MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

December 14, 2022

PERMIT TO INSTALL 24-22A

ISSUED TO Louisiana-Pacific Corporation – Sagola Mill

> LOCATED AT N8504 Highway M-95 Sagola, Michigan 49881

IN THE COUNTY OF

Dickinson

STATE REGISTRATION NUMBER N1315

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

November 15, 2022

DATE PERMIT TO INSTALL APPROVED: December 14, 2022	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

. 2
. 3
. 4
. 6
. 6
. 8
12
12
13
15
17
19
21
23
25
27
29
31
32

COMMON ACRONYMS

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm BTU	Actual cubic feet per minute British Thermal Unit
°C	Degrees Celsius
co	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	•
	Dry standard cubic foot
dscm °F	Dry standard cubic meter
	Degrees Fahrenheit
gr HAP	Grains
	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	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
hđ	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 condition 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**)
- 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
EUPRESS	Press System (EUPRESS) including the mat	1988 / 1996 /	N/A
	forming line with a paper overlay system and the	2004 / 2008 /	
	board press. The paper overlay system will unroll, measure, cut, and apply the paper to the	2022	
	formed mat prior to the board press. The board		
	press will include embossing plates to provide		
	the SmartSide® wood grain finish. Emissions from EUPRESS are controlled by a single device		
	that oxidizes VOCs and HAPs either thermally		
	(RTO) or catalytically (RCO). When operating as		
	a RCO a layer of catalyst is placed in the		
	combustion chamber, which allows the oxidation of VOC and HAPs to occur at lower		
	temperatures. If the catalyst deactivates, the		
	RCO can be converted to a RTO simply by		
	increasing the temperature in the combustion chamber. Exposing the catalyst to high		
	temperatures for prolonged periods of time		
	deactivates the catalyst thus a RTO cannot be		
	converted to a RCO unless the new layer of catalyst is placed in the combustion chamber.		
EUFORMING	Forming line system includes blenders, formers,		FGBH2, FGBH1
	fines blender, fines former, flying cut off saw, mat	1988 / 1998 /	- , -
	forming line controlled by baghouse dust	2022	
EUSAWLINE	collector BH2. Sawline system includes first and second pass	1988 / 1998 /	FGBH4, FGBH1,
	saws and controlled by baghouse dust collector BH4.		FGBH5
EUPULVERIZING1	#1 Fuel fines pulverizing mill	2003	FGBH3
EUPULVERIZING2 EUSANDER	#2 Fuel fines pulverizing mill	2003 1988 / 1998	FGBH3
	Sanding operations controlled by a baghouse dust collector BH7.	1988 / 1998	FGBH7, FGBH1, FGBH5
EUIGPAIIERN	EUTGPATTERN Tongue and Groove machine controlled by a baghouse dust collector BH7.		FGBH7, FGBH1, FGBH5
EUHAMMERMILL1 Primary fuel fines hammermill.		1988 / 1998 1988 / 2003	FGBH7, FGBH1, FGBH5
EUFUELBIN			FGBH1, FGBH3
EUPANELLINE	NELLINE Board (panel) sawing, trimming, scoring, sanding, and finishing controlled by baghouse dust collector BH6.		FGBH6, FGBH5
EUPANELOV	EUPANELOV Direct heated natural gas-fired oven on the Panel finishing line, total heat input 5.0 million Btu/hr.		FGFINISHOVENS
EULAPLANE1	Board (lap) sawing, trimming, scoring, sanding, and finishing controlled by baghouse dust collector BH6.	2022	FGBH6, FGBH5

