATION

SIC Code	NAICS Code
2493	321219

Source Name: Arauco

Street Address: 5851 Arauco Road

City	State	ZIP Code	County
Grayling	MI	49738	Crawford

Section/Town/Range (if street address not available):

Source Description: Particleboard manufacturing mill

OWNER INFORMATION

Owner Name: Arauco

Mailing address (☒ check if same as source address)

City	State	ZIP Code	County	Country

☐ Check if an AI-001 Form is attached to provide more information for S-001. Enter AI-001 Form ID: **AI-**

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION FORM
S-002 CONTACT AND RESPONSIBLE OFFICIAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

At least one contact and one Responsible Official must be identified. Additional contacts and Responsible Officials may be included if necessary.

CONTACT INFORMATION

Contact 1 Name	Title
Charles Detiege	EH&S Manager

Company Name & Mailing address (☒ check if same as source address)

City	State	ZIP Code	County	Country

Phone number	E-mail address
989-344-3903	Charles.Detiege@Arauco.com

Contact 2 Name (optional)	Title
Tammi Van Til	Consultant

Company Name & Mailing address (☐ check if same as source address)
Madison Consulting 340 Madison SE

City	State	ZIP Code	County	Country
Grand Rapids	MI	49503	Kent	US

Phone number	E-mail address
616-454-9647	tvantil@comcast.net

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name	Title
Matthew Gibbon	Plant Manager

Company Name & Mailing address (☒ check if same as source address)

City	State	ZIP Code	County	Country

Phone number	E-mail address
989-344-3909	Matthew.Gibbon@arauco.com

Responsible Official 2 Name (optional)	Title

Company Name & Mailing address (☐ check if same as source address)

City	State	ZIP Code	County	Country

Phone number	E-mail address

☐ Check if an AI-001 Form is attached to provide more information for S-002. Enter AI-001 Form ID: **AI-**

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
S-003 SOURCE REQUIREMENT INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

SOURCE REQUIREMENT INFORMATION

Answer the questions below for specific requirements or programs to which the source may be subject. Refer to the ROP Initial Application Instructions for additional information.

1.	Actual emissions and associated data from **all** emission units with applicable requirements are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes, identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	☐ Yes ☒ No
2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	☐ Yes ☒ No
3.	a. Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If Yes, a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. b. Has an updated RMP been submitted to the USEPA?	☐ Yes ☒ No ☐ Yes ☐ No
4.	Does the source belong to one of the source categories that require quantification of fugitive emissions? If Yes, identify the category on an AI-001 Form and include the fugitive emissions in the PTE calculations for the source. *See ROP Initial Application instructions.*	☐ Yes ☒ No
5.	Does this stationary source have the potential to emit (PTE) of 100 tons per year or more of any criteria pollutant (PM-10, PM 2.5, VOC, NOx, SO_2, CO, lead)? If Yes, include potential emission calculations for each identified pollutant on an AI-001 Form.	☒ Yes ☐ No
6.	Does this stationary source emit any hazardous air pollutants (HAPs) regulated by the federal Clean Air Act, Section 112? If Yes, include potential and actual emission calculations for HAPs, **including fugitive emissions** on an AI-001 Form.	☒ Yes ☐ No
7.	a. Are any emission units subject to Compliance Assurance Monitoring (CAM)? If Yes, identify the specific emission unit(s) and pollutant(s) subject to CAM on an AI-001 Form. b. Is a CAM plan included with this application on an AI-001 Form?	☐ Yes ☒ No ☐ Yes ☐ No
8.	Does the source have any active Consent Orders/Consent Judgments (CO/CJ)? If Yes, attach a copy of each CO/CJ on an AI-001 Form.	☐ Yes ☒ No
9.	Are any emission units subject to the federal Cross State Air Pollution Rule (CSAPR)? If Yes, identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	☐ Yes ☒ No
10.	a. Are any emission units subject to the federal Acid Rain Program? If Yes, identify the specific emission unit(s) subject to the Federal Acid Rain Program on an AI-001 Form. b. Is an Acid Rain Permit Application included with this application?	☐ Yes ☒ No ☐ Yes ☐ No
11.	Does the source have any required plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, startup/shutdown plans or any other monitoring plan? If Yes, then the plan(s) must be submitted with this application on an AI-001 Form.	☒ Yes ☐ No
12.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes, then the requirement and justification must be submitted on an AI-001 Form.	☐ Yes ☒ No
☐	Check if an AI-001 Form is attached to provide more information for S-003. Enter AI-001 Form ID: **AI-**	

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
EU-001 PERMIT TO INSTALL (PTI) EXEMPT EMISSION UNITS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Review all emission units at the source and answer the question below.

1. Does the source have any emission units that are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules, not including Rules 281(2)(h), 287(2)(c), and 290?

☐ Yes ☒ No

If Yes, identify the emission units in the table below. If No, go to the EU-002 Form.

Note: Emission units that are subject to process specific emission limitations or standards, even if identified in Rule 212, must be captured in either an EU-002 or EU-004 Form. Identical emission units may be grouped (e.g. PTI exempt Storage Tanks).

Emission Unit ID	Emission Unit Description	PTI Exemption Rule Citation [e.g. Rule 282(2)(b)(i)]	Rule 212(4) Citation [e.g. Rule 212(4)(c)]
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			

Comments:
All exempt units are listed in Permit to Install 59-16D, including natural gas fired heaters.

☒ Check if an AI-001 Form is attached to provide more information for EU-001. Enter AI-001 Form ID: **AI-**

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
EU-002 EMISSION UNITS MEETING THE CRITERIA OF RULES 281(2)(h), 285(2)(r)(iv), 287(2)(c), OR 290

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Review all emission units and applicable requirements at the source and provide the following information.

1. Does the source have any emission units which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290. ☒ Yes ☐ No

   If Yes, identify the emission units in the table below. If No, go to the EU-003 Form.

Note: If several emission units were installed under the same rule above, provide a description of each and an installation date for each.

Origin of Applicable Requirements	**Emission Unit Description – *Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices***	**Date Emission Unit was Installed/ Modified/ Reconstructed**
☒ Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation	2 small cold cleaners <10 ft2 for maintenance purposes	4/24/2019
☐ Rule 287(2)(c) surface coating line		
☐ Rule 290 process with limited emissions		

Comments:

☐ Check if an AI-001 Form is attached to provide more information for EU-002. Enter AI-001 Form ID: **AI-**

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
EU-003 EMISSION UNITS WITH PERMITS TO INSTALL

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Review all emission units at the source and fill in the information in the following table for **all** emission units with Permits to Install (PTI). Any PTI(s) identified below must be attached to the application.

Permit to Install Number	Emission Unit ID	Description (*Include Process Equipment, Control Devices and Monitoring Devices*)	Date Emission Unit was Installed/ Modified/ Reconstructed
59-16D	EU-	see attached table with AI-EU - all are listed in PTI 59-16D with dates (pp 6-8)	
	EU-		
	EU-		
	EU-		
	EU-		
	EU-		
	EU-		
	EU-		
	EU-		

1. Are you proposing changes to any emission unit names, descriptions or control devices in the PTIs listed above? If Yes, describe the proposed changes on an AI-001 Form. ☐ Yes ☒ No

2. Are you proposing additions or clarifications to any permit conditions? If Yes, describe the proposed changes on an AI-001 Form. ☐ Yes ☒ No

3. Are you proposing monitoring, testing, recordkeeping and/or reporting necessary to demonstrate compliance with any applicable requirements? If Yes, describe the proposed conditions on an AI-001 Form. ☐ Yes ☒ No

☒ Check if an AI-001 Form is attached to provide more information for EU-003. Enter AI-001 Form ID: **AI-EU**

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
EU-004 OTHER EMISSION UNITS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Complete an EU-004 Form for **all** emission units with applicable requirements that have **not** been addressed on an EU-001, EU-002 or EU-003 Form. This would include grandfathered emission units or PTI exempt emission units subject to applicable requirements in the AQD Rules, and emission units subject to a MACT, NESHAP, NSPS, or other federal requirement.

1. Does the source have emission units with applicable requirements that have not been addressed on the EU-001, EU-002 and/or EU-003 Forms? ☐ Yes ☒ No

If Yes, provide the required information below. Complete the AR-001 and/or AR-002 Form(s) to identify all applicable requirements and all monitoring, testing, recordkeeping and/or reporting to demonstrate compliance with the applicable requirements.

Emission Unit ID **EU-**	Installation Date (MM/DD/YYYY)	Modification/Reconstruction Date(s) (MM/DD/YYYY)	SIC Code – *If different from S-001 Form*
Emission Unit Description – *Include process equipment, control devices, monitoring devices, and all stacks/vents associated with this emission unit that have applicable requirements. Indicate which forms are used to describe/include the applicable requirements for this emission unit (AR-001 and/or AR-002 Forms).*			

Emission Unit ID **EU-**	Installation Date (MM/DD/YYYY)	Modification/Reconstruction Date(s) (MM/DD/YYYY)	SIC Code – *If different from S-001 Form*
Emission Unit Description – *Include process equipment, control devices, monitoring devices, and all stacks/vents associated with this emission unit that have applicable requirements. Indicate which forms are used to describe/include the applicable requirements for this emission unit (AR-001 and/or AR-002 Forms).*			

Emission Unit ID **EU-**	Installation Date (MM/DD/YYYY)	Modification/Reconstruction Date(s) (MM/DD/YYYY)	SIC Code – *If different from S-001 Form*
Emission Unit Description – *Include process equipment, control devices, monitoring devices, and all stacks/vents associated with this emission unit that have applicable requirements. Indicate which forms are used to describe/include the applicable requirements for this emission unit (AR-001 and/or AR-002 Forms).*			

☐ Check if an AI-001 Form is attached to provide more information for EU-004. Enter AI-001 Form ID: **AI-**

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Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

RENEWABLE OPERATING PERMIT INITIAL APPLICATION
FG-001: FLEXIBLE GROUPS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Complete the FG-001 Form for all Emission Units (EUs) that you want to combine into a Flexible Group (FG). Create a descriptive ID for the FG and description, and list the IDs for the EUs to be included in the FG. See instructions for FG examples.

Flexible Group ID **FG-**			
Flexible Group Description			
Emission Unit IDs			
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
Flexible Group ID **FG-**			
Flexible Group Description			
Emission Unit IDs			
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
EU-	**EU-**	**EU-**	**EU-**
☐ Check if an AI-001 Form is attached to provide more information for FG-001. Enter AI-001 Form ID: **AI-**			

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION AR-001 APPLICABLE REQUIREMENTS FROM MACT, NESHAP OR NSPS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Proposed Section Number (if applicable):

Answer the question below for emission units subject to a MACT, NESHAP or NSPS regulation and provide either an existing Permit to Install, an existing template table*, or a newly created table** that contains the applicable requirements for each subject emission unit with the application, including associated monitoring, testing, recordkeeping and reporting necessary to demonstrate compliance.

1. Is any emission unit subject to a Maximum Achievable Control Technology (MACT) standard in 40 CFR Part 63, National Emission Standard for Hazardous Air Pollutants (NESHAP) in 40 CFR Part 61, or New Source Performance Standard (NSPS) in 40 CFR Part 60? ☒ Yes ☐ No

   If yes, identify the emission units and applicable MACT, NESHAP or NSPS in the table below.

Note: If several emission units are subject to the same regulation, list all of the emission unit IDs together. Attach the applicable requirements (PTI, template table or newly created table) in the selected format to the application using an AI-001 Form.

MACT NESHAP or NSPS Subpart and Name	**Emission Unit ID** – *Provide the Emission Unit ID you created on the EU-003 or EU-004 Form*	**Applicable Requirements Attached in Which Format?**
40 CFR 63 DDDD - PCWP MACT	FGPCWPMACT	☒ PTI No. 59-16D ☐ Template Table* ☐ Newly Created Table**
40 CFR 63 JJJJ - web coating MACT	FGPTL	☒ PTI No. 59-16D ☐ Template Table* ☐ Newly Created Table**
40 CFR 63 ZZZZ - RICE MACT	FGRICE	☒ PTI No. 59-16D ☐ Template Table* ☐ Newly Created Table**
40 CFR 63 DDDDD - boiler MACT	FGBOILERMACT	☒ PTI No. 59-16D ☐ Template Table* ☐ Newly Created Table**
		☐ PTI No. ☐ Template Table* ☐ Newly Created Table**

STREAMLINED REQUIREMENTS

2. Are you proposing to streamline any requirements? ☐ Yes ☒ No

   If yes, identify the streamlined and subsumed requirements and provide the EU ID and a justification for streamlining the applicable requirement on an AI-001 Form.

*MACT and NSPS template tables (available at the link below)

**Blank EU or FG template tables (available at the link below)

http://michigan.gov/air (select the Permits Tab, "Renewable Operating Permits(ROP)/Title V", then "ROP Forms & Templates")

☐ Check if an AI-001 Form is attached to provide more information for AR-001. Enter AI-001 Form ID: **AI-**

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

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RENEWABLE OPERATING PERMIT INITIAL APPLICATION
AR-002 OTHER APPLICABLE REQUIREMENTS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

APPLICABLE REQUIREMENTS NOT INCLUDED IN A PTI, MACT, NESHAPS, NSPS, OR PERMIT EXEMPTION

Answer the questions below and create an EU table to identify terms and conditions for each emission unit identified on an EU-004 Form (other than MACT, NESHAP, or NSPS requirements). This would include emission units that are grandfathered or exempt from PTI requirements but subject to state rules, federal rules or consent orders/consent judgments. Blank EU template tables are available on the EGLE Internet at: http://michigan.gov/air (select the Permits Tab, "Renewable Operating Permits (ROP)/Title V", then "ROP Forms & Templates")

1. Is there an emission unit identified on an EU-004 Form that is subject to **emission limit(s)**? If Yes, fill out an EU table to identify the emission limit(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
2. Is there an emission unit identified on an EU-004 Form that is subject to **material limit(s)**? If Yes, fill out an EU table to identify the material limit(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
3. Is there an emission unit identified on an EU-004 Form that is subject to **process/operational restriction(s)**? If Yes, fill out an EU table to identify the process/operational restriction(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
4. Is there an emission unit identified on an EU-004 Form that is subject to **design/equipment parameter(s)**? If Yes, fill out an EU table to identify the design/equipment parameter(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No

5. Is there an emission unit identified on an EU-004 Form that is subject to **testing/sampling requirement(s)**? If Yes, fill out an EU table to identify the testing/sampling requirement(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
6. Is there an emission unit identified on an EU-004 Form that is subject to **monitoring/recordkeeping requirement(s)**? If Yes, fill out an EU table to identify the monitoring/recordkeeping requirement(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
7. Is there an emission unit identified on an EU-004 Form that is subject to **reporting requirement(s)**? If Yes, fill out an EU table to identify reporting requirement(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
8. Is there an emission unit identified on an EU-004 Form that is subject to **stack/vent restriction(s)**? If Yes, fill out an EU table to identify stack/vent restriction(s), and provide the EU ID and the source of the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
9. Are there any other requirements that you would like to **add** for an emission unit identified on an EU-004 Form? If Yes, fill out an EU table to identify the requirements, and provide the EU ID and a justification for the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
10. Are you proposing to streamline any requirements? If Yes, identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below. Do not include requirements identified on an AR-001 Form.	☐ Yes ☒ No
☐ Check if an AI-001 Form is attached to provide more information for AR-002. Enter AI-001 Form ID: **AI-**	

EGLE

RENEWABLE OPERATING PERMIT INITIAL APPLICATION
AR-003 SOURCE-WIDE APPLICABLE REQUIREMENTS

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to "Renewable Operating Permit Initial Application Instructions" for additional information to complete the application.

SRN: P0699	Section Number (if applicable):

Complete a Source-wide table for any conditions that apply to the entire source. A blank Source-wide template table is available on the EGLE Internet at:
http://michigan.gov/air (select the Permits Tab, "Renewable Operating Permits (ROP)/Title V", then "ROP Forms & Templates")

1. Are there any applicable requirements that apply to the entire source? If Yes, identify the conditions by utilizing a Source-wide template table and include all of the appropriate applicable requirements, including associated monitoring, testing, recordkeeping and reporting necessary to demonstrate compliance. Provide information regarding the applicable requirements in the comment field below.	☒ Yes ☐ No
Comments contained in FGFACILITY in PTI 59-16D	
☐ Check if an AI-001 Form is attached to provide more information for AR-003. Enter AI-001 Form ID: **AI-**	

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: P0699	Section Number (if applicable):

1. Additional Information ID
AI-EU

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

All EU's are listed in the PTI 59-16D which is attached (pp 6-8). An application to amend PTI 59-16D is currently being processed, this includes an amendment to the AMU sizes - table attached.

Also attached are all required plans and PTE tables for criteria pollutants and HAPs.

