

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

January 25, 2023

**PERMIT TO INSTALL**  
107-18C

**ISSUED TO**  
Corteva Agriscience, LLC

**LOCATED AT**  
305 North Huron Avenue  
Harbor Beach, Michigan 48441

**IN THE COUNTY OF**  
Huron

**STATE REGISTRATION NUMBER**  
B4942

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: <b>October 28, 2022</b>	
DATE PERMIT TO INSTALL APPROVED: <b>January 25, 2023</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

## PERMIT TO INSTALL

### Table of Contents

COMMON ACRONYMS .....	2
POLLUTANT / MEASUREMENT ABBREVIATIONS.....	3
GENERAL CONDITIONS .....	4
EMISSION UNIT SPECIAL CONDITIONS.....	6
EMISSION UNIT SUMMARY TABLE .....	6
EUPROCESS .....	7
FGFACILITY CONDITIONS.....	13

## 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 <sub>2</sub> e	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 <sub>2</sub> S	Hydrogen Sulfide
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
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
EUPROCESS	Insect management product production process. The manufacturing process consists of fermentation, extraction, crystallization, evaporation, continuous belt filter, centrifuge, vacuum and steam dryer equipment. The emission group also includes a raw material storage tank for glucose, one organic oil tank, and two solvent tanks. Emissions from the production process are vented to the thermal treatment units. Emissions from the bioreactor are controlled by an enclosed flare. The most recent PTI for EUPROCESS is No. 107-18C.	01-18-1996/ 10-26-1998/ 11-18-2004/ 12-29-2005/ 08-04-2006/ 10-09-2008/ 2011/ 2017/ 2018 03-07-2019 3-31-2020 1-25-2023	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.

**EUPROCESS  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Insect management product production process. The manufacturing process consists of fermentation, extraction, crystallization, evaporation, continuous belt filter, centrifuge, vacuum and steam dryer equipment. The emission group also includes a raw material storage tank for glucose, one organic oil tank, and two solvent tanks. Emissions from the production process are vented to the thermal treatment units. Emissions from the bioreactor are controlled by an enclosed flare. The most recent PTI for EUPROCESS is No. 107-18C.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

1. Four (4) Catalytic Thermal Treatment Units (TTUs) that operate at 30,000 cubic feet per minute (cfm) each, identified as:
  - a) TTU-850.
  - b) TTU-855.
  - c) TTU-860.
  - d) TTU-865.
2. One regenerative thermal oxidizer (RTO), also a TTU, that operates at 30,000 to 38,000 standard cubic feet per minute (scfm), identified as TTU-870
3. Enclosed Flare

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. Organic HAP*	20 ppmv+	Hourly	EUPROCESS emissions exhausted through TTU-850	SC V.1, SC V.2, SC VI.13, SC VI.9, SC VI.11	40 CFR 63.1362(b)
2. Organic HAP*	20 ppmv+	Hourly	EUPROCESS emissions exhausted through TTU-855	SC V.1, SC V.2, SC VI.13, SC VI.9, SC VI.11	40 CFR 63.1362(b)
3. Organic HAP*	20 ppmv+	Hourly	EUPROCESS emissions exhausted through TTU-860	SC V.1, SC V.2, SC VI.13, SC VI.9, SC VI.11	40 CFR 63.1362(b)
4. Organic HAP*	20 ppmv+	Hourly	EUPROCESS emissions exhausted through TTU-865	SC V.1, SC V.2, SC VI.13, SC VI.9, SC VI.11	40 CFR 63.1362(b)
5. Organic HAP*	20 ppmv or 98% destruction	Hourly	EUPROCESS emissions exhausted through TTU-870	SC V.3, SC VI.13	40 CFR 63.1362(b)
6. VOC	13.99 lb/hr	Hourly	EUPROCESS emissions exhausted through each TTU: TTU-850, TTU-855, TTU-860, TTU-865, and TTU-870	SC V.1, SC V.3	R 336.1225 R 336.1702(a)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
7. VOC	53.60 tpy	12-month rolling time period as determined at the end of each calendar month	EUPROCESS	SC VI.7	R 336.1702(a)
8. Ammonia	31 lb/hr <sup>1</sup>	Hourly	EUPROCESS	SC V.1, SC V.3	R 336.1225
9. Ammonia	2.0 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUPROCESS	SC VI.8	R 336.1224
10. PM	0.006 lb/1000 lb of exhaust gas, calculated on a dry gas basis	Hourly	EUPROCESS emissions exhausted through each TTU: TTU-850, TTU-855, TTU-860, TTU-865, and TTU-870	SC V.1, SC V.3	R 336.1331
11. Formaldehyde	13.1 lb/hr <sup>1</sup>	Hourly	EUPROCESS	SC V.1, SC V.3, SC VI.13	R 336.1225(2)
* Organic HAP as defined in 40 CFR 63.1361 + Alternative Operating Parameter per Alternative Monitoring Request (AMR) (40 CFR 63.1362(b)(2)(iv)(A))					