	Emission Unit Description (Including Process Equipment & Control	Installation Date / Modification	
Emission Unit ID	Device(s))	Date	Flexible Group ID
EULAP1OV	Direct heated natural gas-fired oven on the Lap finishing lane 1, total heat input 5.0 million Btu/hr	2022	FGFINISHOVENS
EULAP1XOV	Direct heated natural gas-fired oven on the Lap finishing lane 1, total heat input 6.3 million Btu/hr.	2022	FGFINISHOVENS
EULAPLANE2	Board (lap) sawing, trimming, scoring, sanding, and finishing controlled by baghouse dust collector BH6.	2022	FGBH6, FGBH5
EULAP2OV	Direct heated natural gas-fired oven on the Lap finishing lane 2, total heat input 5.0 million Btu/hr.	2022	FGFINISHOVENS
EULAP2XOV	Direct heated natural gas-fired oven on the Lap finishing lane 2, total heat input 6.3 million Btu/hr.	2022	FGFINISHOVENS
EUVSLINE	Board (vented soffit) sawing, trimming, sanding, and finishing controlled by baghouse dust collector BH8.	2022	FGBH8, FGBH5
EUPRIMER	Non-VOC/HAP primer application on Panel, Lap, and VS lines by high-pressure spray or fan coater.	2022	N/A
EUHOG	Downgrade hog and room aspirations controlled by baghouse dust collector BH8.	2022	FGBH8, FGBH5
EUOVERFINES	Overlay fines hammermill, storage bin, and metering bin controlled by baghouse dust collector BH5.	2022	FGBH5
EUSCREENS	Aspiration from rotary screeners, conveyors, and dry bins controlled by baghouse dust collector BH1.	2022	FGBH1

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.

EUPRESS EMISSION UNIT CONDITIONS

DESCRIPTION

Press System (EUPRESS) including the mat forming line with a paper overlay system and the board press. The paper overlay system will unroll, measure, cut, and apply the paper to the formed mat prior to the board press. The board press will include embossing plates to provide the SmartSide® wood grain finish. Emissions from EUPRESS are controlled by a single device that oxidizes VOCs and HAPs either thermally (RTO) or catalytically (RCO). When operating as a RCO a layer of catalyst is placed in the combustion chamber, which allows the oxidation of VOC and HAPs to occur at lower temperatures. If the catalyst deactivates, the RCO can be converted to a RTO simply by increasing the temperature in the combustion chamber. Exposing the catalyst to high temperatures for prolonged periods of time deactivates the catalyst thus an RTO cannot be converted to a RCO unless the new layer of catalyst is placed in the combustion chamber.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

RCO or RTO

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	NOx	43.0 pph	Hourly	EUPRESS	SC V.1	40 CFR 52.21
2.	NOx	155.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	(c), (d), and (j) 40 CFR 52.21 (c), (d), and (j)
3.	CO	0.51 lb/TFP	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC V.1, and FGFACILITY SC I.1, SC 1.2, SC VI.2	40 CFR 52.21 (d) and (j)
4.	VOC	3.44 pph	Hourly	EUPRESS	SC V.1	R 336.1702(a)
5.	VOC	12.4 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.3	R 336.1702(a)
6.	PM10	0.072 lb/TFP	12-month rolling time period	EUPRESS	SC V.2, SC VI.4, and FGFACILITY SC I.1, SC 1.2, SC VI.2	40 CFR 52.21 (c), (d), and (j)
7.	PM10	2.0 pph	Hourly	EUPRESS	SC V.2	R 336.2803, R 336.2804
8.	PM2.5	2.0 pph	Hourly	EUPRESS	SC V.2	R 336.2803, R 336.2804
9.	Formaldehyde	5.91 pph ¹	Hourly	EUPRESS	SC V.1	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- Except as provided in SC V.3. the permittee shall maintain an hourly average minimum combustion chamber temperature of 800 degrees (RCO) or 1400 degrees (RTO) or not less than the last compliance test temperature that met the applicable VOC emission limitation in SC I.4 during operation of EUPRESS based on a one-hour average for the RCO or RTO that controls EUPRESS. (R 336.1225, R 336.1702(a), R 336.1910)
- 2. Visible emissions from EUPRESS during normal operation (excluding the bake out time period) shall not exceed a six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity. (R 336.1301(1)(a))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not produce product in EUPRESS unless the RCO or RTO is operating properly. (R 336.1910)