Attachments:

Current PTI 59-16D
Amended AMU size table for EU
Criteria Emissions PTE
HAP Emissions PTE
All MAPs
PCWP MACT SSMP
Fugitive Dust Plan

EUMU-01	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-02	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-03	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-04	Makeup air direct gas heating unit in the press, dryer, and cooling area. 3.512~~.06~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-05	Makeup air direct gas heating unit in the press, dryer, and cooling area. 3.512~~.06~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-06A	Makeup air direct gas heating unit in the sanding, finish, and storage. 2.51~~.7~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-06B	Makeup air direct gas heating unit in the sanding, finish, and storage. 2.51~~.7~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-07	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-08	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-09	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-10	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-11	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-12	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-13	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-14	Makeup air direct gas heating unit in the sanding, finish, and storage. 5.03~~.4~~ MM Btu/hr.	4/24/19	FGAMU
EUMU-15	Makeup air direct gas heating unit in the wet exhaust room. 0.1 MM Btu/hr.	4/24/19	FGAMU
EUAHU-01	Air handling indirect gas heating unit, lockers and bathrooms, office building. 0.5 MM Btu/hr.	4/24/19	FGAMU

EUAHU-02	Air handling indirect gas heating unit, maintenance main workshop. 1.2 MM Btu/hr.	4/24/19	FGAMU
EUAHU-03	Air handling direct gas heating unit, spare parts warehouse. 1.14 MM Btu/hr.	4/24/19	FGAMU

ARAUCO HAP PTE - lb/year

Emission Unit ID	EUFLAKERS	SV-24	EUOVERS1	EUFINES	EUCHEMICAL	EUSIFTER	EUBLENDING	EUFORMING	EUPRESS	EUTOH	EUFCOS	EUCOOLING	EUSANDING	EUCTPSAW	EUTFL1	EUTFLTOS1	EUTFL2	EUTFL3	EUMTL1 & 2		EUUFRESIN	EUMRESIN	EUAMUS	EUEMRGRICE1	EUEMRGRICE2	EUFIREPUMP	TOTAL
Description	Flakers	Dryer 1 and 2, Energy Plant and RTO	Overs BH5	Fines BH20	MDP Line Chemical Storage Tank (includes resins)	Sifter BH8	Blending BH12	Forming BH11 and BH13	Press	Thermal Oil system for press and sifter	Flying cutoff saw	cooling system	Sanding	Cut to Panel Saw line	Thermal Fused Lamination Line No. 1	Thermal oil system for TFLs	Thermal Fused Lamination Line No. 2	Thermal Fused Lamination Line No. 3	Melamine Treating Lines	MTL Dryers	2 UF Resin tanks for MTL	2 Melamine Resin tanks for MTL	Air Makeup Units	Diesel emergency generator 1	Diesel emergency generator 2	Diesel Fire Pump	
	Pounds per Year								Pounds per Year						Pounds Per Year									Pounds per Year			lbs/yr
Acetaldehyde	124.20	262.80	43,800.00	0.00E+00	0.00E+00	18,046.00	10,162.00	5,519.00	3,679.20	0.00E+00	0.00E+00	0.00E+00	1,314.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.79	0.26	0.52	82,908.77
Acetophenone	0.00E+00	1.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-04
Acrolein	110.40	788.40	1,401.60	0.00E+00	0.00E+00	613.20	832.20	753.36	438.00	0.00E+00	0.00E+00	0.00E+00	1,138.80	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.05	0.02	0.03	6,076.05
Aldehydes	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	71.67	23.89	47.78	143.35
Antimony	0.00E+00	0.76	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.76
Arsenic	0.00E+00	2.40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02	0.00E+00	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	2.62
Barium	0.00E+00	22.61	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.39	0.00E+00	0.00E+00	0.00E+00	0.26	0.00E+00	0.00E+00	2.59	0.00E+00	0.00E+00	0.00E+00	27.29
Benzene	42.70	202.93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,054.35	0.69	0.00E+00	890.40	0.00E+00	0.00E+00	0.00E+00	0.18	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	1.24	0.96	0.32	0.64	2,194.53
Beryllium	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	0.00E+00	0.00E+00	0.00E+00	7.04E-04	0.00E+00	0.00E+00	7.07E-03	0.00E+00	0.00E+00	0.00E+00	0.14
Bromomethane	50.47	1.72	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,081.20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,133.39
1,3-Butadiene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02	6.67E-03	0.01	0.04
Cadmium	0.00E+00	2.88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.36	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.10	0.00E+00	0.00E+00	0.00E+00	0.06	0.00E+00	0.00E+00	0.65	0.00E+00	0.00E+00	0.00E+00	4.05
Carbon Tetrachloride	0.00E+00	2.17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17
Chromium	0.00E+00	4.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.46	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	0.08	0.00E+00	0.00E+00	0.82	0.00E+00	0.00E+00	0.00E+00	5.49
Chlorine	0.00E+00	761.24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	761.24
Chlorobenzene	0.00E+00	1.59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59
Chloroethane	35.72	0.59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	737.76	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	774.06
Chloroethene	34.55	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	34.55
Chloroform	0.00E+00	1.35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35
Cobalt	0.00E+00	0.75	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.39E-03	0.00E+00	0.00E+00	0.00E+00	4.93E-03	0.00E+00	0.00E+00	0.05	0.00E+00	0.00E+00	0.00E+00	0.83
Copper	0.00E+00	5.93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.28	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.07	0.00E+00	0.00E+00	0.00E+00	0.05	0.00E+00	0.00E+00	0.50	0.00E+00	0.00E+00	0.00E+00	6.83
Cumene	1,319.95	1.36	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,321.30
Diethylene Glycol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	852.85	0.00E+00	0.02	0.02	0.00E+00	0.00E+00	852.89
Dioxins/Furans	0.00E+00	2.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-05
Ethylbenzene	0.00E+00	1.49	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49
Formaldehyde	10.65	6,865.21	0.00E+00	0.00E+00	3.68	0.00E+00	1,674.92	6,432.43	38,544.00	24.48	1,305.92	0.00E+00	1,899.52	1,305.92	473.77	6.60	473.77	473.77	23,783.20	4.40	12.44	10.96	44.19	1.21	0.40	0.81	83,352.24
Hexane	0.00E+00	602.74	14103.6	0.00E+00	0.00E+00	16381.2	17,520.00	9,548.40	0.00E+00	587.44	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	158.35	0.00E+00	0.00E+00	0.00E+00	105.57	0.00E+00	0.00E+00	1,060.63	0.00E+00	0.00E+00	0.00E+00	60,067.92
Hydrochloric Acid	0.00E+00	18,308.40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	18,308.40
Manganese	0.00E+00	154.71	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.02	0.00E+00	0.00E+00	0.22	0.00E+00	0.00E+00	0.00E+00	155.12
Mercury	0.00E+00	0.71	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02	0.00E+00	0.00E+00	0.00E+00	0.02	0.00E+00	0.00E+00	0.15	0.00E+00	0.00E+00	0.00E+00	0.98
Methanol	363.40	788.40	788.4	0.00E+00	9.78	1138.8	24,878.40	13,753.20	65,262.00	0.00E+00	8,059.20	0.00E+00	7,884.00	5,639.20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	44,325.60	0.00E+00	0.00E+00	9.24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	172,899.62
Methyl Isobutyl Ketone	143.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	10,543.54	0.00E+00	0.00E+00	1,335.60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	12,022.78
Methylene Chloride	46.59	32.12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	970.96	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,049.67
Naphthalene	0.00E+00	4.84	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.05	0.00E+00	0.00E+00	0.00E+00	0.04	0.00E+00	0.00E+00	0.36	8.68E-02	2.89E-02	5.79E-02	5.66
Nickel	0.00E+00	6.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.69	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.18	0.00E+00	0.00E+00	0.00E+00	0.12	0.00E+00	0.00E+00	1.24	0.00E+00	0.00E+00	0.00E+00	8.38
4-Nitrophenol	0.00E+00	5.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-03
PAH (total)	0.00E+00	3.29E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E+00
Pentachlorophenol	0.00E+00	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E-03
Phenol	92.00	868.67	2365.2	0.00E+00	0.00E+00	1051.2	1,401.60	1,927.20	764.19	0.00E+00	0.00E+00	0.00E+00	9,198.90	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	17,668.06
Phosphorus	0.00E+00	2.60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60
POM	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.17E-03	0.00E+00	0.00E+00	0.05	0.00E+00	0.00E+00	0.00E+00	0.12
Propionaldehyde	124.20	3.15	1401.6	0.00E+00	0.00E+00	7358.4	15,768.00	8,584.80	7,008.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	40,248.15
Propylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64	0.88	1.76	5.28
Selenium	0.00E+00	0.30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.11E-03	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.01	0.00E+00	0.00E+00	0.00E+00	0.33
Styrene	58.23	91.54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,187.20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,336.97
Triethanolamine	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	189.52	0.00E+00	0.02	0.02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	189.56
Toluene	50.47	45.26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11	0.00E+00	1,051.52	0.00E+00	0.00E+00	0.00E+00	0.30	0.00E+00	0.00E+00	0.00E+00	0.20	0.00E+00	0.00E+00	2.00	0.42	0.14	0.28	1,151.70
Vinyl Chloride	0.00E+00	0.87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.87
Xylenes	116.47	97.51	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1,212.64	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.29	0.10	0.19	1,427.20
																									TOTAL LB/YR		506,160.06
																									TOTAL TPY		253.08

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUDEBARK	Debarking and Chipping. Emissions are fugitive.	4/24/19	FGFUGITIVES
EUWOODSTORAGE	Raw material storage and transfer. Includes handling of logs and chips. Emissions are fugitive.	4/24/19	FGFUGITIVES
EUBB	Bark Shredder. Emissions are fugitive.	4/24/19	FGFUGITIVES
EUBARKSTG	Conveyance of material to bark storage. Emissions are controlled by a baghouse BH14B.	4/24/19	FGMTRLHNDL
EUFLAKERS	Green flakers (7). Emissions controlled by baghouse BH04 and the Thermal Energy Plant dry electrostatic precipitator (DESP1) and the dryer thermal oxidizer (RTO1) when the dryers are operating	4/24/19	FGDRYERRTO FGPCWPMACT
EUENERGY	Thermal Energy Plant. Combusts wood derived fuel (such as sander dust, fines from screening, material from the board breaker, and material reject) and clean cellulosic biomass (such as, but not limited to, bark). Emissions are controlled by a dry electrostatic precipitator (DESP1). Exhaust is routed to the dryers as make up air before exhausting through the dryer RTO (RTO1). Propane is used for startup.	4/24/19	FGDRYERRTO FGPCWPMACT
EUDRYER1	Rotary Green Dryer, natural gas-fired. Receives heated makeup air from the Thermal Energy Plant. Emissions controlled by RTO1.	4/24/19	FGDRYERRTO FGPCWPMACT
EUDRYER2	Rotary Green Dryer, natural gas-fired. Receives heated makeup air from the Thermal Energy Plant. Emissions controlled by RTO1.	4/24/19	FGDRYERRTO FGPCWPMACT
EUFINES	Conveyance of fines from screening to Energy Plant Dust Silo. Emissions are controlled by a baghouse BH20.	4/24/19	FGMTRLHNDL
EUOVERS1	Overs mill No. 1. Emissions controlled by baghouse BH05.	4/24/19	FGMTRLHNDL
EUOVERS2	Overs mill No. 2. Emissions controlled by baghouse BH05.	4/24/19	FGMTRLHNDL
EUOVERS3	Overs mill No. 3. Emissions controlled by baghouse BH05.	4/24/19	FGMTRLHNDL
EUSIFTER	Core & Surface Sifter/Shaker. Emissions controlled by baghouse BH08.	4/24/19	FGMTRLHNDL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCHEMICAL	Chemical Storage Tanks (includes resins). Tanks are 20,000 gallons or smaller. Emissions are uncontrolled and indoor fugitive.	4/24/19	FGTANKS
EUBLENDING	Core and Surface Blending. Emissions controlled by baghouse BH12.	4/24/19	FGBLNDFRM
EUFORMING	Core and Surface Forming. Emissions controlled by two baghouses, BH11 and BH13.	4/24/19	FGBLNDFRM
EUPRESS	Continuous Press. Particulate emissions are controlled by wet scrubber (WS01).	4/24/19	FGPRESSCOOL FGPCWPMACT
EUTOH	Thermal oil heater for press and sifter. Combusts natural gas only.	4/24/19	FGTOH FGBOILERMACT
EUFCOS	Flying cutoff saw. Emissions controlled by baghouse BH17.	4/24/19	FGFINISH
EURMSILO	Conveyance of material from material reject and board breaking to Raw Material Sawdust Silo. Emissions are controlled by a baghouse BH14A.	4/24/19	FGFINISH
EUCOOLING	Board cooling system. Particulate emissions are controlled by wet scrubber (WS01).	4/24/19	FGPRESSCOOL FGPCWPMACT
EUSANDING	Sanding operations. Emissions are controlled by a baghouse BH18.	4/24/19	FGFINISH
EUCTPSAW	Cut to panel saw line. Emissions are controlled by a baghouse BH19.	4/24/19	FGFINISH
EUUFRESIN	4 urea formaldehyde (UF) resin tanks for the paper treating lines.	4/24/19	FGTANKS
EUMRESIN	4 Melamine Resin tanks for the paper treating lines.	4/24/19	FGTANKS
EUPTL1	Paper Treating Line No. 1 with a natural gas dryer.	TBD	FGPTL
EUPTL2	Paper Treating Line No. 2 with a natural gas dryer.	TBD	FGPTL
EUTFL1	Thermally fused lamination line No. 1. Emissions are controlled by a baghouse BH28.	4/24/19	FGTFL
EUTFL2	Thermally fused lamination line No. 2. Emissions are controlled by a baghouse BH29.	4/24/19	FGTFL
EUTFL3	Thermally fused lamination line No. 3. Emissions are controlled by a baghouse BH30.	TBD	FGTFL
EUTFLTOS1	Thermal oil system for thermally fused lamination lines. Combusts natural gas only.	4/24/19	FGTOH FGBOILERMACT
EUEMRGRICE1	1500-kilowatt emergency diesel generator engine.	4/24/19	FGRICE
EUEMRGRICE2	500-kilowatt emergency diesel generator engine.	4/24/19	FGRICE
EUFIREPUMP	187-kilowatt diesel fire pump engine.	4/24/19	FGRICE
EUDIESEL	4 diesel storage tanks for emergency engines, fire pump and mobile equipment.	4/24/19	FGTANKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EULPTANKS	2 pressurized liquid propane (LP) tanks used for mobile equipment.	4/24/19	FGTANKS
EUROADS	Vehicle traffic on facility road. Road are paved. Emissions are controlled by wetting and/or sweeping.	4/24/19	FGFUGITIVES
EUMU-01	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-02	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-03	Makeup air direct gas heating unit in the glue, forming, and pre-press area. 4.55 MM Btu/hr.	4/24/19	FGAMU
EUMU-04	Makeup air direct gas heating unit in the press, dryer, and cooling area. 2.06 MM Btu/hr.	4/24/19	FGAMU
EUMU-05	Makeup air direct gas heating unit in the press, dryer, and cooling area. 2.06 MM Btu/hr.	4/24/19	FGAMU
EUMU-06A	Makeup air direct gas heating unit in the sanding, finish, and storage. 1.7 MM Btu/hr.	4/24/19	FGAMU
EUMU-06B	Makeup air direct gas heating unit in the sanding, finish, and storage. 1.7 MM Btu/hr.	4/24/19	FGAMU
EUMU-07	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-08	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-09	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-10	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-11	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-12	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-13	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-14	Makeup air direct gas heating unit in the sanding, finish, and storage. 3.4 MM Btu/hr.	4/24/19	FGAMU
EUMU-15	Makeup air direct gas heating unit in the wet exhaust room. 0.1 MM Btu/hr.	4/24/19	FGAMU
EUAHU-01	Air handling indirect gas heating unit, lockers and bathrooms, office building. 0.5 MM Btu/hr.	4/24/19	FGAMU
EUAHU-02	Air handling indirect gas heating unit, maintenance main workshop. 1.2 MM Btu/hr.	4/24/19	FGAMU
EUAHU-03	Air handling direct gas heating unit, spare parts warehouse. 1.14 MM Btu/hr.	4/24/19	FGAMU

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUAHU-04	Air handling indirect gas heating unit, maintenance shop and bathrooms. 0.3 MM Btu/hr.	4/24/19	FGAMU

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

EUFLAKERS
EMISSION UNIT CONDITIONS

DESCRIPTION

Green flakers (7). Emissions are controlled by baghouse BH04. While the dryer is operating, emissions are also controlled by the Thermal Energy Plant dry electrostatic precipitator (DESP1) and the dryer thermal oxidizer (RTO1).

Flexible Group ID: FGDRYERRTO, FGPCWPMACT

POLLUTION CONTROL EQUIPMENT

Baghouse BH04, DESP1, and thermal oxidizer RTO1

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	76 lb/hr	Hourly	EUFLAKERS during bypass of DESP1 and RTO1	SC V.1	R 336.1225 R 336.1702(a) R 336.2810
2. PM	1.01 lb/hr	Hourly	EUFLAKERS during bypass of DESP1 and RTO1	SC V.1, VI.2	R 336.2810
3. PM	0.002 gr/dscf	Hourly	EUFLAKERS during bypass of RTO1	SC V.1, VI.2	R 336.1331
4. PM10	1.01 lb/hr	Hourly	EUFLAKERS during bypass of DESP1 and RTO1	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
5. PM2.5	1.01 lb/hr	Hourly	EUFLAKERS during bypass of DESP1 and RTO1	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
6. Formaldehyde	0.012 lb/hr[1]	Hourly	EUFLAKERS during bypass of DESP1 and RTO1	SC V.1	R 336.1225
7. Opacity	10%	6-minute average	EUFLAKERS during bypass of DESP1 and RTO1	SC VI.4	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUFLAKERS for more than 460 hours per 12-month rolling time period as determined at the end of each calendar month, when emissions are not controlled by DESP1 and RTO1. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall not operate EUFLAKERS unless a minimum temperature in RTO1, as determined during the most recent performance test and documented in the MAP, is maintained, except as specified in SC III.1. Monitoring and record keeping requirements for RTO1 are specified in the FGDRYERRTO Special Conditions. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUFLAKERS unless baghouse BH04 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the pressure drop as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. Except as allowed by SC III.1, the permittee shall not operate EUFLAKERS unless thermal oxidizer RTO1 is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) and maintaining a minimum temperature of as determined during the most recent performance test and documented in the MAP. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336. 1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. Except as allowed by SC III.1, the permittee shall not operate EUFLAKERS unless dry electrostatic precipitator DESP1 is installed, maintained and operated in a satisfactory manner as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336. 1910, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on baghouse BH04. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the time and duration of each bypass of thermal oxidizer RTO1. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the VOC, PM, PM10, PM2.5, and/or formaldehyde[1] emission rates from EUFLAKERS, prior to DESP1, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations and records by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor the baghouse BH04 pressure drop on a continuous basis. Whenever EUFLAKERS is operating and emissions are not controlled by DESP1 and RTO1, the permittee shall record the BH04 pressure drop at least once per day. Whenever EUFLAKERS is operating and emissions are controlled by DESP1 and RTO1, the permittee shall record the BH04 pressure drop at least once per week. If the pressure drop is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall monitor and record, in a satisfactory manner, the time and duration of each bypass of thermal oxidizer RTO1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall monitor EUFLAKERS to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar day during daylight hours for any bypass of RTO1 exceeding 2 hours. Either a certified or non-certified reader shall take each visible emission reading. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

5. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EUFLAKERS. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the EUFLAKERS emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. This demonstration will be used when emissions are not controlled by DESP1 and RTO1. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-04	53	65.6	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUENERGY
EMISSION UNIT CONDITIONS

DESCRIPTION

Thermal Energy Plant. Combusts wood derived fuel (such as sander dust, fines from screening, material from the board breaker, and material reject) and clean cellulosic biomass (such as, but not limited to, bark). Emissions are controlled by a dry electrostatic precipitator (DESP1). Exhaust is then routed to the dryers as make up air before exhausting through the dryer RTO (RTO1). Propane is used for startup.

