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

January 30, 2024

PERMIT TO INSTALL 43-19B

ISSUED TO
Louisiana-Pacific Corporation

LOCATED AT
7299 N County Road 403
Newberry, Michigan 49868

IN THE COUNTY OF Luce

# STATE REGISTRATION NUMBER N0780

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 REQ	UIRED BY RULE 203:
January 4, 2024	
•	
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:
January 30, 2024	
,	
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

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#### **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

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan 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

<sup>\*</sup>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

CO2e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter Degrees Fahrenheit

gr Grains

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

 $\begin{array}{ccc} \text{HP} & \text{Horsepower} \\ \text{H}_2 \text{S} & \text{Hydrogen Sulfide} \end{array}$ 

kW Kilowatt
lb Pound
m Meter
mg Milligram
mm Millimeter
MM Million
MW Megawatts

NMOC Non-Methane Organic Compounds

NO<sub>x</sub> 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<sub>2</sub> Sulfur Dioxide

TAC Toxic Air Contaminant

Temp Temperature

THC Total Hydrocarbons tpy Tons per year 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.
- 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
EUDRYERRC	Dryer System consisting of a triple pass dryer drum with heat provided by the existing 42 million BTU per hour wood fired McConnell burner and/or three independently operated Maxon natural gas burners (19.5 million Btu per hour each) and an exhaust gas recirculation system. Emissions are controlled by a wet electrostatic precipitator (WESP) and a regenerative thermal oxidizer (RTO). The wet ESP is an E-tube unit with two separately energized electrical sections operating in parallel.	2005	NA
EUPRESS	Press System including the Board Press and fugitive emissions from the mat forming line. The press has 17 flights with vented platens on all flights. The emissions for EUPRESS are routed to a regenerative catalytic oxidizer (RCO).	1985 1996 2019 TBD	NA

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.

# EUDRYERRC EMISSION UNIT CONDITIONS

#### **DESCRIPTION**

Dryer System consisting of a triple pass dryer drum with heat provided by the existing 42 million BTU per hour wood fired McConnell burner and/or three independently operated Maxon natural gas burners (19.5 million Btu per hour each) and an exhaust gas recirculation system. Emissions are controlled by a wet electrostatic precipitator (WESP) and a regenerative thermal oxidizer (RTO). The wet ESP is an E-tube unit with two separately energized electrical sections operating in parallel.

Flexible Group ID: NA

#### POLLUTION CONTROL EQUIPMENT

Emissions are controlled by a wet electrostatic precipitator (WESP) and a regenerative thermal oxidizer (RTO). The wet ESP is an E-tube unit with two separately energized electrical sections operating in parallel.

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM-10	0.235 lb/tfp <sup>a</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
2. PM-10	3.94 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
3. PM	0.235 lb/tfp <sup>a</sup>	Hourly	<b>EUDRYERRC</b>	SC V.1	R 336.1205(3)
4. PM	3.94 pph	Hourly	<b>EUDRYERRC</b>	SC V.1	R 336.1205(3)
5. SO <sub>2</sub>	0.32 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
6. NOx	11.01 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
7. CO	23.98 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
8. CO	100.87 tpy <sup>b</sup>	12-month rolling time period as determined at the end of each calendar month	EUDRYERRC	SC VI.1	R 336.1205(3)
9. VOC	3.65 pph <sup>c</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1205(3) R 336.1702(c)
10. VOC	15.44 tpy <sup>b</sup>	12-month rolling time period as determined at the end of each calendar month	EUDRYERRC	SC VI.1	R 336.1205(3) R 336.1702(c)
11. Acetaldehyde	0.36 pph <sup>1</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1225
12. Acrolein	0.11 pph <sup>1</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1225
13. Formaldehyde	0.22 pph <sup>1</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1225
14. Manganese	0.011 pph <sup>1</sup>	Hourly	EUDRYERRC	SC V.1	R 336.1225

<sup>&</sup>lt;sup>a</sup> "tfp" means ton of finished product.