V. TESTING/SAMPLING

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

1. The permittee shall verify NOx, CO, VOC, and Formaldehyde emission rates from EUPRESS by testing at owner's expense, in accordance with the Department requirements, once every five years from the last test. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference	
NOx	40 CFR Part 60, Appendix A	
CO	40 CFR Part 60, Appendix A	
VOC	40 CFR Part 60, Appendix A	
Formaldehyde	40 CFR Part 63, Appendix A	

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c), (d), and (j))

 Within 180 days after commencement of initial startup and every five years thereafter, the permittee shall verify PM10 and PM2.5 emission rates from EUPRESS by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference	
PM10 / PM2.5	40 CFR Part 51, Appendix M	

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

 The permittee may lower the minimum operating temperature in the RCO or RTO below the last compliance test value that met the applicable VOC emission limitation if sufficient data is submitted to the Department that proves that VOC emissions can be maintained under the applicable emission limit at the lower temperature. The permittee may conduct trials at a temperature less than the most recent successful compliance test no more frequently than quarterly to obtain such data. (R 336.1225, R 336.1702(a), R 336.1910)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor and record the RCO and RTO combustion chamber temperature and the volumetric flow rate through the RCO and RTO on a continuous basis with instrumentation acceptable to the Air Quality Division, except if an alternate method(s) is approved by the District Supervisor, Air Quality Division. (R 336.1225, R 336.1702(a))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling NOx records for EUPRESS. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), 40 CFR 52.21(c), (d) and (j))
- 3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling VOC records for EUPRESS. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), R 336.1225, R 336.1702(a))
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling PM10 records for EUPRESS. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), 40 CFR 52.21(c), (d) and (j))

VII. <u>REPORTING</u>

 Within 30 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 commencement of trial operation of EUPRESS. (R 336.1201(7)(a))

STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPRESS	76	100	R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d), R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

NA

<u>Footnotes</u>: 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
FGBH1	A baghouse controlling particulate emissions from EUSCREENS, EUFORMING, EUSAWLINE, EUTGPATTERN, EUSANDER, EUHAMMERMILL1, and EUFUELBIN.	EUSCREENS EUFORMING EUSAWLINE EUTGPATTERN EUSANDER EUHAMMERMILL1 EUFUELBIN
FGBH2	A baghouse controlling particulate emissions from EUFORMING.	EUFORMING
FGBH3	A baghouse controlling particulate emissions from EUPULVERIZNG1, EUPULVERIZNG2, EUHAMMERMILL1, EUFUELBIN and fuel fines material transfer.	EUPULVERIZNG1 EUPULVERIZNG2 EUHAMMERMILL1 EUFUELBIN
FGBH4	A baghouse controlling particulate emissions from EUSAWLINE.	EUSAWLINE
FGBH5	A baghouse controlling particulate emissions from EUOVERFINES, EUSAWLINE, EUPANELLINE, EULAPLANE1, EULAPLANE2, EUTGPATTERN, EUSANDER and fuel fines material transfer.	EUOVERFINES EUSAWLINE EUPANELLINE EULAPLANE1 EULAPLANE2 EUTGPATTERN EUSANDER
FGBH6	A baghouse controlling particulate emissions from EUPANELLINE, EULAPLANE1, and EULAPLANE2.	EUPANELLINE EULAPLANE EULAPLANE2
FGBH7	A baghouse controlling particulate emissions from EUPATTERN and EUSANDER.	EUTGPATTERN EUSANDER
FGBH8	A baghouse controlling particulate emissions from EUVSLINE and EUHOG.	EUVSLINE EUHOG
FGFINISHOVENS	Direct natural gas fired ovens on the Panel finishing line and Lap finishing lanes 1 and 2.	EUPANELOV EULAP1OV EULAP1XOV EULAP2OV EULAP2XOV
FGBLRS/HTRS	Two (2) natural gas-fired service water heaters and thirty-nine (39) natural gas-fired air make-up units and space heaters.	NA

FGBH1 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUSCREENS, FGBH2, FGBH4, and FGBH7.