Flexible Group ID: FGDRYERRTO, FGPCWPMACT

POLLUTION CONTROL EQUIPMENT

Dry electrostatic precipitator (DESP1) and thermal oxidizer RTO1

I. EMISSION LIMITS

1. The permittee shall minimize emissions as described in the startup, shutdown, and malfunction plan. **(R 336.1225, R 336.1702, R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 63.6(e), 40 CFR 63.2250(c))**

II. MATERIAL LIMITS

1. The permittee shall only burn wood derived fuel (such as sander dust, fines from screening, material from the board breaker, and material reject) and clean cellulosic biomass (such as, but not limited to, bark), as defined by the Wood Fuel Procurement and Monitoring Plan (WFPMP), in EUENERGY. The WFPMP shall include provisions to prevent the burning of chemically treated wood, construction/demolition wood waste, and other inappropriate materials. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall immediately cease the input feed of materials to EUENERGY, consistent with safe operating procedures, upon initiation of bypass of thermal oxidizer RTO1 or DESP1. Input feed of materials to EUENERGY shall not restart until RTO1 and DESP1 are back online and operating in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall not operate EUENERGY unless a minimum temperature in RTO1, as determined during the FGDRYERRTO most recent performance test and documented in the MAP, is maintained. Monitoring and record keeping requirements for RTO1 are specified in the FGDRYERRTO Special Conditions. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall not operate EUENERGY unless the secondary voltage or total power in DESP1 is maintained, as described in the MAP. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall not operate EUENERGY unless a WFPMP has been submitted to, and approved by, the AQD District Supervisor not less than 60 days before startup of EUPRESS, as defined under 40 CFR 63.2292, and is being followed at all times. The permittee shall amend the WFPMP within 45 days if any changes are deemed necessary or upon request by the AQD District Supervisor. The permittee shall submit the WFPMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EUENERGY unless RTO1 and DESP1 are installed, maintained, and operated in a satisfactory manner as described in the MAP. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The maximum design heat input capacity for EUENERGY shall not exceed a maximum of 110 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a secondary voltage monitoring device or a total power monitoring device on DESP1 to monitor and record the secondary voltage or total power on a continuous basis in accordance with the MAP. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations and records by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor and record, in a satisfactory manner, secondary voltage or total power, on a continuous basis, while exhaust from EUENERGY is routed to DESP1. Secondary voltage or total power data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. If the voltage is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall monitor and record, in a satisfactory manner, the time and duration of each bypass of thermal oxidizer RTO1 and DESP1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall keep daily records of the amount of wood derived fuel (such as sander dust, fines from screening, material from the board breaker, and material reject) and clean cellulosic biomass (such as, but not limited to, bark) burned in EUENERGY. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

5. The permittee shall calculate the VOC, PM, PM10, and PM2.5 emissions from EUENERGY due to bypass of RTO1 and DESP1 for each bypass event, using emission factors acceptable to the AQD District Supervisor, each calendar month, and each 12-month rolling time period, as determined at the end of each calendar month. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used during bypass events. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. Bypass Stack 1	51	101	R 336.1225, R 336.2803, R 336.2804
2. Bypass Stack 2	72	90	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFUGITIVES	Fugitive emission sources at the facility.	EUROADS, EUDEBARK, EUWOODSTORAGE, EUBB
FGDRYERRTO	Process equipment normally exhausted through the dryer RTO (RTO1).	EUFLAKERS, EUDRYER1, EUDRYER2, EUENERGY
FGMTRLHNDL	Material handling sources at the facility with emissions controlled by baghouses.	EUOVERS1, EUOVERS2, EUOVERS3, EUFINES, EUSIFTERS, EUBARKSTG
FGBLNDFRM	Blending and forming operations. Emissions are controlled by baghouses.	EUBLENDING, EUFORMING
FGPRESSCOOL	Continuous Press and Board cooling system. Equipped with a wet scrubber (WS01) to control particulate emissions.	EUPRESS, EUCOOLING
FGTOH	Two natural gas fired thermal oil heaters. EUTOH is 38 MMBtu/hr and EUTFLTOS1 is 10.2 MMBtu/hr.	EUTOH, EUTFLTOS1
FGFINISH	Sanding, sawing, and cutting of boards and conveyance of reject material to the RM silo. Emissions are controlled by baghouses.	EUFCOS, EUSANDING, EUCTPSAW, EURMSILO
FGPTL	Two paper treating lines. Each line has a 3.4 MMBTU per hour natural gas dryer.	EUPTL1, EUPTL2
FGTFL	The three thermally fused lamination lines. Emissions are controlled by baghouses.	EUTFL1, EUTFL2, EUTFL3
FGTANKS	Storage tanks for resins and other materials for the particle board line, resins for the paper treating lines, diesel fuel, and liquid propane.	EUCHEMICAL, EUMRESIN, EUUFRESIN, EUDIESEL, EULPTANKS
FGRICE	1500-kilowatt emergency diesel generator engine, 500 kilowatt emergency diesel generator engine, and 187 kilowatt diesel fire pump engine.	EUEMRGRICE1, EUEMRGRICE2, EUFIREPUMP
FGAMU	Natural gas fired air handling units, space heaters, and small water heaters.	EUMU-01, EUMU-02, EUMU-03, EUMU-04, EUMU-05, EUMU-06A, EUMU-06B, EUMU-07, EUMU-08, EUMU-09, EUMU-10, EUMU-11, EUMU-12, EUMU-13, EUMU-14, EUMU-15, EUAHU-01, EUAHU-02, EUAHU-03, EUAHU-04
FGPCWPMACT	Emission units subject to the PCWP MACT, 40 CFR 63 Subpart DDDD	EUPRESS, EUCOOLING, EUDRYER1, EUDRYER2, EUFLAKERS, EUENERGY
FGBOILERMACT	Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply with this subpart upon startup.	EUTOH, EUTFLTOS1

FGAMU
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas fired air handling units, space heaters, and small water heaters.

Emission Unit: Number and names of emission units will be determined before operation.

POLLUTION CONTROL EQUIPMENT

Low NOx burner

I. EMISSION LIMITS

N/A

II. MATERIAL LIMITS

1. The permittee shall only burn pipeline natural gas in FGAMU. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not burn more than 429 MMSCF per year of natural gas in FGAMU based on a 12-month rolling time period as determined at the end of each calendar month. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for FGAMU on a continuous basis. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804)**

2. The permittee shall conduct tune-ups and maintenance on each FGAMU burner in accordance with the manufacturer's recommendations. **(R 336.1911, R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install a device to continuously monitor and record the natural gas usage rate for FGAMU. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate FGAMU unless the low NO_x burners are installed and operating properly. **(R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The heat input capacity of each hot water generator FGAMU shall be less than 10 MMBtu per hour. **(40 CFR 60 Subpart Dc)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month,

unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep the following information on a monthly basis for FGAMU, using emission factors acceptable to the AQD District Supervisor and the natural gas usage records:
   a) CO, NO_x, VOC, PM, PM10, PM2.5, and CO_2e mass emission calculations determining the monthly emission rate in tons per calendar month.
   b) CO, NO_x, VOC, PM, PM10, PM2.5, and CO_2e mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall monitor and record the natural gas usage rate for FGAMU on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFUGITIVES
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Fugitive emission sources at the facility.

Emission Unit: EUROADS, EUDEBARK, EUWOODSTORAGE, EUBB

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	20%, except for one six-minute average per hour of not more than 27%.	6-minute average	Each emission unit in FGFUGITIVES	SC VI.1	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall sweep and/or apply water to plant roadways as necessary to meet the opacity limit specified in SC I.1, as described in the nuisance minimization plan for fugitive dust. **(R 336.1301, Act 451 324.5524)**

2. The permittee shall operate EUDEBARK and EUBB using good housekeeping practices, as described in the nuisance minimization plan for fugitive dust. **(R 336.1301, Act 451 324.5524)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall pave the plant roadways routinely travelled by trucks delivering material to the facility, including chemicals, logs, and wood chips and trucks hauling finished product from the facility. **(R 336.1301, Act 451 324.5524)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor each emission unit in FGFUGITIVES to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar week when the equipment is operating. Each visible emission reading shall be taken during routine operating conditions. Either a certified or non-certified reader shall take each visible emission reading. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the nuisance minimization plan for fugitive dust and document the corrective action taken. **(R 336.1301, R 336.1911, Act 451 324.5524)**

2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGFUGITIVES. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, Act 451 324.5524)**

3. The permittee shall keep, in a satisfactory manner, records of all sweeping and watering of the plant roadways. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, Act 451 324.5524)**

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

N/A

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGDRYERRTO
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Process equipment normally exhausted through the dryer RTO (RTO1).

Emission Unit: EUFLAKERS, EUDRYER1, EUDRYER2, EUENERGY

POLLUTION CONTROL EQUIPMENT

RTO1

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	36.3 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.2804 R 336.2810
2. NO_x	~~95~~170 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.2803 R 336.2804 R 336.2810
3. VOC	7.1 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.1225 R 336.1702(a) R 336.2810
4. PM	29.1 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.2810
5. PM10	28.4 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.2803 R 336.2804, R 336.2810
6. PM2.5	16.55 lb/hr	Hourly	FGDRYERRTO	SC V.1	R 336.2803 R 336.2804, R 336.2810
7. GHG as CO_2e	257,292~~205,655~~ tpy	12-month rolling time period as determined at the end of each calendar month.	FGDRYERRTO	SC VI.3	40 CFR 52.21(j)
8. Formaldehyde	0.78 lb/hr[1]	Hourly	FGDRYERRTO	SC V.1	R 336.1225
9. Total HAP*	90% reduction, measured as THC (as carbon); or 20 ppmvd THC (as carbon); or 90% reduction of methanol; or 1 ppmvd methanol (if uncontrolled methanol entering the control device is greater than 10 ppmvd; or 90% reduction of formaldehyde; or 1 ppmvd formaldehyde (if formaldehyde emissions entering the control device are greater than 10 ppmvd.	3-hour block	FGDRYERRTO	SC V.2	40 CFR 63.2240(b)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
10. Opacity	20%, except for one six-minute average per hour of not more than 27%.	6-minute average	FGDRYERRTO	SC VI.5	R 336.1301
11. CO	0.43 lb/oven dried ton	Hourly	FGDRYERRTO	SC V.1	R 336.2810
12. NO_x	2.0~~1.1~~ lb/oven dried ton	Hourly	FGDRYERRTO	SC V.1	R 336.2810
13. VOC	95% reduction (by weight)	3-hour block	FGDRYERRTO	SC V.1	R 336.1225 R 336.1702(a) R 336.2810
* Total HAP, as defined in 40 CFR 63.2292, includes acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde.					

II. MATERIAL LIMITS

1. The permittee shall only burn pipeline natural gas in EUDRYER1, EUDRYER2 and RTO1. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for EUDRYER1, EUDRYER2 and RTO1 on a continuous basis. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804)**

2. The permittee shall conduct tune-ups and maintenance on the EUDRYER1, EUDRYER2 and RTO1 burners in accordance with the manufacturer's recommendations. **(R 336.1911, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall not operate EUDRYER1 or EUDRYER2 unless a minimum temperature in RTO1, as determined during the most recent performance test and documented in the MAP, is maintained. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall maintain the 3-hour block average firebox temperature in RTO1 above the minimum temperature established during the performance test according to 40 CFR 63.2262(n). **(Table 2 of 40 CFR 63 Subpart DDDD)**

5. Upon bypass of RTO1, the permittee shall initiate an immediate shutdown, consistent with safe operating practices, of EUENERGY, EUDRYER1, and EUDRYER2. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install a device to continuously monitor and record the natural gas usage rate for EUDRYER1, EUDRYER2 and RTO1. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate EUDRYER1, EUDRYER2 or RTO1 unless the low NOx burners are installed and operating properly. **(R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The maximum design heat input capacity for each natural gas dryer burner in FGDRYERRTO shall not exceed a maximum of 139.9 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

4. The maximum design heat input capacity for RTO1 shall not exceed a maximum of 25 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

5. The permittee shall not operate EUDRYER1 or EUDRYER2 unless thermal oxidizer RTO1 is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 95 percent (by weight) and maintaining a minimum temperature as determined during the most recent performance test and documented in the MAP, is maintained. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336. 1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

6. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a temperature monitoring device in the combustion chamber of thermal oxidizer RTO1 to monitor and record the temperature, on a continuous basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

7. The permittee shall meet and maintain the 3-hour block average firebox temperature above the minimum temperature established during the performance test, as specified in Table 2 of 40 CFR 63 Subpart DDDD. **(40 CFR 63.2240(b))**

8. The temperature monitoring device must meet the requirements in 40 CFR 63.2269(b)(1) through (6), as follows: **(40 CFR 63.2269(b)**
   a) Locate the temperature sensor in a position that provides a representative temperature.
   b) Use a temperature sensor with a minimum accuracy of 4 °F or 0.75 percent of the temperature value, whichever is larger.
   c) If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20 °F.
   d) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner's manual. Following the electronic calibration, the permittee shall conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 °F of the process temperature sensor's reading.
   e) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
   f) At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days of achieving the maximum production rate, but not later than 365 days after initial startup of EUPRESS, as defined under 40 CFR 63.2292, and every five years thereafter, the permittee shall verify the CO, NOx, VOC, PM, PM10, PM2.5, and formaldehyde emission rates from FGDRYERRTO and the VOC destruction efficiency of RTO1 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

2. To demonstrate initial compliance with the emission limit and operating requirements, the permittee must conduct performance tests and establish each site-specific operating requirement in Table 2 to 40 CFR 63 Subpart DDDD according to the requirements in 40 CFR 63.2262 and Table 4 to 40 CFR 63 Subpart DDDD. **(40 CFR 63.2260(a))**

3. The permittee must conduct performance tests upon initial startup or no later than 180 calendar days after the compliance date that is specified in §63.2233 and according to 40 CFR 63.7(a)(2). **(40 CFR 63.2261(a))**

4. The permittee must conduct each performance test according to the requirements in 40 CFR 63.7(e)(1), the requirements in 40 CFR 63.2262(b) through (o), and according to the methods specified in Table 4 to 40 CFR 63 Subpart DDDD. **(40 CFR 63.2262(a))**

5. The permittee shall submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in 40 CFR 63.7(b)(1). **(40 CFR 63.2280(c))**

6. Upon request from the AQD District Supervisor, the permittee may be required to verify the GHG emissions from FGDRYERRTO by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission factors includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the thermal oxidizer, on a continuous basis. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling time period CO_2e mass emissions for FGDRYERRTO using emission factors from the most recent valid emission testing data or other emission factors acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using a method approved by the District Supervisor. **(40 CFR 52.21(j))**

4. The permittee shall monitor and record the natural gas usage rate for EUDRYER1, EUDRYER2 and RTO1 on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

5. The permittee shall monitor FGDRYERRTO to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar day when the equipment is operating. Upon written approval from the AQD District Supervisor, the permittee may reduce the monitoring frequency to once per calendar week if no corrective action was required during a consecutive 6-month period. If corrective action is required after reducing monitoring to weekly, the permittee shall resume daily monitoring until another 6-month consecutive period of no corrective actions occurs. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGDRYERRTO. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

7. The permittee shall monitor and collect data according to 40 CFR 63.2270, as follows: **(40 CFR 63.2270(a))**
   a) Except for, as appropriate, monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall must conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, the permittee shall not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities. The permittee shall use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
   b) The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities; data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control system.
   c) The permittee shall determine the 3-hour block average of all recorded readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded readings in the previous 3 operating hours (excluding periods described in paragraphs a) and b) above).
   d) To calculate the data averages for each 3-hour or 24-hour averaging period, the permittee must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (*i.e.*, not from periods described in a) and b) above).

8. The permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to paragraphs (a)(1) through (3) of 40 CFR 2269, as follows: **(40 CFR 63.2269(a))**
   a) The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.
   b) At all times, the permittee shall maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
   c) Record the results of each inspection, calibration, and validation check.

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-24	178	109.9	R 336.1225, R 336.2803, R 336.2804
2. Bypass S-1	79	72.2	R 336.2803, R 336.2804
3. Bypass N-1	79	72.2	R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGMTRLHNDL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Material handling sources at the facility with emissions controlled by baghouses.

Emission Unit: EUOVERS1, EUOVERS2, EUOVERS3, EUFINES, EUSIFTERS, EUBARKSTG

POLLUTION CONTROL EQUIPMENT

EUOVERS1, EUOVERS2, and EUOVERS3 controlled by BH05, EUFINES controlled by BH20, EUSIFTERS controlled by BH08, EUBARKSTG controlled by BH14B

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.61 lb/hr	Hourly	Overs mills exhausted through BH05	SC V.1, VI.1	R 336.2810
2. PM10	0.61 lb/hr	Hourly	Overs mills exhausted through BH05	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
3. PM2.5	0.61 lb/hr	Hourly	Overs mills exhausted through BH05	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
4. VOC	20.60~~.75~~ lb/hr	Hourly	Overs mills exhausted through BH05	SC V.1, VI.4	R 336.1702 R 336.2803 R 336.2804 R 336.2810
5. PM	0.03 lb/hr	Hourly	EUFINES	SC V.1, VI.1	R 336.2810
6. PM10	0.03 lb/hr	Hourly	EUFINES	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
7. PM2.5	0.03 lb/hr	Hourly	EUFINES	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
8. VOC	1.93 lb/hr	Hourly	EUFINES	SC V.1, VI.4	R 336.1702 R 336.2803 R 336.2804 R 336.2810
9. PM	0.41 lb/hr	Hourly	EUSIFTERS	SC V.1, VI.1	R 336.2810
10. PM10	0.41 lb/hr	Hourly	EUSIFTERS	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
11. PM2.5	0.41 lb/hr	Hourly	EUSIFTERS	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
12. VOC	18.0 lb/hr	Hourly	EUSIFTERS	SC.V.1, Vi.1	R336.2803 R336.2804 R336.2810
1~~2~~3. PM	0.06 lb/hr	Hourly	EUBARKSTG	SC V.1, VI.1	R 336.2810

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
134. PM10	0.06 lb/hr	Hourly	EUBARKSTG	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
145. PM2.5	0.06 lb/hr	Hourly	EUBARKSTG	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
156. VOC	0.55 lb/hr	Hourly	EUBARKSTG	SC V.1, VI.4	R 336.1702 R 336.2803 R 336.2804 R 336.2810
167. PM	0.002 gr/dscf	Hourly	Each emission unit in FGMTRLHNDL	SC V.1, VI.1	R 336.1331
178. Opacity	10%	6-minute average	Each emission unit in FGMTRLHNDL	SC VI.2	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the following emission units unless the corresponding baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the pressure drop as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

Emission Unit	Corresponding Baghouse
EUOVERS1, EUOVERS2, EUOVERS3	BH05
EUFINES	BH20
EUSIFTER	BH08
EUBARKSTG	BH14B

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on each baghouse in FGMTRLHNDL. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the VOC, PM, PM10, and/or PM2.5 emissions from any emission point in FGMTRLHNDL by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA

Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor the pressure drop of each baghouse in FGMTRLHNDL on a continuous basis. Whenever an emission unit is operating, the permittee shall record the pressure drop of the associated baghouse at least once per day. If the pressure drop is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor each emission unit in FGMTRLHNDL to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar week when the equipment is operating. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

3. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for each emission unit in FGMTRLHNDL. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

4. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGMTRLHNDL VOC emission limits. These records shall include the emission factors, operating parameters, calculations, and other information needed to demonstrate compliance with the emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGMTRLHNDL emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-05	39.4	59.1	R 336.1225, R 338.2803, R 336.2804
2. SV-20	8.7	75.5	R 336.1225, R 338.2803, R 336.2804
3. SV-08	32	50.9	R 336.1225, R 338.2803, R 336.2804
4. SV-14B	18.1	52.5	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGBLNDFRM
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Blending and forming operations.