<sup>&</sup>lt;sup>b</sup> If the tested emission factor for EUDRYERRC is lower than the hourly emission limit for CO and/or VOC in this section, the tested emission factor may be used to determine compliance with the tons per year limit.

<sup>&</sup>lt;sup>c</sup> The VOC limit is based on a maximum drying rate of 16.74 tfp/hr (19.7 oven dry tons/hr).

# II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Coniferous Wood	30% by volume	12-month rolling time period as determined at the end of each calendar month	EUDRYERRC	SC VI.10	R 336.1205(3)

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUDRYERRC unless the cyclone, the wet electrostatic precipitator, and the RTO are installed, maintained and operated in a satisfactory manner. (R 336.1370, R 336.1910)
- 2. The permittee shall not operate EUDRYERRC unless the hourly average minimum combustion temperature in the RTO is greater than 1525 degrees Fahrenheit or the minimum hourly average combustion temperature identified during the most recent acceptable compliance test. (R 336.1910)
- 3. The permittee shall not introduce wash liquor from the wet electrostatic precipitator to EUDRYERRC. (R 336.1910)
- 4. The permittee shall keep a record of the date and time that each RTO bake out is initiated and the length of each bake out. (R 336.1201(3))
- 5. The permittee shall not operate EUDRYERRC unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the RTO and ESP, has been submitted within 90 days of permit issuance, 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.

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(3), R 336.1702(a), R 336.1910, R 336.1911)

6. The permittee shall not operate EUDRYERRC for more than one hour without the exhaust gas recirculation system functioning. The permittee shall include procedures in the MAP for operating the exhaust recirculation system in a satisfactory manner, monitoring equipment during malfunction events, and a program for corrective action for such events. (R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.1911)

# IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The permittee shall not operate EUDRYERRC unless the ESP and RTO are installed, maintained, and operated in a satisfactory manner acceptable to the AQD District Supervisor. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21(c) and (d))
- 2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner, acceptable to the AQD District Supervisor, applicable devices to monitor and record all data as specified in SC VI.2 through VI.8 and SC VI.10. (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 PM10, PM, CO, NOx, VOC, Acetaldehyde, Acrolein, Formaldehyde, Manganese, and Methanol emission rates from EUDRYERRC by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed at a minimum frequency of once every five years. Testing shall be performed using an approved EPA Method listed in the table below. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol.

Pollutant	Test Method Reference			
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules			
PM10	40 CFR Part 51, Appendix M			
NOx	40 CFR Part 60, Appendix A			
CO	40 CFR Part 60, Appendix A			
VOC	40 CFR Part 60, Appendix A			
HAPs	40 CFR Part 63, Appendix A			
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B;			
	40 CFR Part 63, Appendix A			

No less than 30 days prior to testing, the permittee shall submit a complete test protocol to the AQD Technical Programs Unit and District Office. The AQD must approve the final protocol 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(3), R 336.1702, R 336.2001, R 336.2004, R 336.2804, 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 keep a monthly record of the amount of CO and VOC emitted from EUDRYERRC, calculated using the emission rates determined during the most recent available compliance testing, per an acceptable method as approved by the District Supervisor. By the tenth day of each calendar month, the permittee shall calculate the CO and VOC emission for the previous 12-calendar month period. (R 336.1205(3), R 336.1702)
- 2. The permittee shall continuously monitor combustion chamber temperature and record hourly as an indicator of proper operation of the RTO. (R 336.1910)
- 3. The permittee shall maintain a summary record of RTO temperature monitoring system downtime. The permittee shall keep a summary record of all hourly average minimum RTO combustion temperatures less than 1525 degrees Fahrenheit (or the minimum hourly average combustion temperature identified during the most recent acceptable compliance test). The summary shall include the cause if known and details of corrective action or action taken to discontinue operation of EUDRYERRC as required by SC III.2. (R 336.1910)