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate the EUPROCESS bioreactor unless the enclosed flare is installed, maintained, and operated in a satisfactory manner. **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subpart MMM)**
2. The permittee shall not operate EUPROCESS unless a malfunction abatement plan (MAP) for the thermal treatment units that includes the Fourier Transform Infrared Spectroscopy (FTIR) continuous monitor and Catalyst Inspection and Maintenance Plan, as described in Rule 911(2), is implemented and maintained. 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 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) and (d), 40 CFR Part 63 Subpart MMM)**

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature of each TTU on a continuous basis. For the purpose of this condition, monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Unless otherwise noted in this permit, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. **(R 336.1225, R 336.1910)**
2. The permittee shall operate a continuously burning pilot flame at the enclosed flare at all times when the EUPROCESS bioreactor is operating. In the event that the pilot flame is extinguished, shutdown of all feed streams to the EUPROCESS bioreactor shall commence automatically within one second. The permittee shall not restart operation of the EUPROCESS bioreactor unless the pilot flame is re-ignited and maintained. Pilot fuel shall be only sweet natural gas. **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63 Subpart MMM)**
3. The permittee shall not operate the portions of EUPROCESS ducted to TTU-850, TTU-855, TTU-860, TTU-865, and TTU-870 unless the associated thermal treatment unit is installed, maintained and operated in a satisfactory manner, as described below. **(R 336.1225, R 336.1702(a), R 336.1331, R 336.1910, 40 CFR Part 63 Subpart MMM)**
  - a) Satisfactory operation of each catalytic thermal treatment unit (TTU-850, TTU-855, TTU-860, and TTU-865) includes all the following:
    - i. A maximum outlet organic HAP concentration of 20 ppmv
    - ii. Maintaining a minimum daily average temperature of 650 degrees F (or other temperature determined by the most recent compliance demonstration)
    - iii. Maintaining a minimum retention time of 0.5 seconds.
  - b) Satisfactory operation of TTU-870 includes all the following:
    - i. A maximum outlet organic HAP concentration of 20 ppmv or minimum organic HAP destruction of 98%
    - ii. Maintaining a minimum combustion chamber temperature as specified in the approved MAP.
4. The permittee shall not operate the portions of EUPROCESS ducted to TTU-850, TTU-855, TTU-860, TTU-865, and TTU-870 unless FTIR monitoring system is installed, maintained, and operated in a satisfactory manner as described in the MAP. **(40 CFR Part 63 Subpart MMM)**

## **V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify the VOC, PM, HAPs, and/or ammonia concentrations and/or emission rates from any or all of the four catalytic TTUs (850, 855, 860, and 865), by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
VOC	40 CFR Part 60, Appendix A
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
HAPs	40 CFR Part 63, Appendix A
Ammonia	40 CFR Part 63, Appendix A, ASTM D6348, Conditional Test Method 027

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 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, 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 336.2001, R 336.2003, R 336.2004)**