Emission Unit: EUBLENDING, EUFORMING

POLLUTION CONTROL EQUIPMENT

EUBLENDING controlled by baghouse BH12. EUFORMING controlled by baghouses BH11 and BH13.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	17.32~~.43~~ lb/hr	Hourly	EUBLENDING	SC V.2, VI.6	R 336.1225 R 336.1702(a) R 336.2810
2. Formaldehyde	0.2519 lb/hr[1]	Hourly	EUBLENDING	SC V.2, VI.6	R 336.1225
3. VOC	9.34 lb/hr	Hourly	EUFORMING	SC V.1, VI.6	R 336.1225 R 336.1702(a) R 336.2810
4. Formaldehyde	0.7673 lb/hr[1]	Hourly	EUFORMING	SC V.1, VI.6	R 336.1225
5. PM	0.002 gr/dscf	Hourly	Each emission unit in FGBLNDFRM	SC V.1, V.2, VI.2	R 336.1331
6. PM	0.41 lb/hr	Hourly	EUBLENDING	SC V.2, VI.2	R 336.2810
7. PM10	0.41 lb/hr	Hourly	EUBLENDING	SC V.2, VI.2	R 336.2803 R 336.2804, R 336.2810
8. PM2.5	0.41 lb/hr	Hourly	EUBLENDING	SC V.2, VI.2	R 336.2803 R 336.2804, R 336.2810
9. PM	1.05 lb/hr	Hourly	EUFORMING through SV11	SC V.1, VI.2	R 336.2810
10. PM10	1.05 lb/hr	Hourly	EUFORMING through SV 11	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
11. PM2.5	1.05 lb/hr	Hourly	EUFORMING through SV11	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
12. PM	0.66 lb/hr	Hourly	EUFORMING through SV13	SC V.1, VI.2	R 336.2810
13. PM10	0.66 lb/hr	Hourly	EUFORMING through SV13	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
14. PM2.5	0.66 lb/hr	Hourly	EUFORMING through SV13	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
15. Opacity	10%	6-minute average	Each emission unit in FGBLNDFRM	SC VI.4	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the following emission units unless the corresponding baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the pressure drop as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

Emission Unit	Corresponding Baghouse
EUBLENDING	BH12
EUFORMING	BH11
EUFORMING	BH13

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on each baghouse in FGBLNDFRM. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days of achieving the maximum production rate, but not later than 365 days after initial startup of EUPRESS, as defined under 40 CFR 63.2292, and every five years thereafter, the permittee shall verify the VOC, PM, PM10, PM2.5, and formaldehyde[1] emission rates from EUFORMING by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

2. Upon request from the AQD District Supervisor, the permittee may be required to verify the VOC, PM, PM10, PM2.5, and/or formaldehyde[1] emission rates from EUBLENDING, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor each baghouse in FGBLNDFRM on a continuous basis. Whenever an emission unit is operating, the permittee shall record the pressure drop of the associated baghouse at least once per day. If the pressure drop is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall monitor each emission unit in FGBLNDFRM to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar week when the equipment is operating. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

4. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for each emission unit in FGBLNDFRM. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

5. The permittee shall keep records of the VOC and formaldehyde content of each resin and scavenger used in FGBLNDFRM, using manufacturer's formulation data, certificates of analysis, or other records approved by the AQD District Supervisor. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

6. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGBLNDFRM VOC and formaldehyde emission limits. These records shall include the emission factors, operating parameters, calculations, and other information needed to demonstrate compliance with the emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used to verify compliance with the VOC and formaldehyde resin content limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-11	51.6	85.3	R 336.1225, R 338.2803, R 336.2804
2. SV-12	31.5	85.3	R 336.1225, R 338.2803, R 336.2804
3. SV-13	42.1	85.3	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGPRESSCOOL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Continuous Press and Board cooling system. Equipped with a wet scrubber (WS01) to control particulate emissions.

Emission Unit: EUPRESS, EUCOOLING

POLLUTION CONTROL EQUIPMENT

Wet Scrubber WS01.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	2.85 lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.2804 R 336.2810
2. CO	12.5 tpy	12-month rolling time period as determined at the end of each calendar month.	FGPRESSCOOL	SC VI.3	R 336.2804 R 336.2810
3. NO_x	2.5 lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.2803 R 336.2804 R 336.2810
4. NO_x	11 tpy	12-month rolling time period as determined at the end of each calendar month.	FGPRESSCOOL	SC VI.3	R 336.2803 R 336.2804 R 336.2810
5. VOC	49.5 lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.1225 R 336.1702(a) R 336.2810
6. VOC	0.728 lb/1000 ft^2, ¾" basis	Hourly	FGPRESSCOOL	SC V.1	R 336.1702(a) R 336.2810
7. VOC	216.8 tpy	12-month rolling time period as determined at the end of each calendar month.	FGPRESSCOOL	SC VI.3, VI.7	R 336.1225 R 336.1702(a) R 336.2810
8. PM	4.74~~12.2~~ lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.2	R 336.2810
9. PM10	4.74~~2.2~~ lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
10. PM2.5	4.74~~2.2~~ lb/hr	Hourly	FGPRESSCOOL	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
11. Formaldehyde	8.8 lb/hr[1]	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.1225
12. Total HAP*	0.30 lb/1000 ft^2, ¾" basis	Daily	EUPRESS	SC V.2, V.3, VI.8	40 CFR 63.2240(a)
13. Total HAP*	0.014 lb/1000 ft^2, ¾" basis	Daily	EUCOOLER	SC V.2, V.3, VI.8	40 CFR 63.2240(a)
14. Opacity	20%, except for one six-minute average per hour of not more than 27%.	6-minute average	FGPRESSCOOL	SC VI.5	R 336.1301

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
15. CO	0.042 lb/1000 ft^2, ¾" basis	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.2810
16. NO_x	0.04 lb/1000 ft^2, ¾" basis	Hourly	FGPRESSCOOL	SC V.1, VI.7	R 336.2810
* Total HAP, as defined in 40 CFR 63.2292, includes acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. Compliance with the 0.30 lb/1000 ft^2, ¾" basis limit for the press and the 0.014 lb/1000 ft^2, ¾" basis limit for the cooler will be demonstrated using a single emission test on the combined EUPRESS and EUCOOLER exhaust.					

17. The permittee may not use an add-on control system or wet control device to meet the production-based compliance option emission limits, SC I.12 and SC I.13. **(40 CFR 63.2240(a))**

II. MATERIAL LIMITS

1. The permittee shall not process more than 595,680,000 square feet, 3/4 inch basis (gross), of particleboard in FGPRESSCOOL per twelve month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Except during the required testing for the HAP limit in SC I.12 and I.13, ~~T~~the permittee shall not operate FGPRESSCOOL unless a minimum water flow rate in WS01, as determined during the most recent performance test and documented in the MAP, is maintained. **(R 336.1205, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. Except during the required testing for the HAP limit in SC 1.12 and 1.13, ~~T~~the permittee shall not operate FGPRESSCOOL unless wet scrubber WS01 is installed and operating properly. Satisfactory operation of the wet scrubber includes a maintaining a minimum water flow rate as determined during the most recent performance test and documented in the MAP. **(R 336.1205, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a water flow rate monitoring device on wet scrubber WS01 to monitor and record the water flow rate, on a continuous basis. **(R 336.1205, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall maintain, on a daily basis, the process unit controlling operating parameter(s) within the ranges established during the performance test according to 40 CFR 63.2262(n). **(40 CFR 63.2240(a), Table 2 to Subpart DDDD)**

4. The permittee shall either use a wood products enclosure as defined in 40 CFR 63.2292 or measure the capture efficiency of the capture device for the press or board cooler using Methods 204 and 204A through 204F of 40 CFR part 51, appendix M (as appropriate), or using the alternative tracer gas method contained in appendix A to 40 CFR 63 Subpart DDDD. The permittee shall submit documentation that the wood products enclosure meets the press enclosure design criteria in 40 CFR 63.2292 or the results of the capture efficiency verification with the Notification of Compliance Status. **(40 CFR 63.2267)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days of achieving the maximum production rate, but not later than 365 days after initial startup of EUPRESS, as defined under 40 CFR 63.2292, and every five years thereafter, the permittee shall verify the CO, NOx, VOC, PM, PM10, PM2.5, and formaldehyde emission rates from FGPRESSCOOL by testing at

owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 63.2261)**

2. The permittee shall submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in 40 CFR 63.7(b)(1). **(40 CFR 63.2280(c))**

3. The permittee must conduct performance tests and establish each site-specific operating requirement in Table 2 to 40 CFR 63 Subpart DDDD according to the requirements in 40 CFR 63.2262 and Table 4 to 40 CFR 63 Subpart DDDD. The permittee must conduct performance tests upon initial startup and according to 40 CFR 63.7(a)(2). The permittee must conduct each performance test according to the requirements in 40 CFR 63.7(e)(1), the requirements in 40 CFR 63.2262(b) through (o), and according to the methods specified in Table 4 to 40 CFR 63 Subpart DDDD. **(40 CFR 63.2260(a), 40 CFR 63.2261(a), (40 CFR 2262(a))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor and record, in a satisfactory manner, the water flow rate in the wet scrubber WS01, on a continuous basis. Flow rate data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. If the flow rate is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling time period CO, NO_x, and VOC for FGPRESSCOOL emission rates using the most recent valid emission testing data. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using a method approved by the District Supervisor. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

4. The permittee shall monitor and record the particleboard production rate, in units of 1,000 square feet on a ¾ inch basis (gross), in FGPRESSCOOL on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

5. The permittee shall monitor FGPRESSCOOL to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar day when the equipment is operating. Upon written approval from the AQD District Supervisor, the permittee may reduce the monitoring frequency to once per calendar week if no corrective action was required during a consecutive 6-month period. If corrective action is required after reducing monitoring to weekly, the permittee shall resume daily monitoring until another 6-month consecutive period of no corrective actions occurs. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP. **(R 336.1301, R 336.1911)**

6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGPRESSCOOL. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

7. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGPRESSCOOL CO, NO_x, VOC and formaldehyde emission limits. These records shall include the emission factors, operating parameters, calculations, and other information needed to demonstrate compliance with the emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

8. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGPRESSCOOL total HAP emission limits. These records shall include the operating parameters established during the performance test as required by SC V.2, calculations, and other information needed to demonstrate compliance with the emission limits. **(40 CFR 63.2282)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-33	93.6	101.7	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGTOH
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two natural gas fired thermal oil heaters. EUTOH is 38 MMBtu/hr and EUTFLTOS1 is 10.2 MMBtu/hr.

Emission Unit: Two natural gas fired thermal oil heaters. EUTOH is 38 MMBtu/hr and EUTFLTOS1 is 10.2 MMBtu/hr.

POLLUTION CONTROL EQUIPMENT

Low NOx burners

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	0.082 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.2804 R 336.2810
2. CO	13.71 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.2804 R 336.2810
3. CO	3.69 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.2804 R 336.2810
4. NO_x	0.05 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.2803 R 336.2804 R 336.2810
5. NO_x	8.16 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
6. NO_x	2.2 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
7. VOC	0.0054 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.1225 R 336.1702(a) R 336.2810
8. VOC	0.9 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.1225 R 336.1702(a) R 336.2810
9. VOC	0.24 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.1225 R 336.1702(a) R 336.2810
10. PM	0.0075 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.2810
11. PM	1.24 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.2810
12. PM	0.33 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.2810
13. PM10	0.0005 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.2803 R 336.2804, R 336.2810

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
14. PM10	0.08 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
15. PM10	0.02 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.2803 R 336.2804 R 336.2810
16. PM2.5	0.0004 lb/MMBTU	Hourly	Each emission unit in FGTOH	SC V.1, VI.4	R 336.2803 R 336.2804, R 336.2810
17. PM2.5	0.07 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
18. PM2.5	0.02 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
19. GHG as CO_2e	19,490 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	40 CFR 52.21(j)
20. GHG as CO_2e	5,254 tpy	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	40 CFR 52.21(j)
21. Formaldehyde	0.01 tpy[1]	12-month rolling time period as determined at the end of each calendar month.	EUTOH	SC V.1, VI.2	R 336.1225
22. Formaldehyde	0.003 tpy[1]	12-month rolling time period as determined at the end of each calendar month.	EUTFLTOS1	SC V.1, VI.2	R 336.1225

II. MATERIAL LIMITS

1. The permittee shall only burn pipeline natural gas in FGTOH. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for each emission unit FGTOH on a continuous basis. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804)**

2. The permittee shall conduct tune-ups and maintenance on each FGTOH burner in accordance with the manufacturer's recommendations. **(R 336.1911, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall operate and maintain each emission unit in FGTOH, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions and comply with the applicable requirements of Table 3 of 40 CFR Part 63 Subpart DDDDD. **(R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install a device to continuously monitor and record the natural gas usage rate for each emission unit in FGTOH. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate any emission unit in FGTOH unless the associated low NO_x burner is installed and operating properly. **(R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The maximum design heat input capacity for EUTOH shall not exceed a maximum of 38 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

4. The maximum design heat input capacity for EUTFLTOS1 shall not exceed a maximum of 10.2 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the CO, NO_x, VOC, PM, PM10, PM2.5, formaldehyde, and/or GHG emissions from either emission unit in FGTOH by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep the following information on a monthly basis for each emission unit in FGTOH using the most recent valid emission testing data or emission factors acceptable to the AQD District Supervisor and the natural gas usage records:
   a) CO, NO_x, VOC, PM, PM10, PM2.5, formaldehyde, and CO_2e mass emission calculations determining the monthly emission rate in tons per calendar month.
   b) CO, NO_x, VOC, PM, PM10, PM2.5, formaldehyde, and CO_2e mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall monitor and record the natural gas usage rate for each emission unit in FGTOH on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGTOH CO, NO_x, VOC, PM, PM10, and PM2.5 lb/MMBtu emission limits. These records shall include the manufacturer's specifications, operating parameters, calculations, and other information needed to demonstrate compliance with the emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGTOH emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-35	31.1	50.9	R 336.1225, R 338.2803, R 336.2804
2. SV-36	17	32.8	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFINISH
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Sanding, sawing, and cutting of boards and conveyance of reject material to the RM silo. Emissions are controlled by baghouses.

Emission Unit: EUFCOS, EUSANDING, EUCTPSAW, EURMSILO

POLLUTION CONTROL EQUIPMENT

EUFCOS controlled by BH17, EUSANDING controlled by BH18, EUCTPSAW controlled by BH19, EURMSILO controlled by BH14A

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	~~1.4~~10.3 lb/hr	Hourly	EUFCOS	SC V.1, VI.4	R 336.1225 R 336.1702(a) R 336.2810
2. PM	0.55 lb/hr	Hourly	EUFCOS	SC V.1, VI.1	R 336.2810
3. PM10	0.55 lb/hr	Hourly	EUFCOS	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
4. PM2.5	0.55 lb/hr	Hourly	EUFCOS	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
5. Formaldehyde	1.93~~0.15~~ lb/hr[1]	Hourly	EUFCOS	SC V.1, VI.4	R 336.1225
6. VOC	6.9~~3.32~~ lb/hr	Hourly	EUSANDING	SC V.1, VI.4	R 336.1225 R 336.1702(a) R 336.2810
7. PM	1.43 lb/hr	Hourly	EUSANDING	SC V.1, VI.1	R 336.2810
8. PM10	1.43 lb/hr	Hourly	EUSANDING	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
9. PM2.5	1.43 lb/hr	Hourly	EUSANDING	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
10. Formaldehyde	0.3 ~~0.22~~ lb/hr[1]	Hourly	EUSANDING	SC V.1, VI.4	R 336.1225
11. VOC	3.0~~1.4~~ lb/hr	Hourly	EUCTPSAW	SC V.1, VI.4	R 336.1225 R 336.1702(a) R 336.2810
12. PM	0.44 lb/hr	Hourly	EUCTPSAW	SC V.1, VI.1	R 336.2810
13. PM10	0.44 lb/hr	Hourly	EUCTPSAW	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
14. PM2.5	0.44 lb/hr	Hourly	EUCTPSAW	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
15. Formaldehyde	0.21~~15~~ lb/hr[1]	Hourly	EUCTPSAW	SC V.1, VI.4	R 336.1225

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
16. VOC	0.54 lb/hr	Hourly	EURMSILO	SC V.1, VI.4	R 336.1225 R 336.1702(a) R 336.2810
17. PM	0.06 lb/hr	Hourly	EURMSILO	SC V.1, VI.1	R 336.2810
18. PM10	0.06 lb/hr	Hourly	EURMSILO	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
19. PM2.5	0.06 lb/hr	Hourly	EURMSILO	SC V.1, VI.1	R 336.2803 R 336.2804 R 336.2810
20. PM	0.002 gr/dscf	Hourly	Each emission unit in FGFINISH	SC V.1, VI.1	R 336.1331
21. Opacity	10%	6-minute average	Each emission unit in FGFINISH	SC VI.2	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the following emission units unless the corresponding baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the pressure drop as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

Emission Unit	Corresponding Baghouse
EUFCOS	BH17
EUSANDING	BH18
EUCTPSAW	BH19
EURMSILO	BH14A

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on each baghouse in FGFINISH. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the VOC, PM, PM10, PM2.5, and/or formaldehyde emissions from any emission unit in FGFINISH by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor the pressure drop of each baghouse in FGFINISH on a continuous basis. Whenever an emission unit is operating, the permittee shall record the pressure drop of the associated baghouse at least once per day. If the pressure drop is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor each emission unit in FGFINISH to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar week when the equipment is operating. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

3. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for each emission unit in FGFINISH. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

4. The permittee shall keep, in a satisfactory manner, records to demonstrate compliance with the FGFINISH VOC and formaldehyde emission limits. These records shall include emission factors, operating parameters, calculations, and other information needed to demonstrate compliance with the emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of EUPRESS, as defined under 40 CFR 63.2292, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGFINISH emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-17	39	82	R 336.1225, R 338.2803, R 336.2804
2. SV-18	63	91.9	R 336.1225, R 338.2803, R 336.2804

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SV-19	34.3	82	R 336.1225, R 338.2803, R 336.2804
4. SV-14A	18.1	75.5	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGPTL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two paper treating lines. Each line has a 3.4 MMBTU per hour natural gas dryer.