- 4. The permittee shall monitor, on an hourly basis, the temperature in the wet electrostatic precipitator (ESP) measured at the outlet of the quench section using a thermocouple and shall record the temperature on a continuous basis. The thermocouple shall be calibrated as needed. (R 336.1910)
- 5. The permittee shall continuously monitor and record hourly the temperature at the outlet of the quench section using a thermocouple as an indicator of proper operation of the ESP. The indicator range is an hourly average quench section temperature less than 180 degrees Fahrenheit. (R 336.1910)
- 6. The permittee shall maintain a summary record of the wet ESP temperature monitoring system downtime. The permittee shall keep a summary record of all hourly quench section temperatures greater than 180 degrees Fahrenheit including keeping a summary record of corrective action taken. (R 336.1910)
- 7. The permittee shall continuously monitor and record hourly the secondary voltage as an indicator of proper operation of the ESP. (R 336.1910)
- 8. Precipitator grid voltages below 30 kilovolts caused by a malfunction shall be recorded. The permittee shall keep a summary record of all hourly precipitator grid voltages less than 30 kilovolts that are not caused by automated hourly flushing action including a summary record of corrective action taken and voltage monitoring system downtime. (R 336.1910)
- 9. The permittee shall keep a monthly record of the amount of finished product produced. By the tenth day of each calendar month, the permittee shall calculate the amount of finished product produced for the previous 12-calendar month period. (R 336.1205(3))
- 10. The permittee shall keep a monthly record of the amount of coniferous and non-coniferous wood used to manufacture the finished product. By the tenth day of each calendar month, the permittee shall calculate the percentage by volume of coniferous wood used to manufacture the finished product for the previous 12-calendar month period. (R 336.1205(3))
- 11. The permittee shall keep a record of the date and time that each RTO bake out is initiated and the length of each bake out. (R 336.1910)
- 12. The permittee shall keep records of preventative maintenance, repairs, and corrective actions taken for EUDRYERRC and the WESP and RTO, as specified by the MAP. (R 336.1301, R 336.1331, R 336.1910)

#### VII. REPORTING

- 1. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. (R 336.2001(3))
- 2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. (R 336.2001(4))
- 3. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. (R 336.2001(5))

# 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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRTOSTACK	64	100	R 336.1205(3),
			R 336.1225

# IX. OTHER REQUIREMENT(S)

NA

### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

# **EUPRESS EMISSION UNIT CONDITIONS**

# **DESCRIPTION**

Press System including the Board Press and fugitive emissions from the mat forming line. The press has 17 flights with vented platens on all flights. The emissions for EUPRESS are routed to a regenerative catalytic oxidizer (RCO).

Flexible Group ID: NA

# **POLLUTION CONTROL EQUIPMENT**

Regenerative Catalytic Oxidizer (RCO)

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	6.69 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
2. PM10	28.09 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3)
3. PM2.5	6.69 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
4. PM2.5	28.09 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3)
5. PM	6.69 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
6. PM	28.09 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3)
7. NOx	2.67 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
8. CO	1.92 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
9. CO	8.10 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3)
10. VOC	4.92 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3) R 336.1702
11. VOC	20.71 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3) R 336.1702
12. Formaldehyde	1.23 pph <sup>1</sup>	Hourly	EUPRESS	SC V.1	R 336.1225
13. Formaldehyde	10,400 lbs/yr	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1225(3), R 336.1205(3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
14. Methylene Diphenyl Isocyanate (MDI)	0.33pph <sup>1</sup>	Hourly	EUPRESS	SC V.1	R 336.1225
15. Phenol	3.78 pph <sup>1</sup>	Hourly	EUPRESS	SC V.1	R 336.1225

# II. MATERIAL LIMIT(S)

	Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	Finished Product		12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.3	R 336.1205(3)
2.	Coniferous Wood	30% by volume	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.4	R 336.1205(3)

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUPRESS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the RCO, has been submitted within 90 days of permit issuance, 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.