Emission Units: EUSCREENS, EUFORMING (FGBH2), EUSAWLINE (FGBH4), EUPATTERN and EUSANDER (FGBH7), and EUHAMMERMILL1, and EUFUELBIN

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.39 pph	Hourly	FGBH1	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.39 pph	Hourly	FGBH1	SC V.1	R 336.2803,
			-			R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH1, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH1 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH1 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference		
PM10 / PM2.5	40 CFR Part 51, Appendix M		

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH1 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH1	48	60	R 336.1225, R 336.2803, R 336.2804

FGBH2 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUFORMING.

Emission Units: EUFORMING

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.36 pph	Hourly	FGBH2	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.36 pph	Hourly	FGBH2	SC V.1	R 336.2803,
						R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH2, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH2 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

 Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH2 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference		
PM10 / PM2.5	40 CFR Part 51, Appendix M		

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH2 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH2	48	60	R 336.1225, R 336.2803, R 336.2804

FGBH3 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUPULVERIZING1, EUPULVERIZING2, and fuel fines material transfer.

Emission Units: EUPULVERIZING1, EUPULVERIZING2, EUHAMMERMILL1 and EUFUELBIN, and fuel fines material transfer.

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.21 pph	Hourly	FGBH3	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.21 pph	Hourly	FGBH3	SC V.1	R 336.2803,
			-			R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH3, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH3 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

 Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH3 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH3 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH3	48	60	R 336.1225, R 336.2803, R 336.2804

FGBH4 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUSAWLINE.

Emission Units: EUSAWLINE

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.39 pph	Hourly	FGBH4	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.39 pph	Hourly	FGBH4	SC V.1	R 336.2803,
						R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH4, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH4 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH4 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference		
PM10 / PM2.5	40 CFR Part 51, Appendix M		

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH4 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH4	48	80	R 336.1225, R 336.2803, R 336.2804

FGBH5 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUOVERFINES, FGBH4, FGBH6, and FGBH7.

Emission Units: EUOVERFINES, EUFORMING (FGBH2), EUPANELLINE, EULAPLANE1, EULAPLANE2 (FGBH6), EUTGPATTERN and EUSANDER (FGBH7), and fuel fines material transfer.

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.47 pph	Hourly	FGBH5	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.47 pph	Hourly	FGBH5	SC V.1	R 336.2803,
						R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH5, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH5 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH5 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH5 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH5	48	60	R 336.1225, R 336.2803, R 336.2804

FGBH6 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUPANELLINE, EULAPLANE1, AND EULAPLANE2.

Emission Units: EUPANELLINE, EULAPLANE1, AND EULAPLANE2.

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.51 pph	Hourly	FGBH6	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.51 pph	Hourly	FGBH6	SC V.1	R 336.2803,
			-			R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH6, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH6 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH6 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH6 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH6	48	80	R 336.1225, R 336.2803, R 336.2804

FGBH7 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUTGPATTERN and EUSANDER.

Emission Units: EUTGPATTERN, EUSANDER

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.39 pph	Hourly	FGBH7	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.39 pph	Hourly	FGBH7	SC V.1	R 336.2803,
			-			R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH7, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH7 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH7 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH7 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBH7	48	60	R 336.1225, R 336.2803, R 336.2804

FGBH8 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A baghouse controlling particulate emissions from EUVSLINE and EUHOG.

Emission Units: EUVSLINE, EUHOG

POLLUTION CONTROL EQUIPMENT

Baghouse dust collector.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM10	0.47 pph	Hourly	FGBH8	SC V.1	R 336.2803,
						R 336.2804
2.	PM2.5	0.47 pph	Hourly	FGBH8	SC V.1	R 336.2803,
						R 336.2804

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate process equipment or emission units controlled by FGBH8, unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted within 30 days of commencement of trial operation, 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.