Emission Unit: EUPTL1, EUPTL2

POLLUTION CONTROL EQUIPMENT

Low NOx burners for the natural gas dryers

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	0.082 lb/MMBTU	Hourly	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2	R 336.2804 R 336.2810
2. CO	1.23 tpy	12-month rolling time period as determined at the end of each calendar month.	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2, VI.2	R 336.2804 R 336.2810
3. NO_x	0.05 lb/MMBTU	Hourly	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2	R 336.2803 R 336.2804 R 336.2810
4. NO_x	0.73 tpy	12-month rolling time period as determined at the end of each calendar month.	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2, VI.2	R 336.2803 R 336.2804 R 336.2810
5. VOC	4.3 lb/hr	Hourly	Each emission unit in FGPTL	SC V.1	R 336.1225 R 336.1702(a) R 336.2810
6. VOC	19 tpy	12-month rolling time period as determined at the end of each calendar month.	Each emission unit in FGPTL	SC V.1, VI.2	R 336.1225 R 336.1702(a) R 336.2810
7. PM	0.0075lb/MMBTU	Hourly	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2	R 336.2810
8. PM	0.11 tpy	12-month rolling time period as determined at the end of each calendar month.	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2, VI.2	R 336.2810
9. PM10	0.0005lb/MMBTU	Hourly	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2	R 336.2803 R 336.2804, R 336.2810

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
10. PM10	0.01 tpy	12-month rolling time period as determined at the end of each calendar month.	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2, VI.2	R 336.2803 R 336.2804 R 336.2810
11. PM2.5	0.0004lb/MMBTU	Hourly	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2	R 336.2803 R 336.2804, R 336.2810
12. PM2.5	0.01 tpy	12-month rolling time period as determined at the end of each calendar month.	Each natural gas dryer associated with each emission unit in FGPTL	SC V.2, VI.2	R 336.2803 R 336.2804, R 336.2810
13. GHG as CO_2e	3,502 tpy	12-month rolling time period as determined at the end of each calendar month.	FGPTL	SC V.2, VI.2	40 CFR 52.21(j)
14. Formaldehyde	1.36 lb/hr[1]	Hourly	Each emission unit in FGPTL	SC V.1	R 336.1225

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. HAP content of each coating	1.6% by weight coating material or 8% by weight coating solids	Monthly	FGPTL	SC VI.6, VI.7	40 CFR 63.3320(b)(1) and (2)

2. The permittee shall only burn pipeline natural gas in FGPTL. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for each natural gas dryer in FGPTL on a continuous basis. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804)**

2. The permittee shall conduct tune-ups and maintenance on each FGPTL burner in accordance with the manufacturer's recommendations. **(R 336.1911, R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install a device to continuously monitor and record the natural gas usage rate for each natural gas dryer in FGPTL. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate any dryer in FGPTL unless the associated low NOx burner is installed and operating properly. **(R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

3. The maximum design heat input capacity for each dryer in FGPTL shall not exceed a maximum of 3.4 MMBTU per hour on a fuel heat input basis. **(R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days after startup of each emission unit in FGPTL, and every five years thereafter, the permittee shall verify the VOC and formaldehyde emission rates from the emission unit by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

2. Upon request from the AQD District Supervisor, the permittee may be required to verify the CO, NO_x, PM, PM10, PM2.5, and/or GHG emissions from either natural gas dryer in FGPTL by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep the following information on a monthly basis for each emission unit in FGPTL:
   a) CO, NO_x, VOC, PM, PM10, PM2.5, and CO_2e mass emission calculations determining the monthly emission rate in tons per calendar month.
   b) CO, NO_x, VOC, PM, PM10, PM2.5, and CO_2e mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall monitor and record the natural gas usage rate for each natural gas dryer in FGPTL on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall keep records of the VOC and formaldehyde content of each resin used in FGPTL. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

5. The permittee shall determine the organic HAP content of coating materials according to the procedures in 40 CFR 63.3360(c). **(40 CFR 63.3360(a)(1))**

6. The permittee shall determine the organic HAP mass fraction of each coating material "as-purchased" using Method 311, Method 24, or formulation data provided by the manufacturer of the material. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used. **(40 CFR 3360(c)(1), (2), and (3))**

7. The permittee shall, on a monthly basis, maintain, at a minimum a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP for each coating. **(40 CFR 63.3410(a)(iii))**

VII. REPORTING

1. Semiannual reporting of monitoring and deviations. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR 63.3400(c)(v))**

2. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.3400(c). Each semiannual compliance report shall identify any deviation from the emission limit or include a statement that there were no deviations from the emission limitations during the reporting period. For any deviations, the report shall include the information specified in 40 CFR 63.3400(c)(v). **(40 CFR 63.3400(c)(2)(iv) and (v))**

3. Not less than 60 days prior to startup of each emission unit in FGPTL, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGPTL CO, NOx, PM, PM10, PM2.5, and GHG emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. This demonstration will be used when emissions are not controlled by DESP1 and RTO1. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-26	31.1	60	R 336.1225, R 338.2803, R 336.2804
2. SV-27	31.1	60	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart JJJJ for Paper and Other Web Coating upon startup. **(40 CFR Part 63, Subparts A and JJJJ)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFTL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

The three thermally fused lamination lines.

Emission Unit: EUTFL1, EUTFL2, EUTFL3

POLLUTION CONTROL EQUIPMENT

EUTFL1 controlled by BH 28, EUTFL2 controlled by BH 29, EUTFL3 controlled by BH 30

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	0.05 lb/hr	Hourly	Each emission unit in FGTFL	SC V.1	R 336.1225 R 336.1702(a) R 336.2810
2. VOC	0.24 tpy	12-month rolling time period as determined at the end of each calendar month.	Each emission unit in FGTFL	SC V.1, VI.5	R 336.1225 R 336.1702(a) R 336.2810
3. PM	0.33 lb/hr	Hourly	Each emission unit in FGTFL	SC V.1, VI.2	R 336.2810
4. PM	0.002 gr/dscf	Hourly	Each emission unit in FGTFL	SC V.1, VI.2	R 336.1331
5. PM	1.45 tpy	12-month rolling time period as determined at the end of each calendar month.	Each emission unit in FGTFL	SC V.1, VI.5	R 336.2810
6. PM10	0.33 lb/hr	Hourly	Each emission unit in FGTFL	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
7. PM10	1.45 tpy	12-month rolling time period as determined at the end of each calendar month.	Each emission unit in FGTFL	SC V.1, VI.5	R 336.2803 R 336.2804 R 336.2810
8. PM2.5	0.33 lb/hr	Hourly	Each emission unit in FGTFL	SC V.1, VI.2	R 336.2803 R 336.2804, R 336.2810
9. PM2.5	1.45 tpy	12-month rolling time period as determined at the end of each calendar month.	Each emission unit in FGTFL	SC V.1, VI.5	R 336.2803 R 336.2804, R 336.2810
10. Formaldehyde	0.05 lb/hr[1]	Hourly	Each emission unit in FGTFL	SC V.1	R 336.1225
11. Opacity	10%	6-minute average	Each emission unit in FGTFL	SC VI.4	R 336.1301

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the following emission units unless the corresponding baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the pressure drop as described in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

Emission Unit	Corresponding Baghouse
EUTFL1	BH28
EUTFL2	BH29
EUTFL3	BH30

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a pressure drop monitoring device on each baghouse in FGTFL. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request from the AQD District Supervisor, the permittee may be required to verify the VOC, PM, PM10, PM2.5, and/or formaldehyde emissions from any emission unit in FGTFL by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall monitor the pressure drop of each baghouse in FGTFL on a continuous basis. Whenever an emission unit is operating, the permittee shall record the pressure drop of the associated baghouse at least once per day. If the pressure drop is outside the range established in the MAP, the permittee shall take corrective action as described in the MAP and document the corrective action taken. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

3. The permittee shall monitor each emission unit in FGTFL to verify compliance with the opacity limit by taking visible emission readings a minimum of once per calendar week when the equipment is operating. Either a certified or non-certified reader shall take each visible emission reading during routine operating

conditions. If a certified reader observes visible emissions that exceed the opacity limit or if a non-certified reader observes visible emissions above normal, the permittee shall take corrective action as described in the MAP and document the corrective action taken. **(R 336.1301, R 336.1911)**

4. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for each emission unit in FGTFL. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301)**

5. The permittee shall keep the following information on a monthly basis for each emission unit in FGTFL using the most recent valid emission testing data or emission factors acceptable to the AQD District Supervisor and the natural gas usage records:
   a) VOC, PM, PM10, and PM2.5 mass emission calculations determining the monthly emission rate in tons per calendar month.
   b) VOC, PM, PM10, and PM2.5 mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VII. REPORTING

1. Not less than 60 days prior to startup of each emission unit in FGTFL, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGTFL emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-28	34.4	55.8	R 336.1225, R 338.2803, R 336.2804
2. SV-29	34.4	55.8	R 336.1225, R 338.2803, R 336.2804
3. SV-30	34.4	55.8	R 336.1225, R 338.2803, R 336.2804

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGTANKS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Storage tanks for resins and other materials for the particle board line, resins for the paper treating lines, diesel fuel, and liquid propane.

Emission Unit: EUCHEMICAL, EUMRESIN, EUUFRESIN, EUDIESEL, EUPLTANKS

POLLUTION CONTROL EQUIPMENT

Breather vents and submerged fill pipes on non-pressurized tanks

I. EMISSION LIMITS

N/A

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall install, maintain and operate in a satisfactory manner, breather vents on each non-pressurized tank in FGTANKS. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not fill any non-pressurized tank in FGTANKS unless the tank is equipped with submerged fill piping. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep records of all material deliveries to each tank if FGTANKS, including the date of delivery and the amount of material delivered. **(R 336.1205, R 336.1225, R 336.1702, R 336.2810)**

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGRICE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

1500-kilowatt emergency diesel generator engine, 500-kilowatt emergency diesel generator engine, and 187 kilowatt diesel fire pump engine.

Emission Unit: EUEMRGRICE1, EUEMRGRICE2, EUFIREPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NO_x	4.0 g/KW-hr	Hourly	EUFIREPUMP	SC VI.2, VI.3	40 CFR 60.4205(c), 40 CFR 60 Subpart IIII Table 4
2. NO_x	3.53 lb/hr	Hourly	EUFIREPUMP	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
3. CO	3.5 g/KW-hr	Hourly	EUFIREPUMP	SC VI.2, VI.3	40 CFR 60.4205(c), 40 CFR 60 Subpart IIII Table 4
4. CO	3.09 lb/hr	Hourly	EUFIREPUMP	SC V.2, VI.2, VI.3	R 336.1205, R 336.2804, R 336.2810
5. PM	0.2 g/KW-hr	Hourly	EUFIREPUMP	SC VI.2, VI.3	40 CFR 60.4205(c), 40 CFR 60 Subpart IIII Table 4
6. PM	0.18 lb/hr	Hourly	EUFIREPUMP	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
7. PM10	0.18 lb/hr	Hourly	EUFIREPUMP	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
8. PM2.5	0.18 lb/hr	Hourly	EUFIREPUMP	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
9. GHG as CO_2e	7056 ~~56~~ tpy	12-month rolling time period as determined at the end of each calendar month.	EUFIREPUMP	SC VI.6	40 CFR 52.21(j)
10. NMHC + NO_x	6.4 g/KW-hr	Hourly	EUEMRGRICE1	SC VI.2, VI.3	40 CFR 60.4205(d)(2)
11. NO_x	21.2 lb/hr	Hourly	EUEMRGRICE1	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
12. CO	3.5 g/KW-hr	Hourly	EUEMRGRICE1	SC VI.2, VI.3	40 CFR 60.4205(d)(2)
13. CO	11.6 lb/hr	Hourly	EUEMRGRICE1	SC V.2, VI.2, VI.3	R 336.1205, R 336.2804, R 336.2810
14. PM	0.20 g/KW-hr	Hourly	EUEMRGRICE1	SC VI.2, VI.3	40 CFR 60.4205(d)(3)
15. PM	0.66 lb/hr	Hourly	EUEMRGRICE1	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
16. PM10	0.66 lb/hr	Hourly	EUEMRGRICE1	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
17. PM2.5	0.66 lb/hr	Hourly	EUEMRGRICE1	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
18. GHG as CO_2e	590~~209~~ tpy	12-month rolling time period as determined at the end of each calendar month.	EUEMRGRICE1	SC VI.6	40 CFR 52.21(j)
19. NMHC + NO_x	4.00 g/KW-hr	Hourly	EUEMRGRICE2	SC VI.2, VI.3	40 CFR 60.4205(d)(2)
20. NO_x	4.4 lb/hr	Hourly	EUEMRGRICE2	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
21. CO	3.5 g/KW-hr	Hourly	EUEMRGRICE2	SC VI.2, VI.3	40 CFR 60.4205(d)(2)
22. CO	3.9 lb/hr	Hourly	EUEMRGRICE2	SC V.2, VI.2, VI.3	R 336.1205, R 336.2804, R 336.2810
23. PM	0.20 g/KW-hr	Hourly	EUEMRGRICE2	SC VI.2, VI.3	40 CFR 60.4205(d)(3)
24. PM	0.22 lb/hr	Hourly	EUEMRGRICE2	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
25. PM10	0.22 lb/hr	Hourly	EUEMRGRICE2	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
26. PM2.5	0.22 lb/hr	Hourly	EUEMRGRICE2	SC V.2, VI.2, VI.3	R 336.1205, R336.2803, R 336.2804, R 336.2810
27. GHG as CO_2e	209~~70~~ tpy	12-month rolling time period as determined at the end of each calendar month.	EUEMRGRICE2	SC VI.6	40 CFR 52.21(j)

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel in FGRICE with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205, R 336.1402(1), 40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUFIREPUMP, EUEMRGRICE1, or EUEMRGRICE2 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. These hours include the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

2. The permittee may operate each engine in FGRICE for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. Each engine in FGRICE may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-

emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f))**

3. The permittee shall not operate each engine in FGRICE for more than 80 minutes per day, except during emergency conditions and required stack testing in SC V.1 and V.2. **(R 336.2803, R 336.2804)**

4. The permittee shall do all of the following, except as permitted under paragraph (g) of 40 CFR 60.4211 in SC III.5: **(40 CFR 60.4206 and 60.4211(a))**
   a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
   b) Change only those emission-related settings that are permitted by the manufacturer; and
   c) Meet the requirements of 40 CFR parts 89 (Control of Emissions from New and In-use Nonroad CI Engines) and/or 1068 (General Compliance Provisions for Highway, Stationary, and Nonroad Programs), as they apply.

5. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each of such engine in FGRICE and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(2) & (3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain each engine in FGRICE with a non-resettable hours meter to track the operating hours. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, 40 CFR 60.4209)**

2. The maximum rated power output of EUFIREPUMP shall not exceed 187 kilowatts, as certified by the equipment manufacturer, the maximum rated power output of EUEMRGRICE1 shall not exceed 1500 kilowatts, as certified by the equipment manufacturer, and the maximum rated power output of EUEMRGRICE2 shall not exceed 500 kilowatts, as certified by the equipment manufacturer. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, 40 CFR 60.4205(b) & (c), 40 CFR 60.4202(a)(2), 40 CFR Part 60 Subpart IIII Table 4)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. If the engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
   a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
   b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
   c) Conduct subsequent performance testing for EUEMRGRICE every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards.

   No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, 40 CFR 60.4211(g)(2) & (3), 40 CFR 60.4212)**

2. Upon request from the AQD District Supervisor, the permittee may be required to verify the NO_x, CO, PM, PM10, and/or PM2.5 emissions from one, two, or all three engines in FGRICE by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804)**

2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FGRICE:
   a) For each certified engine: The permittee shall keep records of the manufacturer certification documentation.
   b) For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

   The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FGRICE:
   a) For each certified engine: The permittee shall keep records demonstrating that the engine has been maintained according to the manufacturer's emission-related written instructions, as specified in SC III.3.
   b) For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.4, and maintenance activities.

   The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211, R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each engine in FGRICE, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of each engine in FGRICE, including what classified the operation as emergency. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211, 40 CFR 60.4214)**

5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGRICE, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205, R 336.1225, R 336.2803, R 336.2804, R 336.1402(1), 40 CFR 60.4207)**

6. The permittee shall keep the CO_2e mass emission calculations determining the monthly emission rate in tons per calendar month and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month for each engine in FGRICE, using emission factors acceptable to the AQD District Supervisor and the natural gas usage records. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. The permittee shall submit a notification specifying whether each engine in FGRICE will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(40 CFR Part 60 Subpart IIII)**

2. Not less than 60 days prior to startup of each engine in FGRICE, the permittee shall submit, to the AQD District Supervisor, the compliance demonstration method to be used in lieu of emission testing to verify compliance with the FGRICE emission limits. The compliance demonstration method shall include the emission factors used and calculation examples. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810)**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-32A	23.3	19.7	R 336.1225, R 336.2803, R 336.2804
2. SV-32B	13.0	19.7	R 336.1225, R 336.2803, R 336.2804
3. SV-34	6.0	19.7	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable General Provisions identified in Table 8 of 40 CFR Part 60 Subpart IIII, for Stationary Reciprocating Internal Combustion Engines. **(40 CFR 60.4218)**

2. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to each engine in FGRICE. **(40 CFR Part 60 Subparts A & IIII, 40 CFR 63.6590(c)(1))**

3. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine in FGRICE, upon startup. **(40 CFR Part 63 Subparts A & ZZZZ, 40 CFR 63.6595)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGPCWPMACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission units subject to the PCWP MACT, 40 CFR 63 Subpart DDDD.

Emission Unit: EUFLAKERS, EUENERGY, EUPRESS, EUCOOLER, EUDRYER1, EUDRYER2, Miscellaneous Coating Operations

POLLUTION CONTROL EQUIPMENT

RTO1, wet scrubber

I. EMISSION LIMITS

Emission limit are in FGDRYERRTO and FGPRESSCOOL

II. MATERIAL LIMITS

1. The permittee shall only use non-HAP coatings in the Group 1 Miscellaneous Coating Operations. Non-HAP coating means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds **(40 CFR 63.2241(a), 40 CFR 63.2292)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee must be in compliance with the compliance options, operating requirements, and the work practice requirements in Subpart DDDD at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption specified in 40 CFR 63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating requirements, and work practice requirements are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. **(40 CFR 63.2250(a))**

2. The permittee shall always operate and maintain the FGPCWPMACT sources, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). **(40 CFR 63.2250(b))**

3. The permittee shall develop a written startup, shutdown, malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1911, R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 63.2250(c))**

IV. DESIGN/EQUIPMENT PARAMETERS

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall conduct initial compliance demonstrations that do not require performance tests upon initial startup. **(40 CFR 63.2261(b))**

2. The permittee shall keep a copy of each notification and report that was submitted to comply with Subpart DDDD, records related to startup, shutdown, and malfunction, and records of performance tests and performance evaluations. **(40 CFR 63.2282(a))**

3. In accordance with line (5) of Table 8 to Subpart DDDD, the permittee shall keep records to show that non-HAP coatings are used in Group 1 miscellaneous coating operations. **(40 CFR 63.2282(b))**

VII. REPORTING

1. Semiannual reporting of monitoring and deviations shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(40 CFR 63.2281(b)(5), and 40 CFR 63.2281(g))**

2. The Permittee shall submit an initial notification as specified in 40 CFR 63.2280. **(40 CFR Part 63, Subparts A and DDDD)**

3. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.2280(d) and 40 CFR 63.9(h)(2)(ii). **(40 CFR 63.2260(c) and 40 CFR 63.2280(d))**

4. For each initial compliance demonstration required in Table 5 or 6 to Subpart DDDD that does not include a performance test, the permittee shall submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. **(40 CFR 63.2280(d)(1))**

5. For each initial compliance demonstration required in Tables 5 and 6 to Subpart DDDD that includes a performance test conducted according to the requirements in Table 4 to Subpart DDDD, the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2). **(40 CFR 63.2280(d)(2))**

6. The permittee shall notify the MDEQ within 30 days before taking any of the following actions: **(40 CFR 63.2280(g))**
   a) Modification or replacement of the control system for any process unit subject to the compliance options and operating requirements in Subpart DDDD.
   b) Change a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.

7. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.2281(b). Each semiannual compliance report shall include the information in paragraphs 40 CFR 2281(c)(1) through (8). Deviations should be reported as specified in 40 CFR 2281(d) and (e). **(40 CFR 63.2281(c), (d), and (e))**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

N/A

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart DDDD for Plywood and Composite Wood Products upon initial startup. **(40 CFR Part 63, Subparts A and DDDD)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGBOILERMACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply with this subpart upon startup.

Emission Unit: EUTOH, EUTFLTOS1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

N/A

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(l))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. **(40 CFR 63.7500(a))**
   a) The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
      i. New boilers or process heaters with heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 1 fuel subcategory must conduct a tune-up of the boiler or process heater every 5 years as specified in 40 CFR 63.7540, stated in SC IX.5. **(40 CFR 63.7500(e), 40 CFR Part 63 Subpart DDDDD Table 3)**
      ii. New boilers or process heaters with heat input capacity of 10 million Btu per hour or greater, including EUTOH and EITFLTOS1, must conduct a tune-up of the boiler or process heater annually as specified in 40 CFR 63.7540, stated in SC IX.5. **(40 CFR Part 63 Subpart DDDDD Table 3)**
   b) At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**

3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(e))**

4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual or 5-year schedule as specified in 40 CFR 63.7515(d), stated in SC III.5, following the initial compliance date specified in 40 CFR 63.7495(a), stated in SC IX.4. Thereafter, you are required to complete the applicable annual or 5-year tune-up as specified in 40 CFR 63.7515(d), stated in SC III.5. **(40 CFR 63.7510(g))**

5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
   a) Conduct the first annual tune-up no later than 13 months after the initial startup of the new or reconstructed boiler or process heater or the first 5-year tune-up no later than 61 months after the initial startup of the new or reconstructed boiler or process heater.
   b) Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.b. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.

   (40 CFR 63.7515(d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.102(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.201(3), 40 CFR 63.7560(b))**

1. The permittee must keep records according to paragraphs (a)(1) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
   a) A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**

2. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**

3. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**

4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.2 through SC VII.3, and in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**

2. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**

3. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**

4. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**

5. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.7, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.b, and not subject to emission limits or operating limits, the permittee may submit only an annual or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**
   a) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.4, and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.4. **(40 CFR 63.7550(b)(1))**
   b) The first annual or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.10(a)(5), 40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
   c) Annual and 5-year compliance reports must cover the applicable 1, 2, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
   d) Annual and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.10(a)(5), 40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**

6. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
   a) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
   b) 40 CFR 63.7550(c)(5) is as follows:
      i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
      ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
      iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
      iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.b. Include the date of the most recent burner inspection if it was not done annually or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
      v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

7. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
   a) The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

VIII. STACK/VENT RESTRICTION(S)

N/A

IX. OTHER REQUIREMENT(S)

1. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**

2. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
   a) If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10))**
      i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
      ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
      iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
      iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
      v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
      vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
         (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
         (2) A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
         (3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
   b) If the boiler or process heater has a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(12))**
   c) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

3. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFACILITY CONDITIONS

DESCRIPTION: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Baghouses, dry electrostatic precipitator, thermal oxidizer, wet scrubber, Low NOx burners

I. EMISSION LIMITS

N/A

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any equipment at the facility subject to an emission limitation unless an approvable malfunction abatement plan (MAP) as described in Rule 911(2), for each emission unit and emission control device at the facility, has been submitted to the AQD District Supervisor not less than 60 days before startup of EUPRESS, as defined under 40 CFR 63.2292, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
   a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
   b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
   c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
   d) A description of good design, engineering, and combustion practices for each process, as applicable.

   If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810)**

2. The permittee shall submit a nuisance minimization plan for fugitive dust to the AQD District Supervisor not less than 60 days before startup of EUPRESS, as defined under 40 CFR 63.2292. The permittee shall implement and maintain the plan, as described in the plan, upon startup of EUPRESS, as defined under 40 CFR 63.2292. **(R 336.1205, R 336.2803, R 336.2804, R 336.2810)**

IV. DESIGN/EQUIPMENT PARAMETERS

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
   a) Compliance tests and any testing required under the special conditions of this permit;
   b) Monitoring data;
   c) All calculations or documents necessary to show compliance with the limits contained in this permit.

   The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. Within 15 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than startup of EUPRESS, as defined under 40 CFR 63.2292. **(R 336.1201(7)(a), 40 CFR 63.9(b)(4)(v))**

2. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal. **(R 336.1225(4))**

3. Within 15 days after achieving the maximum production rate, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, that the maximum production rate has been achieved. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and DDDD, as they apply to the facility, upon initial startup. **(40 CFR Part 63 Subparts A & DDDD)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and DDDDD, as they apply to the facility. **(40 CFR Part 63 Subparts A & DDDDD)**

3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart A and Subpart JJJJ, as they apply to the facility, upon startup. **(40 CFR Part 63, Subparts A & JJJJ)**

4. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to the facility. **(40 CFR Part 60 Subparts A & IIII)**

5. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to the facility, upon startup. **(40 CFR Part 63 Subparts A & ZZZZ)**

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

Grayling Particleboard
MAP Forming and Pressing

System Procedure Reference	Operational Control	**Document #**	EHS GPB PRS 001
Revision Contact	Environmental Manager	**Revision Date**	August 10, 2018
Revision #	00		

1. Purpose

Preventative Maintenance and Malfunction Abatement Plan-for the Forming & Pressing Area of the Facility. Below are the Emission Units and Control Devices for this plan.

Emission Unit	Control Device
EUBLENDING	BH12
EUFORMING	BH11, BH13
EUPRESS	WS01
EUCOOLING	WS01
EUFCOS	BH17
EURMSILO	BH14A
EUTOH	

This plan fulfills the requirements in current air permit and Malfunction Abatement plan requirements under MACT standard found in 40 CFR 63 Subpart DDDD.

Function: Under MACT, reduce emissions of Hazardous Air Pollutants (defined in the rule) from SOURCE to 90% as defined in the rule and PSD BACT requirement of 95% control of VOC.

2. Scope

This policy applies to Arauco employees and contract workers within the scope of the EHS MS.

3. Responsibility

Responsible supervisory personnel for overseeing the inspection, maintenance, and repair of air cleaning devices: Forming and Pressing Coordinator

Grayling Particleboard
MAP Forming and Pressing

A. Preventative Maintenance Program

Emission Source: EUBLENDING

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order
Resin Meter	Weekly	Verification	Form
Resin Meter	Annual/As Needed	Calibration	SAP Work Order

Emission Source: EUFORMING

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUPRESS

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUCOOLING

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Grayling Particleboard
MAP Forming and Pressing

Emission Source: EUFCOS

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUSILO

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUTOH

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Grayling Particleboard
MAP Forming and Pressing

Air Cleaning Device: Baghouse (BH12, BH11, BH13, BH17, BH14A)

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Stack Observation	Weekly	Visual	Log Sheet
Pressure Drop Monitor	Annual	Calibration	SAP Work Order
Fans	Annual	Bearing Repacks	SAP Work Order
Fans	Quarterly	PM	SAP Work Order
Rotary valves	Yearly	PM	SAP Work Order

Air Cleaning Device: Wet Scrubber (WS01)

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Water quality	Weekly	Testing	Log Sheet
Wet scrubber	Monthly	PM	SAP Work Order
Wet scrubber	Annual	PM	SAP Work Order
Wet scrubber	Annual	Cleaning	SAP Work Order
Flow meter	Annual	Calibration	SAP Work Order

Grayling Particleboard
MAP Forming and Pressing

Spare parts list for

This list is a list of items to be either kept on hand or if the spare is utilized, then a replacement will be put on order.

Air Cleaning Device: Baghouse (BH12, BH11, BH13, BH17, BH14A)

Spare Quantity	Unit Item Description
Full set/size +10%	Bags
Full set/size +10%t	Cages
1	Pressure regulator/filter
1	Safety valve
1/size	Air solenoid valve
1	Pressure differential switch
1	Filter Control unit
1/size	Rupture discs
1/size	Fan impeller shaft fixed bearing
1/size	Fan impeller shaft floating bearing
1/size	Fan shaft coupling elements

Air Cleaning Device: Wet Scrubber

Suggested Spare Quantity	Unit Item Description
1/size	Fan Bearings
1/size	Pump impeller
1/size	Bearings
1/size	Mechanical seal
1/size	Shafts
1	Flow Meter

B. Emission Unit (Source) and Air Cleaning Device Operating Variables to be Monitored

Emission Source: EUBLENDING, EUFORMING, EUPRESS, EUCOOLING, EUFCOS, EURMCOS, EURMSILO, EUTOH

The above Emission Sources does not have any operating parameters that will directly affect emissions.

Air Cleaning Device: Scrubber

Operating Variable to be Monitored	**Normal Range of Operating Variable**	**Frequency & method of monitoring malfunction and type of record keeping**
Number of Plugged Nozzles	>4 to <9 plugged nozzles, TBD during commissioning	Continuous monitoring with alarms.
Scrubber Water Flow	TBD during commissioning	Continuous monitoring with data stored on a local historian server.
Visual Emission Inspection	Clear emission from stack.	While operating, one per calendar week a visual emission inspection.

Air Cleaning Device: Baghouse

Operating Variable to be monitored	**Normal Range of the Operating Variable**	**Frequency & method of monitoring malfunction and type of record keeping**
Prefilter pressure drop (dP)	Range of >.5 lbs to <8 lbs W.C. to be finalized during commission.	Continuously monitored in the control room and retained in the outside historian.
Visual Emission Inspection	Clear emission from stack.	While operating, one per calendar week a visual emission inspection.

Grayling Particleboard
MAP Forming and Pressing

C. Corrective Procedures or Operational Changes taken in the event of a malfunction or failure to achieve compliance with applicable requirements.

Air Cleaning Device: Baghouse

Malfunction or Failure	Corrective Procedure
Fire in Baghouse	Emergency vents and process shutdown
Pressure <.5 or >8 inches WC	The cause of the out of range pressure differential will be investigated and repairs and or cleaning will be completed.
Abnormal Visual Emissions.	The cause of the abnormal visual emission will be investigated and repairs and or cleaning will be completed.

Air Cleaning Device: Wet Scrubber

Malfunction or Failure	Corrective Procedure
Plugged Nozzles	Nozzles will be unplugged while unit is operating.
Water flow under minimum water flow.	Investigation to ensure flow meter is reading correctly will be done first. If minimum flow cannot be resolved in a 12-hour period with the minimum number of nozzles are in service. The press will be shut down and an investigation will be initiated and proper correction will be initiated.
Abnormal Visual Emissions.	The system will be investigated and repair and or cleaning be completed.

Revision Number	Revision Date	Description of Change
00	8/10/2018	Written

Grayling Particleboard
MAP Milling and Drying

System Procedure Reference	Operational Control	**Document #**	EHS GPB MD 001
Revision Contact	Environmental Manager	**Revision Date**	May 23, 2019
Revision #	001		

1. Purpose

Preventative Maintenance and Malfunction Abatement Plan-for the Milling and Drying Area of the Facility. Below are the Emission Units and Control Devices for this plan.

Emission Unit	Control Device
EUBARKSTG	BH14B
EUFLAKER	DESP1, BH04, RTO1
EUENERGY	DESP1, RTO1
EUDRYER1, EUDRYER2	RTO1
EUFINES	BH20
EUOVERS1, EUOVERS2, EUOVERS3	BH05
EUSIFTER	BH08

This plan fulfills the requirements in current air permit and Malfunction Abatement plan requirements under MACT standard found in 40 CFR 63 Subpart DDDD.

Function: Under MACT, reduce emissions of Hazardous Air Pollutants (defined in the rule) from SOURCE to 90% as defined in the rule and PSD BACT requirement of 95% control of VOC.

2. Scope

This policy applies to Arauco employees and contract workers within the scope of the EHS MS.

3. Responsibility

Responsible supervisory personnel for overseeing the inspection, maintenance, and repair of air cleaning devices: Milling and Drying Coordinator

Grayling Particleboard
MAP Milling and Drying

A. Preventative Maintenance Program

Emission Source: EUENERGY

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Refractory inspection	Annual	PM	SAP Work Order
Refractory inspection	Quarterly	Infrared	SAP Work Order
Emergency stack damper	Annual	Test operation	SAP Work Order
Grate Inspection	Annual	Visual Inspection	SAP Work Order
Clean and inspect of undergrates	Quarterly	Cleaning	SAP Work Order
Feed system	Quarterly	PM	SAP Work Order
Hydraulics	Quarterly	PM	SAP Work Order
Hydraulics	Annual	Oil sample	SAP Work Order
Wet ash removal	Quarterly	Visual Inspection	SAP Work Order
RTD's	Semi annual	Calibration	SAP Work Order
RTD's	Semi annual	Validation of sensor	SAP Work Order
RTD's	Quarterly	PM	SAP Work Order
Dust Burners x 2	Annual	PM	SAP Work Order
Sander dust dosing bin	Quarterly	PM	SAP Work Order
Sanderdust blower filters	As required	Replacement	SAP Work Order
Primary Combustion Fan	Yearly	Bearing repacks	SAP Work Order
Secondary Combustion Fan	Yearly	Bearing repacks	SAP Work Order
Sander dust Combustion Fan	Yearly	Bearing repacks	SAP Work Order
Undergrate Combustion Fan	Yearly	Bearing repacks	SAP Work Order
Hog fuel bin wall wear	Yearly	NDT	SAP Work Order

Grayling Particleboard
MAP Milling and Drying

Emission Source: EUFLAKERS

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Flaker building	Condition based	Cleaning	Check sheets
Flaker impeller	2 weeks	Lube	SAP Work Order
Flaker hydraulic Unit	Yearly	Oil change/test	SAP Work Order
Flaker knife ring gearbox	Yearly	Oil change/test	SAP Work Order
Flaker impeller	Yearly	PM	SAP Work Order
Flaker drive motors	Yearly	PM	SAP Work Order
Flaker impeller shaft	2 Years	Bearing repack	SAP Work Order

Emission Source: EUDRYER1, EUDRYER2

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Gas Burners	Annual	Tune up	SAP Work Order
Refractory inspection	Annual	PM	SAP Work Order
Refractory inspection	Monthly	Infrared	SAP Work Order
Trunnion Inspection	Monthly	PM	SAP Work Order
Trunnion brg	Annual	Brg repack	SAP Work Order
Drive motors	Monthly	Infrared	SAP Work Order
Drive motors	Monthly	Vibration	SAP Work Order
RTDS	Quarterly	Validation	SAP Work Order
RTDS	Annual	Calibration	SAP Work Order

Grayling Particleboard
MAP Milling and Drying

Emission Source: EUBARKSTG

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUEUFINES

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUOVERS1, EUOVERS2, EUOVERS3

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUSIFTER

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Air Cleaning Device: Baghouse (BH04, BH14A, BH14B, BH20, BH05, BH08)

Grayling Particleboard
MAP Milling and Drying

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Visual Stack Observation	Weekly	Visual	Log Sheet
Pressure Drop Monitor	Annual	Calibration	SAP Work Order
Fans	Annual	Bearing Repacks	SAP Work Order
Fans	Quarterly	PM	SAP Work Order
Rotary valves	Yearly	PM	SAP Work Order

Air Cleaning Device: ESP

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Plates	Annual	Cleaning	SAP Work Order
Vibrators/rappers	Annual	Cleaning	SAP Work Order
Inspect/Clean insulators and electrical connections	Annual	Inspection	SAP Work Order
ESP operation	Continual	Visual	Historian
Ash removal system	Annual	Inspection	SAP Work Order
Ash removal system	Quarterly	Inspection	SAP Work Order

Grayling Particleboard
MAP Milling and Drying

Air Cleaning Device: RTO

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Ducts and stacks	Inspect annually or during outages as operations indicate problems	Visual	SAP
Media Condition	Inspect annually	Testing/Visual	Annual inspection report
RTO system bakeout	When prefilter backpressure (water column) reaches 6”.	Cleaning as Needed	Bakeouts are recorded (by temperature) on the chart recorder or MAP press log sheet.
Thermocouples	Semiannually Calibration or Change out	Calibration/Replacement of instrument	SAP Work Order
Thermocouples	Quarterly visual inspection	Validation	SAP Work Order

Grayling Particleboard
MAP Milling and Drying

Spare parts list for

This list is a list of items to be either kept on hand or if the spare is utilized, then a replacement will be put on order.

