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

February 10, 2022

PERMIT TO INSTALL
43-19A

ISSUED TO
Louisiana Pacific Corporation - Newberry

LOCATED AT
7299 North 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 REQUIRED BY RULE 203: **November 17, 2021**	
DATE PERMIT TO INSTALL APPROVED: **February 10, 2022**	SIGNATURE:
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
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

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

GENERAL CONDITIONS

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

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

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

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

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

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

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

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. The dryer capacity is 16.5 tons per hour of dried flakes. A portion of the press (EUPRESS) emissions are routed to the Dryer 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 that route a portion of the Press System exhaust to the Dryer System for control. The vented platen press emissions are controlled by the Dryer System WESP and RTO and are accounted for in the emission limits under EUDRYERRC. The limits for EUPRESS are applicable to the portion of the exhaust that 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. The dryer capacity is 16.5 tons per hour of dried flakes. A portion of the press (EUPRESS) emissions are routed to the Dryer System.

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	0.020 gr / dscf	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
2. PM-10	7.9 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
3. PM	0.020 gr / dscf	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
4. PM	7.9 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
5. SO_2	0.4 pph	Hourly	EUDRYERRC	SC V.1	R 336.1205(3)
6. NOx	14.8 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	78.34 tpy	12-month rolling time period as determined at the end of each calendar month *	EUDRYERRC	SC VI.1	R 336.1205(3)
9. VOC	5.12 pph**	Hourly	EUDRYERRC	SC V.1	R 336.1205(3) R 336.1702(c)
10. VOC	14.07 tpy	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	1.17 pph[1]	Hourly	EUDRYERRC	SC V.1	R 336.1225
12. Acrolein	0.195 pph[1]	Hourly	EUDRYERRC	SC V.1	R 336.1225
13. Formaldehyde	1.11 pph[1]	Hourly	EUDRYERRC	SC V.1	R 336.1225
14. Manganese	0.03 pph[1]	Hourly	EUDRYERRC	SC V.1	R 336.1225

*If the tested emission factor for EUDRYERRC is lower than the 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.

**The VOC limit is based on a maximum drying rate of 16.50 oven dry tons/hour.

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.13	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 the "Malfunction Abatement Plan and Control Equipment Monitoring Plan" (MAP) that has been approved by the AQD District Supervisor is implemented and maintained. The plan shall include procedures for maintaining and operating in a satisfactory manner the process and add-on air pollution control device, monitoring equipment during malfunction events, and a program for corrective action for such events. If the Malfunction Abatement Plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the Malfunction Abatement Plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor for approval. **(R 336.1301, R 336.1331, 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. 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 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 336.2003, R 336.2004, R 336.2803, R 336.2804)**

2. The permittee shall conduct daily visible emissions observations from EUDRYERRC using EPA Method 22 or an alternate test method approved by the AQD. The AQD District Supervisor must approve an alternate test method prior to testing. **(R 336.2001, R 336.2003, R 336.2004)**

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 monitor the RTO combustion chamber temperature at the middle of the combustion chamber using a thermocouple and shall record the combustion chamber temperature on a continuous basis. The thermocouple shall be calibrated as needed. **(R 336.1201(3))**

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 336.1201(3))**

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 336.1201(3))**

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 336.1201(3))**

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 336.1201(3), R 336.1910)**

7. The permittee shall monitor and record on an hourly basis the secondary voltage for each of the two parallel sections of the wet ESP. **(R 336.1201(3))**

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 336.1201(3), 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 336.1201(3))**

12. The permittee shall, at all times, maintain the RTO and Wet ESP monitoring system, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. **(R 336.1201(3))**

13. The permittee shall conduct temperature and voltage readings at all required intervals that the equipment is operating except for defined malfunctions, repairs and QA/QC activities. **(R 336.1201(3))**

14. The permittee shall record a daily visual opacity observation as an indicator of proper operation of the dust collector. The indicator of proper operation is the absence of visible emissions. **(R 336.1201(3))**

15. 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 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:
[1] 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 that route a portion of the Press System exhaust to the Dryer System for control. The vented platen press emissions are controlled by the Dryer System WESP and RTO and are accounted for in the emission limits under EUDRYERRC. The limits for EUPRESS are applicable to the portion of the exhaust that is 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	11.16 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
2. PM10	40.9 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	11.16 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
4. PM2.5	40.9 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	11.16 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
6. PM	40.9 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	2.77 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
8. CO	3.39 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3)
9. CO	13.3 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	8.26 pph	Hourly	EUPRESS	SC V.1	R 336.1205(3) R 336.1702
11. VOC	30.3 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	4.1 pph[1]	Hourly	EUPRESS	SC V.1	R 336.1225

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
13. Formaldehyde	19,800 lbs/yr[1]	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1225(2)
14. Formaldehyde	4,417 lbs/yr	12-month rolling time period as determined at the end of each calendar month	EUPRESS	SC VI.2	R 336.1205(3)
15. Methylene Diphenyl Isocyanate (MDI)	0.53 pph[1]	Hourly	EUPRESS	SC V.1	R 336.1225
16. Phenol	2.0 pph[1]	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	109,686 tons of finished products per year	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)

1. 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)**

2. 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 the RCO for EUPRESS has been commissioned, the permittee shall verify PM, PM10, PM2.5, CO, NO_X, 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)**

2. Within 180 days after EUPRESS resumes regular operation after the installation of the RCO, the permittee shall verify VOC destruction efficiency of the RCO by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1702, R 336.1910, R 336.2001, R 336.2003, R 336.2004)**

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))**

4. 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)**

6. 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. Within 10 days after completion of the installation and commissioning of the RCO authorized by this Permit to Install, the permittee shall notify the AQD District Supervisor, in writing, of the completion of the activity. **(R 336.1201(7)(a))**

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)

1. The special conditions in this PTI do not go into effect until the permittee notifies the AQD that the RCO has been installed and commissioned. Upon that notification, the special conditions of this PTI go into effect immediately. **(R 336.1201)**

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

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)
2. 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 10th 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.
   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.

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