2. Pursuant to the approved AMR, the permittee shall conduct continuous sampling according to the methodology and frequency described in the AMR. **(40 CFR Part 63 Subpart MMM)**
3. Upon request of the AQD District Supervisor, the permittee shall verify organic HAP, VOC, ammonia, and/or PM emission rates and/or organic HAP destruction efficiency from TTU-870 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
HAPs	40 CFR Part 63, Appendix A
VOCs	40 CFR Part 60, Appendix A
Ammonia	40 CFR Part 63, Appendix A, ASTM D6348, Conditional Test Method 027
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules

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 336.1205, R 336.1225, R 336.1702, R 336.1902, 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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall keep, in a satisfactory manner, monthly production records for EUPROCESS. **(R 336.1224, R 336.1702(a))**
3. The permittee shall monitor and record, in a satisfactory manner, the daily average temperature in each catalytic TTU (850, 855, 860, and 865) each day that the TTU operates. **(R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall monitor and record, in a satisfactory manner, the inlet and outlet catalyst temperature for each catalytic TTU (850, 855, 860, and 865). **(R 336.1910, 40 CFR 63.1366(b)(1)(viii))**
5. The permittee shall monitor and record, in a satisfactory manner, the combustion chamber temperature for TTU 870. The frequency of monitoring and recording of temperatures shall be as described in the approved MAP. **(R 336.1910, 40 CFR 63.1366(b)(1)(vii))**
6. The permittee shall keep, in a satisfactory manner, records of catalyst regeneration hours and temperature. **(R 336.1910, 40 CFR Part 63 Subpart MMM)**
7. The permittee shall calculate the VOC emission rate from EUPROCESS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. **(R 336.1702(a))**
8. The permittee shall calculate the ammonia emission rate from EUPROCESS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor.<sup>1</sup> **(R 336.1224)**

9. The permittee shall monitor and record, in a satisfactory manner, total hydrocarbon concentration on each catalytic TTU outlet stack (SV00003, SV00004, SV00005, and SV00006) pursuant to the approved AMR. **(40 CFR Part 63 Subpart MMM)**
10. The permittee shall maintain a current list of the materials emitted from EUPROCESS that are determined to be exempt from the health-based screening level requirement of Rule 225 pursuant to Rule 226(a). The list shall include the compound name and CAS number and a calculation demonstrating the emission rate of each material. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>1</sup> **(R 336.1225)**
11. The permittee shall comply with the alternative monitoring agreement for the catalytic TTUs (850, 855, 860, and 865) as outlined in EPA’s letter dated September 20, 2022 (or any subsequent revisions). **(40 CFR Part 63, Subpart MMM)**
12. The permittee shall monitor and record the following for each catalytic thermal treatment unit (TTU-850, TTU-855, TTU-860, and TTU-865):
  - a) The amount of combustion air fed to the unit, by volume, on a continuous basis.
  - b) The amount of natural gas fed to the unit, by volume, on a continuous basis.
  - c) The hourly average ratio of combustion air to natural gas.

For the purpose of this condition, monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Unless otherwise noted in this permit, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. **(R 336.1910)**

13. The permittee shall continuously monitor and record, in a satisfactory manner acceptable to the AQD District Supervisor, the organic HAP emissions from TTU-850, TTU-855, TTU-860, TTU-865, and TTU-870. The permittee shall operate the continuous Fourier Transform Infrared Spectroscopy monitoring system pursuant to the approved AMR. **(40 CFR Part 63 Subpart MMM)**

**VII. REPORTING**

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV00003 (TTU-850)	48	90	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV00004 (TTU-855)	48	90	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV00005 (TTU-860)	48	90	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV00006 (TTU-865)	48	90	R 336.1225, 40 CFR 52.21(c) & (d)

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
5. SV00017 (TTU-870)	36 x 78	35	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVFLARE (Bioreactor)	32	30	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

<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)

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. Formaldehyde	35.07 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1225(2)

#### 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))

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>1</sup> (R 336.1225(2))
2. The permittee shall calculate formaldehyde emission rates from FGFACILITY for each calendar month and rolling 12-month time period using a method acceptable to the AQD District Supervisor.<sup>1</sup> (R 336.1225(2))

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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