Emission Source: EUENERGY

Suggested Spare Quantity	Unit Item Description
1	RTD's
1/size	Hydraulic pumps
1/size	Hydraulic Pump motors
1/size	Hydraulic cylinders
1/size	Hydraulic Directional valves
1	Hydraulic check valves
1	Hydraulic Pressure relief valves
50	Grates
1/size	Fan Bearing
1	Dust Bin Rotary valve

Emission Source: EUFLAKERS

Suggested Spare Quantity	Unit Item Description
24	Impact ledge
24	Wear Plates
72	Wear Shoes
72	Knifes
1/size	Sealing Rigs
1/size	Self aligning bearings
1/size	Withdrawal sleeve
1/size	Cylindrical roller bearing
10	V belts
1/set/size	Brake Lining
1	Safety Switch
1	Proximity Switch
1	Cable Socket

Grayling Particleboard
MAP Milling and Drying

Emission Source: EUDRYER1, EUDRYER2

Suggested Spare Quantity	Unit Item Description
1	Drum Drive motor
1	Drum Drive motor gearbox
1	Burner ignitor
1	Burner uv sensor
1	Fan motor
2	Fan shaft bearings
2/size	RTD's

Air Cleaning Device: Baghouse (BH04, BH14A, BH14B, BH20, BH05, BH08)

Spare Quantity	Unit Item Description
Full set/size +10%	Bags
Full set/size +10%	Cages
1	Pressure regulator/filter
1	Safety valve
1/size	Air solenoid valve
1	Pressure differential switch
1	Filter Control unit
1/size	Rupture discs
1/size	Fan impeller shaft fixed bearing
1/size	Fan impeller shaft floating bearing
1/size	Fan shaft coupling elements

Grayling Particleboard
MAP Milling and Drying

Air Cleaning Device: ESP

Suggested Spare Quantity	Unit Item Description
1	Insulator, wall-tube repair kit
1	Hammer
1	Level Detector
1	High voltage insulator repair kit
1	RTD
1	Pressure Deferential Switch

Air Cleaning Device: RTO

Suggested Spare Quantity	Unit Item Description
1	Electronic flame detectors
2	Thermocouples
1/size	Proximity sensors
1	Rotork actuator
1/size	Pressure switches
1/size	Solenoid valves
1/size	PLC modules
1/size	Relays
1	Flame safeguard
1	Ignitor
1	UV Scanner
1/size	Pressure transmitter
1	Maxon gas valve

B. Emission Unit (Source) and Air Cleaning Device Operating Variables to be Monitored

Emission Source: EUENERGY

Operating Variable to be Monitored	**Normal Range of Operating Variable**	**Frequency & method of monitoring malfunction and type of record keeping**
Fuel bin temp	TBD during commissioning	Continuous and Kept on local historian server.
Fuel bin pusher temp	TBD during commissioning	Continuous and Kept on local historian server.
Post-Combustion chamber oxygen analyzer signal	TBD during commissioning	Continuous and Kept on local historian server.
Combustion Chamber Pressure	TBD during commissioning	Continuous and Kept on local historian server.
Combustion Chamber Ash Temp	TBD during commissioning	Continuous and Kept on local historian server.
Combustion Chamber Temp	TBD during commissioning	Continuous and Kept on local historian server.
Post-Combustion Chamber Temp	TBD during commissioning	Continuous and Kept on local historian server.
Dust Burner Combustion Air Pressure	TBD during commissioning	Continuous and Kept on local historian server.
Mixing chamber Pressure	TBD during commissioning	Continuous and Kept on local historian server.
Process water fuel bin feed water pressure	TBD during commissioning	Continuous and Kept on local historian server.

Emission Source: EUBARKSTG, EUFLAKERS, EUDRYER1, EUDRYER2, EUFINES, EUOVERS1, EUOVERS2, EUOVERS3

The above Emission Sources does not have any operating parameters that will directly affect emissions.

Grayling Particleboard
MAP Milling and Drying

Air Cleaning Device: ESP

Operating Variable to be Monitored	**Normal Range of Operating Variable**	**Frequency & method of monitoring malfunction and type of record keeping**
Voltage and current to Primary and Secondary Transformer/Rectifier (T/R)	Primary T/R: 25-50 kilovolts (KV); 45-325 millamps Secondary T/R: 30-55 kilovolts; 75-650 milliamps	Continuous readout and the data is retained on the onsite historian.

Air Cleaning Device: RTO

Operating Variable to be monitored	**Normal Range of the Operating Variable**	**Frequency & method of monitoring malfunction and type of record keeping**
Prefilter pressure drop (dP)	Less than 6 inches W.C. to be finalized during commissioning.	Continuously monitored in the control room and retained in the outside historian.
Combustion Chamber Temperature	Greater than or equal to XXX degrees Fahrenheit - temperature to be determined with emission testing.	Continuously monitored by a thermocouple, real time readout to control room. Data obtained at least every 15 minutes and averaged to 3-hour block. Recorded in the onsite historian.

Air Cleaning Device: Baghouse

Operating Variable to be monitored	Normal Range of the Operating Variable	Frequency & method of monitoring malfunction and type of record keeping
Prefilter pressure drop (dP)	Range of >.5 lbs to <8 lbs W.C. to be finalized during commission.	Continuously monitored in the control room and retained in the outside historian.
Visual Emission Inspection	Clear emission from stack.	While operating, one per calendar week a visual emission inspection.

C. Corrective Procedures or Operational Changes taken in the event of a malfunction or failure to achieve compliance with applicable requirements.

Emission Units (Source): EUENERGY, EUFLAKERS, EUDRYERS

Malfunction or Failure	Corrective Procedure
Fire in Flakers or Dryers or other mechanical, sensor, or process control failure that causes dryer to shutdown.	Dryers: shutdown gas burners and wood feed into dryers. Continue to vent dryer(s) to RTO if safe to do so. Fire in cyclones or ductwork will cause dryer(s) to vent to bypass stack(s). Energy system: vent to bypass stack. Shutdown dust burners immediately, reduce wood feed rate to grate to minimum idle. Flakers: vent to bypass stack

Air Cleaning Device: RTO

Malfunction or Failure	Corrective Procedure
Lube or hydraulic pump or fan failure.	Start the installation of spare and commence repairs on the failed unit.
>6-inch prefilter pressure drop (dP).	A bakeout will be performed when the down unit is brought up to temperature and the unit is brought offline for the bakeout.

Combustion Chamber Temperature fails to maintain XXX degrees Fahrenheit (TBD in compliance stack test)	An alarm displays on the control panel and the RTO in alarm, will be shut down. At least 3 RTO chambers must be at or above minimum temperature with 2 dryers operating. With one dryer operating, at least 2 RTO chambers must be at or above minimum temperature. Wood feed to dryer(s) will shut down if minimum number of RTO chambers are not operating properly.

Air Cleaning Device: DESP

Malfunction or Failure	Corrective Procedure
Loss of power or low voltage.	The DESP and the Energy Plant will be shutdown immediately until repairs

Air Cleaning Device: Baghouse

Malfunction or Failure	Corrective Procedure
Fire in Baghouse	Emergency vents and process shutdown
Pressure <.5 or >8 inches WC	The cause of the out of range pressure differential will be investigated and repairs and or cleaning will be completed.
Abnormal Visual Emissions.	The cause of the abnormal visual emission will be investigated and repairs and or cleaning will be completed.

Grayling Particleboard
MAP Milling and Drying

Revision History

Revision Number	Revision Date	Description of Change
00	8/10/2018	Written
001	5/23/2019	Written

Grayling Particleboard
MAP Lamination

System Procedure Reference	Operational Control	**Document #**	EHS GPB LAM 001
Revision Contact	Environmental Manager	**Revision Date**	August 10, 2018
Revision #	00		

1. Purpose

Preventative Maintenance and Malfunction Abatement Plan-for the Lamination Area of the Facility. Below are the Emission Units and Control Devices for this plan.

Emission Unit	Control Device
EUTFL1	BH28
EUTFL2	BH29
EUTFLTOS1	

This plan fulfills the requirements in current air permit and Malfunction Abatement plan requirements under MACT standard found in 40 CFR 63 Subpart DDDD.

Function: Ensure Compliance with the proper operation and requirement under the current air permit.

2. Scope

This policy applies to Arauco employees and contract workers within the scope of the EHS MS.

3. Responsibility

Responsible supervisory personnel for overseeing the inspection, maintenance, and repair of air cleaning devices: Lamination Coordinator

Grayling Particleboard
MAP Lamination

A. Preventative Maintenance Program

Emission Source: EUTFL1, EUTFL2

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUTOH

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order
Tune Up	Yearly	Maint/Contractor	SAP Work Order

Air Cleaning Device: Baghouse (BH28, BH29)

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Visual Stack Observation	Weekly	Visual	Log Sheet
Pressure Drop Monitor	Annual	Calibration	SAP Work Order
Fans	Annual	Bearing Repacks	SAP Work Order
Fans	Monthly	PM	SAP Work Order
Rotary valves	Yearly	PM	SAP Work Order

Grayling Particleboard
MAP Lamination

Spare parts list for

This list is a list of items to be either kept on hand or if the spare is utilized, then a replacement will be put on order.

Air Cleaning Device: Baghouse (BH18, BH19)

Spare Quantity	Unit Item Description
Full set/size +10%	Bags
Full set/size +10%t	Cages
1	Pressure regulator/filter
1	Safety valve
1/size	Air solenoid valve
1	Pressure differential switch
1	Filter Control unit
1/size	Rupture discs
1/size	Fan impeller shaft fixed bearing
1/size	Fan impeller shaft floating bearing
1/size	Fan shaft coupling elements

Grayling Particleboard
MAP Lamination

B. Emission Unit (Source) and Air Cleaning Device Operating Variables to be Monitored

Emission Source: TFL1, TFL2, EUTOH

The above Emission Sources does not have any operating parameters that will directly affect emissions.

Air Cleaning Device: Baghouse

Operating Variable to be monitored	Normal Range of the Operating Variable	Frequency & method of monitoring malfunction and type of record keeping
Prefilter pressure drop (dP)	Range of >.5 lbs to <8 lbs W.C. to be finalized during commission.	Continuously monitored in the control room and retained in the outside historian.
Visual Emission Inspection	Clear emission from stack.	While operating, one per calendar week a visual emission inspection.

Grayling Particleboard
MAP Lamination

C. Corrective Procedures or Operational Changes taken in the event of a malfunction or failure to achieve compliance with applicable requirements.

Air Cleaning Device: Baghouse

Malfunction or Failure	Corrective Procedure
Fire in Baghouse	Emergency vents and process shutdown
Pressure <.5 or >8 inches WC	The cause of the out of range pressure differential will be investigated and repairs and or cleaning will be completed.
Abnormal Visual Emissions.	The cause of the abnormal visual emission will be investigated and repairs and or cleaning will be completed.

Revision History

Revision Number	Revision Date	Description of Change
00	8/10/2018	Written

Grayling Particleboard
MAP RICE

System Procedure Reference	Operational Control	**Document #**	EHS GPB GEN
Revision Contact	Environmental Manager	**Revision Date**	August 10, 2018
Revision #	001		

1. Purpose

Preventative Maintenance and Malfunction Abatement Plan-for the Emergency Diesel Engines for the Facility. Below are the Emission Units and Control Devices for this plan.

Emission Unit	Control Device
EUEMRGRICE1	
EUEMRCRICE2	
EUFIREPUMP	

This plan fulfills the requirements in current air permit and Malfunction Abatement plan requirements under MACT standard found in 40 CFR 63 Subpart DDDD.

Function: To ensure proper operation of the Emergency Diesel Engines. All of the Emergency Diesel Engines will be operated to manufacturer's recommendations.

The Engines will be meet the required inspections and maintenance as dictated in the RICE MACT regulation.

All manufacturer's emission setting will not be change unless specifically required or recommended by the manufacture.

Responsible supervisory personnel for overseeing the inspection, maintenance, and repair of air cleaning devices: Maintenance Manager

Grayling Particleboard
MAP RICE

A. Preventative Maintenance Program

Emission Source: EUEMRCRICE1, EUEMRCRICE2

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Oil/Filter change	500hrs or annually whichever is sooner	Change out	**SAP Work Order**
Spark plug/air filters	1000hrs or annually whichever is sooner	Change out	**SAP Work Order**
Dielectric battery tests	Monthly	Test	**SAP Work Order**
Transfer switch	Monthly	Test	**SAP Work Order**
Generator	Monthly	Visual Inspection	**SAP Work Order**
Belts and Hoses	Annual	Visual Inspection	**SAP Work Order**

Emission Source: EUFIREPUMP

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Oil/Filter change	500hrs or annually whichever is sooner	Change out	**SAP Work Order**
Spark plug/air filters	1000hrs or annually whichever is sooner	Change out	**SAP Work Order**
Dielectric battery tests	Monthly	Test	**SAP Work Order**
Transfer switch	Monthly	Test	**SAP Work Order**
Generator	Monthly	Visual Inspection	**SAP Work Order**
Belts and Hoses	Annual	Visual Inspection	**SAP Work Order**

Grayling Particleboard
MAP RICE

Spare parts list for

This list is a list of items to be either kept on hand or if the spare is utilized, then a replacement will be put on order.

Emission Unit: EUEMRCRICE1, EUEMRCRICE2

2	Intake air filters
1	Battery
1	Starter
1	Oil Filter
1	Cooling Pump
1	Cooling thermostat
1	Fuel injector Pump
1	Belt

Emission Unit: EUFIREPUMP

2	Intake air filters
1	Battery
1	Starter
1	Oil Filter
1	Cooling Pump
1	Cooling thermostat
1	Fuel injector Pump
1	Belt

B. Emission Unit (Source) and Air Cleaning Device Operating Variables to be Monitored

Emission Source: EMRGRICE1, EMRGRICE2, EMFIREPUMP

The above Emission Sources does not have any operating parameters that will directly affect emissions.

Grayling Particleboard
MAP RICE

C. <u>Corrective Procedures or Operational Changes taken in the event of a malfunction or failure to achieve compliance with applicable requirements.</u>

Revision History

Revision Number	Revision Date	Description of Change
00	8/10/2018	Written

Grayling Particleboard
MAP Finishing

System Procedure Reference	Operational Control	**Document #**	EHS GPB FIN 001
Revision Contact	Environmental Manager	**Revision Date**	August 10, 2018
Revision #	001		

1. Purpose

Preventative Maintenance and Malfunction Abatement Plan-for the Finishing Area of the Facility.

Below are the Emission Units and Control Devices for this plan.

Emission Unit	Control Device
EUSANDING	BH18
EUCTPSAW	BH19

This plan fulfills the requirements in current air permit and Malfunction Abatement plan requirements under MACT standard found in 40 CFR 63 Subpart DDDD.

Function: Ensure Compliance with the proper operation and requirement under the current air permit.

2. Scope

This policy applies to Arauco employees and contract workers within the scope of the EHS MS.

3. Responsibility

Responsible supervisory personnel for overseeing the inspection, maintenance, and repair of air cleaning devices: Finishing Coordinator

Grayling Particleboard
MAP Finishing

A. Preventative Maintenance Program

Emission Source: EUSANDING

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Emission Source: EUCTPSAW

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
PMs	Monthly	Maintenance	SAP Work Order
Maintenance	Yearly	Maintenance	SAP Work Order

Air Cleaning Device: Baghouse (BH18, BH19)

Maintenance Program

Item to be inspected	Frequency of Inspections or repairs	Type of inspection	Recordkeeping Method
Visual Stack Observation	Weekly	Visual	Log Sheet
Pressure Drop Monitor	Annual	Calibration	SAP Work Order
Fans	Annual	Bearing Repacks	SAP Work Order
Fans	Quarterly	PM	SAP Work Order
Rotary valves	Yearly	PM	SAP Work Order

Grayling Particleboard
MAP Finishing

Spare parts list for

This list is a list of items to be either kept on hand or if the spare is utilized, then a replacement will be put on order.

Air Cleaning Device: Baghouse (BH18, BH19)

Spare Quantity	Unit Item Description
Full set/size +10%	Bags
Full set/size +10%t	Cages
1	Pressure regulator/filter
1	Safety valve
1/size	Air solenoid valve
1	Pressure differential switch
1	Filter Control unit
1/size	Rupture discs
1/size	Fan impeller shaft fixed bearing
1/size	Fan impeller shaft floating bearing
1/size	Fan shaft coupling elements

Grayling Particleboard
MAP Finishing

B. Emission Unit (Source) and Air Cleaning Device Operating Variables to be Monitored

Emission Source: EUSANDING, EUCTPSAW

The above Emission Sources does not have any operating parameters that will directly affect emissions.

Air Cleaning Device: Baghouse

Operating Variable to be monitored	Normal Range of the Operating Variable	Frequency & method of monitoring malfunction and type of record keeping
Prefilter pressure drop (dP)	Range of >.5 lbs to <8 lbs W.C. to be finalized during commission.	Continuously monitored in the control room and retained in the outside historian.
Visual Emission Inspection	Clear emission from stack.	While operating, one per calendar week a visual emission inspection.

Grayling Particleboard
MAP Finishing

C. Corrective Procedures or Operational Changes taken in the event of a malfunction or failure to achieve compliance with applicable requirements.

Air Cleaning Device: Baghouse

Malfunction or Failure	Corrective Procedure
Fire in Baghouse	Emergency vents and process shutdown
Pressure <.5 or >8 inches WC	The cause of the out of range pressure differential will be investigated and repairs and or cleaning will be completed.
Abnormal Visual Emissions.	The cause of the abnormal visual emission will be investigated and repairs and or cleaning will be completed.

Revision History

Revision Number	Revision Date	Description of Change
00	8/10/2018	Written

Grayling Particleboard
Startup, Shutdown, and Malfunction Plan

tem Procedure Reference	Operational Control	**Document #**	EHS GPB ENV 003
Revision Contact	Environmental Manager	**Revision Date**	April 22, 2019
Revision #	001		

Revision	Revision Date	Description of Change
00	12/19/2018	Written first draft
01	04/22/2019	Initial Plan

TABLE OF CONTENTS

INTRODUCTION AND SCOPE

Arauco's Grayling Mill (Arauco Grayling) has prepared this document including the procedures and systems detailed herein for the Grayling Mill to satisfy specific requirements contained in the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, 40 CFR Part 63. The applicable MACT rules are contained in 40 CFR Part 63, Subpart A; the General Provisions applicable to all Part 63 source categories and Subpart DDDD for Plywood and Composite Wood Products (PCWP MACT) facilities.

PURPOSE OF SSMP

Per 40 CFR 63.6(e)(3), Arauco has developed this startup, shutdown, and malfunction plan (SSMP) to identify good air pollution control practices for minimizing emissions of HAPs during periods of startup, shutdown and malfunction of affected equipment in the process.

40 CFR 63.6(e)(3) specifies the following requirements for SSMPs (emphasis added):

Startup, shutdown, and malfunction plan. (i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. ***The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard.*** This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to:

- Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;
- Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
- Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

This plan identifies all startup, shutdown, and malfunction events which have the potential of causing excess emissions for affected sources. Since the mill has just been constructed and is being started up, this plan will be updated as needed if the mill experiences malfunctions not identified in the plan or operating procedures are changed.

SCOPE OF SSMP

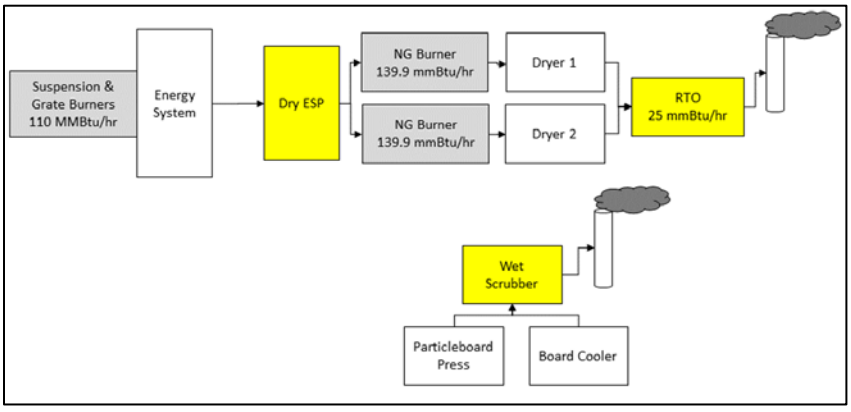
The following emission units, located at this Facility, are subject to the PCWP MACT standard, thus qualifying as MACT regulated system that are required to be addressed in the facility MACT SSM plan:

1. Two Particleboard Rotary Drum Dryers and associated heat sources (wood fired energy system (EUENERGY) and natural gas burners. These systems are controlled by a RTO (FGDRYERRTO) meeting a control requirement (90% reduction or minimum concentration of VOC, formaldehyde or methanol) in Table 2 of the standard. The dryers are identical but may be operated independently from each other. The RTO operates with 3 combustion chambers when both dryers are operating at capacity, and may operate with 2 chambers if only one dryer is operating. A 4th RTO combustion chamber is used as a backup in case of failure or maintenance requirement of one chamber. Each chamber contains its own induced draft fan and can be operated independently of the other chambers.
2. Particleboard Press and Board Cooler (FGPRESSCOOL) meeting the production based compliance limit in Table 1 of the standard. Although equipped with a wet scrubber, the scrubber is not being used for MACT compliance. Critical operating parameters to be monitored for continuous compliance have yet to be identified. This plan will be updated after the initial compliance demonstration has been completed.