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(3), R 336.1702(a), R 336.1910, R 336.1911)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

 The permittee shall not operate EUPRESS unless the RCO is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. Satisfactory operation of the RCO includes maintaining a minimum operating temperature of 750°F, or a minimum temperature that has been demonstrated to be acceptable in the most recent AQD-approved emissions compliance test. (R 336.1224, R 336.1225, R 336.1702, R 336.1910)  The permittee shall install, calibrate, maintain and operate in a satisfactory manner, acceptable to the AQD District Supervisor, a temperature monitoring device in the combustion chamber of the RCO to continuously monitor and record the temperature during operation of EUPRESS. (R 336.1224, R 336.1225, R 336.1702, 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 permit issuance the permittee shall verify PM, PM10, PM2.5, CO, NOx, VOC, Formaldehyde, MDI, Phenol, and methanol emission rates from EUPRESS by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed at a minimum frequency of once every five years. Testing shall be performed using an approved EPA Method listed in the table below. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol.

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
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B;
	40 CFR Part 63, Appendix A

No less than 30 days prior to testing, the permittee shall submit a complete test protocol to the AQD Technical Programs Unit and District Office. The AQD must approve the final protocol 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(3), R 336.1702, R 336.1225, 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 complete all required calculations in a format acceptable to the AQD District Supervisor by the tenth 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 336.1702(a))
- 2. The permittee shall keep monthly and 12-month rolling time period records of the amount of PM10, PM2.5, PM, CO, VOCs, and Formaldehyde emitted from EUPRESS, calculated using the emission rates determined during the most recent compliance testing, per an acceptable method as approved by the District Supervisor. (R 336.1205, R 336.1225, R 336.1702(a))
- 3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling record of the amount of finished product produced in EUPRESS. (R 336.1205, R 336.1225, R 336.1702(a))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling records of the amount of coniferous and non-coniferous wood used to manufacture the finished product. (R 336.1205, R 336.1225, R 336.1702(a))
- 5. The permittee shall monitor and record, in a satisfactory manner acceptable to the AQD District Supervisor, the temperature in the combustion chamber of the RCO, on a continuous basis, during operation of EUPRESS. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. (R 336.1224, R 336.1225, R 336.1702, R 336.1910)

 The permittee shall keep records of preventative maintenance, repairs, and corrective actions taken for EUPRESS and the RCO, as specified by the MAP. (R 336.1205(3), R 336.1702(a), R 336.1910, R 336.1911)

### VII. REPORTING

1. 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))

# 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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPRESSRCOSTACK	80	100	R 336.1225, 40 CFR 52.21(c) & (d)

#### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> 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

NA

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	9.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)
Aggregate     HAPs	24.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)

### II. MATERIAL LIMIT(S)

NA

# 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))

1. The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. (R 336.1205(3))

#### 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 10<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
- 2. The permittee shall keep records of the most recent compliance stack testing completed for any emission unit in FGFACILITY. (R 336.1205(3))

- 3. The permittee shall keep the following information on a monthly basis for FGFACILITY:
  - a) Gallons or pounds of each HAP containing material used.
  - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
  - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month, using emissions factors (lb/tfp) from the most recent AQD approved compliance stack testing report for any emission unit.
  - e) Individual and aggregate HAP emission calculations determining the cumulative emission rate of each, in tons per 12-month rolling time period as determined at the end of each calendar month, using emissions factors (lb/tfp) from the most recent AQD approved compliance stack testing report for any emission unit.
  - f) Monthly and 12-month rolling record of the amount of finished product produced in FGFACILITY.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. Emission calculations shall use the results from the most recent emissions testing, or other methods acceptable to the AQD District Supervisor, such as mass balance or approved emission factors. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

#### VII. REPORTING

NA

# VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

1. The permittee shall implement a Fugitive Dust Control Program approved by the Air Quality Division District Supervisor to limit fugitive dust emissions from the roadways, the material storage piles, stockpile areas, and other operations throughout the plant, including the keeping of records of fugitive dust control activities and dates carried out. (R 336.1201(3))

#### Footnotes:

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