1. The permittee shall not operate the process equipment and emission units controlled by FGBH8 unless a gauge, which continuously measures the pressure drop across the fabric filter collector and sounds an alarm when the pressure drop exceeds 10.0 inches water, is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1301, R 336.1331, R 336.1910)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup and upon the request of the AQD District Supervisor thereafter, the permittee shall verify PM10 and PM2.5 emission rates from FGBH8 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804)

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall conduct Visible Emission (VE) readings for FGBH8 daily for one minute each at 15 second intervals. The VE readings shall be conducted during daylight hours by a VE reader who is familiar with the dust collector. Readings do not need to be conducted by a certified VE reader. (R 336.1301)
- 2. The permittee shall continuously measure the pressure drop and record once per 12-hour shift as an indicator of proper operation of the dust collector. The indicator range is 0.1-10.0 inches of H₂O. (**R 336.1331**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
14. SVBH8	48	60	R 336.1331 R 336.2803, R 336.2804

FGFINISHOVENS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five direct natural gas-fired drying ovens on the panel finishing line (EUPANELLINE) and lap finishing lanes 1 and 2 (EULAPLANE1 AND EULAPLANE 2).

Emission Unit: EUPANELOV, EULAP1OV, EULAP1XOV, EULAP2OV, and EULAP2XOV

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in each oven in FGFINISHOVENS. (R 336.1225, R 336.1702)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The total heat input capacity of the ovens in FGFINISHOVENS shall not exceed a maximum of 27.6 MM BTU per hour.¹ (R 336.1225)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:¹

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVPANELOV1	14	40	R 336.1225
SVPANELOV2	14	40	R 336.1225
SVLAP1OV1	14	40	R 336.1225
SVLAP1OV2	14	40	R 336.1225

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVLAP1XOV1	14	40	R 336.1225
SVLAP1XOV2	14	40	R 336.1225
SVLAP2OV1	14	40	R 336.1225
SVLAP2OV2	14	40	R 336.1225
SVLAP2XOV1	14	40	R 336.1225
SVLAP2XOV2	14	40	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

<u>Footnotes</u>: ¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGBLRS/HTRS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) natural gas-fired service water heaters and thirty-nine (39) natural gas-fired air make-up units and space heaters.

Emission Unit: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in each combustion unit in FGBLRS/HTRS. (R 336.1225, R 336.1702)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The total heat input capacity of the combustion units in FGBLRS/HTRS shall not exceed a maximum of 92.2 MMBTU per hour.¹ (R 336.1225)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

RCO, RTO, and baghouse dust collectors

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Finished Product (OSB)	310,000 tons per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(j)
2. Finished Product (Siding)	250,000 tons per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

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 fugitive dust control activities and dates carried out per a AQD approved Fugitive Dust Control Plan. (R 336.1205, R 336.1371, R 336.1372)

- 2. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling production records as required in SC I.1 and SC I.2. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a) and (3), 40 CFR 52.21(j))
- 3. The permittee shall keep records of the Inspection and Maintenance Program specified in SC IX.2, including records of inspections done, problems found, repairs completed and/or corrective action taken, and scheduled and completed maintenance on the air cleaning devices. (R 336.1201(3))

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

- 1. Permittee shall implement and maintain the Fugitive Dust Control Plan as specified in Appendix 3 to limit all fugitive dust emissions from the roadways, the material storage piles, stockpile areas, and other operations throughout the plant. (R 336.1201, R 336.1371, 40 CFR 52.21)
- 2. The permittee shall carry out an Inspection and Maintenance Program, including the keeping of a daily log or checklists, for all air cleaning devices to assure that the air cleaning devices are maintained and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control Rules and existing law. The permittee shall keep records of the Inspection and Maintenance Program including records of problems found, repairs done and/or corrective action taken, and scheduled and completed maintenance on the air cleaning devices. (R 336.1301, R 336.1331, R 336.1910)
- The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDD—National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products. (40 CFR Part 63, Subpart DDDD)