PARTICLE BOARD DRYERS AND PRESS/COOLER

PROCESS DESCRIPTION

The figure below presents the air flow diagram of the Particleboard Dryer systems, Press and Cooler.



STARTUP AND SHUTDOWN PROCEDURES

The following section provides definitions and indicators for startup and shutdown events.

Startup is defined in the PCWP as "the setting in operation of an affected source or portion of an affected source for any purpose." During a startup period, there is a potential that emissions could exceed the regulatory limitations as a result of normal startup operation.

Shutdown is defined as "the cessation of operation of an affected source or portion of an affected source for any purpose." During a shutdown period, there is a potential that emissions could exceed the regulatory limitations as a result of normal shutdown operation.

DRYER/RTO SYSTEM

For the purposes of this SSM plan, criteria have also been provided for both a cold startup and shutdown, as well as a warm startup and shutdown of the dryer/RTO system. The warm shutdown and startup criteria apply to operating scenarios where production may be temporarily idled for any number of reasons.

The dryers may startup and operate with heat from both the gas burners and the wood-fired energy unit (EUEnergy) or with heat only from the natural gas burners. Note that the 2 dryers may operate independently from each other, the procedures listed are for startup and shutdown for either one or two dryers.

The beginning and ending of startup/shutdown events for FGDRYERRTO at the Grayling facility are identified as follows:

	COLD STARTUP -	COLD SHUTDOWN	WARM STARTUP	WARM SHUTDOWN
Begins:	Propane used to warm up EUEnergy (alternatively: gas burner started up if EUEnergy is off line)	Start lowering wood feed rate to dryer for the purpose of initiating a shutdown	EUEnergy wood feed increased (alternatively, natural gas burners startup if EUEnergy is off line).	Stop wood feed to dryer
Ends:	The dryer exhaust temperature is within 20°F of setpoint, and the dryer has operated at steady state for a reasonable amount of time since startup began.	All wood is out of dryer and no more being fed, the dryer gas burner is off-line, no more wood on the grate in EUEnergy, system is cooled and fans are off.	The dryer exhaust temperature is within 20°F of setpoint, and the dryer has operated at steady state for a reasonable amount of time since startup began.	All wood out of dryer, EUEnergy dust burners are off, grate at minimum firing for idle mode and exhausted to bypass stack, and warm startup begins.

The Arauco Grayling Mill follows the internal standard operating procedures for startup of the particleboard dryers. The Mill has identified the following key parameters to verify that the dryers and the supporting systems have reached steady state and are prepared to begin normal operations and meet the emission limitations in the standard. These key parameters are monitored in order to minimize emissions during startup. The critical steps of the normal cold startup procedure to minimize emissions are as follows:

1) Confirm previous shutdown is complete (e.g., no flakes are in the dryers).
2) Turn on combustion fans and induced draft dryer fans as well as induced draft RTO fans. Confirm exhaust from the empty dryers are being routed through 3 chambers of the RTO. Exception: If one dryer is not operating and only one dryer is being started up, ensure the exhaust is routed through 2 RTO chambers.
3) Bring the RTO chambers up to temperature (at least 3 chambers for 2 dryer operation, 2 chambers for 1 dryer operation). This is shown as a 15-minute average in the process control system. Until the initial compliance test is completed later in 2019, the setpoint of the RTO combustion chambers is 1600 F.
4) Bring the dryer(s) up to proper operating temperature with the use of natural gas burners and/or heat from the wood energy system
5) After the above conditions are satisfied, flakes may be introduced to the dryer(s).

The following steps are utilized for a cold shutdown to minimize emissions:

1) Stop flake feed and ensure all wood material is out of the dryers.
2) Shut down gas burners. Divert wood energy plant to bypass or shutdown wood energy plant.
3) After all flakes are out of the dryers, shutdown the RTO burners. Shutdown the fans after the systems have cooled.

The EUEnergy system may be temporarily idled which is defined as a warm shutdown. Idling the system on a temporary basis minimizes emissions that occur from the wood fired energy system compared to a cold startup. Emissions are minimized because the length of time needed to startup has been minimized. At all times during a warm startup and shutdown, there will be no wood fed into the dryer unless the RTO is operating at the minimum temperature on a 15-minute average.

The procedures for EUEnergy during a warm shutdown is as follows:

- Dust burners shut off immediately upon diversion of exhaust to bypass stack
- Grate fuel feed reduced to minimum idle fire mode (13 MMBtu/hr)

For an unplanned shutdown as a result of a malfunction, the systems will be shutdown in the same manner to the extent practical. Some minor malfunctions can cause a controlled shutdown, while major malfunctions (such as an electrical outage or fire) do not allow that option.

PRESS/COOLER SYSTEM

The Arauco Grayling Mill follows the internal standard operating procedures for a planned startup of the particleboard press.

For the press and cooler startup procedures prior to introducing mat:

- Ensure that the vent fan is on and operating to pull gases from the press to the outlet duct to the scrubber. Confirm the press is at the proper operating temperature. Other critical operating parameters for HAP emission compliance will be determined and confirmed with the initial compliance test later in 2019. This SSM plan will be updated to reflect the critical operating parameters that are identified.

The Arauco Grayling Mill follows the internal standard operating procedures for a planned shut down the particleboard press. For the purpose of defining shutdown as it pertains to the PCWP MACT regulation, the Mill has identified the following key steps to verify that the

systems have concluded normal operations and are prepared to shutdown while minimizing emissions as follows.

1) Stop loading mat to the press and ensure that all mat/board has been processed through the press and cooler.
2) Shutdown the fan that pulls gases from the press to the wet scrubber.

For an unplanned shutdown as a result of a malfunction, the systems will be shutdown in the same manner to the extent practical. Some minor malfunctions can cause a controlled shutdown, while major malfunctions (such as an electrical outage or fire) do not allow that option.

PARTICLEBOARD MALFUNCTIONS

Important Notes

1) Malfunctions that are associated with startup or shutdown conditions are covered under the Startup and Shutdown Procedures of this Plan and do not need to be considered as malfunctions, or reported as malfunctions, under this Plan.
2) If a malfunction is temporary and is resolved quickly before the dryer (or press) system has completed a warm or cold shutdown, flake feed may resume to the dryers (or mat to the press) and the system brought back to normal production.
3) The scope of this plan is related to malfunctions that can cause an exceedance of the emission limitation in the MACT standard. While there are many malfunctions that can occur in the dryer systems or the press that can cause the systems to be shutdown, there are only a limited number of malfunctions that could cause emissions in excess of the PCWP MACT standard.

DRYER/RTO MALFUNCTIONS

There are several operating scenarios which would be considered normal operations of the dryer/RTO system and not a malfunction. These operating scenarios are as follows:

Typical operation consists of the following:

Both dryers operating
Heat provided by gas burners and wood energy plant
RTO chambers: 3 are in service while the 4th is in standby (held at temperature)

There are several alternate normal operations as follows:

1) Heat provided by gas burners only (energy plant shutdown or bypassed on low fire)
2) One dryer operating while one is down for maintenance or repair. One dryer exhausts to 2 of 4 RTO chambers
3) One RTO chamber out of service for maintenance or repair when 2 dryers are operating
4) One or two RTO chambers are out of service for maintance or repair when 1 dryer is operating

MALFUNCTION	**CORRECTIVE ACTION**
Process control or safety device causes dryer to exhaust to emergency bypass stack instead of the RTO	Shutdown affected dryer (stop flake feed, shutdown or bypass heat sources, run flakes out of dryer, cool then shut down ID fans)
Dryer is exhausted to an RTO chamber which is not maintaining 15-minute minimum temperature established by stack test*	Switch exhaust to the standby RTO chamber. If not available within 15 minutes, shutdown affected dryer (stop flake feed, shutdown or bypass heat sources, run flakes out of dryer, cool then shut down ID fans)
Loss of power	Activate emergency generator to rotate dryers so flakes can be removed

*****Until initial compliance test is completed, minimum 15-minute average RTO temperature is 1600 F

Malfunctions that could cause an RTO chamber to be below minimum 15-minute temperature while receiving dryer exhaust include, but are not limited to, the following causes:

- Loss of flame through burner malfunction, loss of fuel or fuel pressure
- Malfunctioning thermocouples or process control problems, including continuous monitoring system (RTO chamber temperature)
- Mechanical issues such as can rotation failure or ID fan failure that cause the RTO chamber into automatic shut down (safety)
- Power outage or power fluctuations

PRESS AND COOLER

Since the Press and Cooler will meet the production based limitation under PCWP MACT and critical operating parameters are yet to be identified for compliance testing, this section will be updated once this information is available. Malfunctions will be identified that cause the press

and cooler to operate outside of the critical operating parameters established in the initial compliance test.

RECORDKEEPING AND REPORTING

During periods of SSM events, the facility is required to operate and maintain the MACT regulated systems in accordance with the procedures outlined in its SSM Plan. In addition to the requirements to operate and maintain the MACT regulated systems, there are also recordkeeping and reporting requirements that are required by the MACT Rules in order to document that proper procedures are followed during Startup, Shutdown, and Malfunction events. The procedures outlined below will be followed to ensure that such events are excluded from excess emissions determinations.

RECORDKEEPING

The Arauco Grayling Mill will keep records of the following events for the dryers and press and cooler:

- The occurrence and duration of each startup and shutdown;
- The occurrence and duration of each malfunction that results in, or has the potential to result in, an exceedance of an applicable MACT standard;
- The occurrence and duration of each malfunction of associated air pollution control and monitoring equipment;
- All maintenance performed on associated air pollution control and monitoring equipment;
- All information necessary to demonstrate conformance with this SSM Plan when all actions taken during periods of startup, shutdown, and malfunction are consistent with the procedures;
- Actions taken during periods of startup, shutdown, and malfunction when such actions are different from the procedures specified in this SSM Plan, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and
- Each period during which a continuous monitoring system (CMS) is malfunctioning or inoperative, including out-of-control periods.

The following are general Mill recordkeeping requirements:

- The Mill maintains files of all information (including all reports and notifications) required with the environmental files located in the Environmental Department. The files are available for inspection and review.
- The files are retained on-site for two (2) years and maintained either on-site or in storage for an additional three (3) years.
- Files are maintained in an electronic format.

PERIODIC REPORTING

The Environmental Manager conducts the following reporting activities for actions during a startup, shutdown, or malfunction event resulting in a MACT excess emission that occur during the specified reporting period (e.g., semiannual) of a MACT regulated system. This includes actions taken to correct a malfunction that are consistent with the procedures specified in this SSM Plan.

- Periodic SSM Report Contents:
    - A cover letter including the name, title, and signature of the responsible Mill official who is certifying its accuracy.
    - A summary of the SSM events during the reporting period that resulted in excess emissions for 1 hour or longer, and the duration of each event.
- Submittal Requirements:
    - Postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate).
    - Submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports.

Please note the following key considerations associated with SSM reporting:

1. The Grayling Mill will include all excess emission events as part of the semi-annual excess emissions reports required by 40 CFR §63.10(e)(3).
2. § 63.10(b)(2)(ii) and (iii) identify that records documenting the occurrence and duration of each startup, shutdown, and malfunction of the process equipment and air pollution control and monitoring equipment be maintained; however, pursuant to § 63.10(d)(5)(i), the reporting requirements are different for SSM events depending upon if there is excess emissions that occur during the event and/or if the SSM Plan was followed.
    a) If there are no excess emissions that occur during the SSM event and the SSM Plan procedures are followed, then only a statement that the “actions taken during the SSM event were consistent with the procedures specified in the SSM Plan” needs to be included in the SSM report.
    b) If there are no excess emissions that occur during the SSM event and the SSM Plan procedures are not followed, then the event needs to be identified in the SSM report.
    c) If there are excess emissions that occur during the SSM event, then an excess emissions report pursuant to § 63.10(e)(3) needs to be developed in addition to the SSM report.

IMMEDIATE REPORTING

The Environmental Manager will submit an Immediate Startup, Shutdown, and Malfunction Report at any time an action taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the SSM Plan AND the source exceeds any applicable emission limitation in the relevant emission standard.

- Immediate SSM Report Contents:
    - A cover letter containing the name, title, and signature of the responsible Mill official who is certifying its accuracy.
        - The circumstances of the event.
        - The reasons for not following the SSM Plan.
        - The occurrence of any excess emissions and/or parameter monitoring exceedances.
- Submittal Requirements:
    - Immediately report via a telephone call or a facsimile transmission to the Administrator within two (2) working days after commencing actions inconsistent with the plan.
    - Submit a follow-up letter within seven (7) working days after the end of the event.

SSMP REVISIONS

Revisions to this SSMP may be precipitated upon process modifications, SSM events, or based upon a determination that the plan is inadequate.

The SSMP may be revised periodically as necessary to reflect changes in equipment or procedures at the affected source. Revisions may be made without prior approval by the permitting authority. However, revisions must be reported in the semi-annual report.

In the event that this document inadequately addresses or fails to address a malfunction, this SSMP should be modified within 45 days of the event (40 CFR 63.6(e)(3)(viii)). The modifications must include procedures for operating and maintaining the source during similar malfunction events, along with a corrective action plan.

In the event that a revision alters the scope of the activities that are deemed to be startups, shutdowns, or malfunctions, or otherwise changes the applicability of any requirement in an applicable standard, the revised plan will not take effect until written notification describing the change is provided to the permitting authority.

The previous version of the plan should be maintained on-site and be made available to the permitting authority for a period of 5 years after the revision.

Grayling Particleboard
Wood Fuel Procurement and Monitoring Plan

System Procedure Reference	Operational Control	**Document #**	EHS GPB ENV 002
Revision Contact	Environmental Manager	**Revision Date**	July 23, 2018
Revision #	00		

1. Purpose

The purpose of this plan is to provide a plan to ensure compliance with wood fuel restrictions from permit # 59-16A.

2. Scope

This plan applies to Arauco employees and applicable vendors within the scope of the EHS MS.

3. Responsibility

- **Mill management:** Support implementation of the plan.
- **All Employees**: Conform to the plan.
- **Supervisors/Coordinators:** Ensure plan is adhered to.

4. Policy (Plan)

The plan will cover all wood-based fuel that will be combusted in the Energy Plant to provide heat for the Dryers located in Grayling, MI.

The facility intends to limit the following fuels to be burned at the facility in the Energy Plant:

1. Approximately 480,000 tons of clean sawmill residuals to be used at the site for production of product, in which a small percentage could be potentially used as fuel in the Energy Plant. All of the sawmill waste will be stored in the RMS building until ready for use.

2. Approximately 240,000 tons of whole tree chips will be used at the site for production of product, in which a small percentage could be used as fuel in the Energy Plant. All of the whole tree chips will be stored in the RMS building until ready for use.

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Grayling Particleboard
Wood Fuel Procurement and Monitoring Plan

3. Approximately 600,000 tons of round wood pulp logs will be brought at the site. The logs will be debarked, and all of the bark will be used as fuel in the Energy Plant. The rest of the material and the rest of the log will be chipped and used to produce product at the facility. The bark will be stored in the Bark Storage Silo until ready for use in the Energy Plant. The chips created from the onsite chipping will be stored in the RMS building until ready for use.

4. The following is a list of onsite wood scrap generated that could be sent to the Energy Plant for fuel.

a. Sander dust
b. Particle board from Board Breaker
c. TFL board and trimmings
d. Fines
e. Dust collected from onsite baghouses and cyclones

5. Definitions

RMS – Raw Material Storage

Revision History

Revision Number	Revision Date	Description of Change
00	07/23/2018	Written

Grayling Particleboard
Fugitive Dust Plan

System Procedure Reference	Operational Control	**Document #**	EHS GPB ENV 001
Revision Contact	Environmental Manager	**Revision Date**	July 23, 2018
Revision #	00		

1. Purpose

The purpose of this plan is to provide a plan to ensure compliance with fugitive dust regulations and requirements from the current air permit.

2. Scope

This plan applies to Arauco employees, applicable vendors, and contract workers within the scope of the EHS MS.

3. Responsibility

- **Mill management:** Support implementation of the plan.
- **All Employees**: Conform to the plan.
- **Supervisors/Coordinators:** Ensure plan is adhered to.

4. Policy (Plan)

The plan will cover all roadways, yards and material handling operations located within the facility boundary of the Grayling Particle Board facility located in Grayling, MI.

The facility intends to do the following to control fugitive dust emissions at the facility:

1. The facility will ensure that all chipped wood and sander dust fines will be kept in silos and in A-Frame buildings unless an emergency occurs and the material must be stored outside. When the maintenance or safety concerns are over, the material will be cleaned immediately and put back into its proper storage location.

2. From April 1st to October 31st the facility will clean all paved roads as needed.

3. The facility will ensure the ash unloading area under the DESP shall be cleaned as needed while operating, for the purpose of dust control. The fly ash hoppers will be

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Grayling Particleboard
Fugitive Dust Plan

sealed to ensure no fugitive occurs from the fly ash entering the hoppers from covered conveyor.

4. The facility will ensure all hauling trucks within the plant boundary carrying a potentially dusty material will be covered to control fugitive dust.

5. The facility will do inspections of the EUDEBARKER and EUBB, which consist of the Debarking operation. The area will be cleaned if needed.

6. The facility will ensure a daily inspection of all transfer points of wood dust or chipped wood is inspected and will be cleaned, if needed.

7. All wood hauling trucks will be required to be cleaned by the onsite pneumatic truck cleaning station before leaving the site. The area will be cleaned regularly.

8. The facility will ensure that all chipped wood conveying equipment from the receiving hopper to the A-Frame building, and silos are enclosed.

9. All material that is conveyed pneumatically will be inspected on a regular basis for leaks and if a leak is discovered, the process will be scheduled for shutdown, so the pneumatic conveying line can be repaired.

5. Definitions

DESP – Dry Electrostatic Precipitator

Revision History

Revision Number	Revision Date	Description of Change
00	07/23/2018	Written

Grayling Particleboard
Fugitive Dust Plan