

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

APRIL 19, 2021  
REVISED JUNE 24, 2021

**PERMIT TO INSTALL  
20-17C**

**ISSUED TO  
ZFS ITHACA, LLC**

**LOCATED AT  
1266 EAST WASHINGTON ROAD  
ITHACA, MICHIGAN 48847**

**IN THE COUNTY OF  
GRATIOT**

**STATE REGISTRATION NUMBER  
P0788**

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>March 15, 2021</b>	
DATE PERMIT TO INSTALL APPROVED: <b>April 19, 2021</b>	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 <sub>2e</sub>	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
EUSHIPRECEIVE	Grain shipping and receiving operations. Grain may be transported by truck or rail. Loadout and receiving are enclosed in the same building, and emissions are controlled by a baghouse.	July 22, 2019	FGHANDLING
EUHANDLING	Completely enclosed grain handling operations consist of enclosed conveyors, bucket elevators, and an enclosed distributor. Fugitive particulate emissions are minimized by an oil spray on the grain.	July 22, 2019	FGHANDLING
EUDRYING1	Rack dryer with two burners, each 33 MMBtu/hr maximum heat input (Total heat input: 66 MMBtu/hr).	October 10, 2019	NA
EUBINS	Grain storage bins and silos.	July 22, 2019	FGHANDLING
EUROADS	On-site vehicle traffic.	November 19, 2019	NA
EUBOILER1	Natural gas fired boiler with maximum heat input of 95 MMBtu/hr.	November 19, 2019	FGBOILERS, FGBOILERMACT
EUBOILER2	Natural gas fired boiler with maximum heat input of 95 MMBtu/hr.	November 19, 2019	FGBOILERS, FGBOILERMACT
EUPREP	Processes to prepare soybeans for extraction vented to stack SVPREP, including the following: <ul style="list-style-type: none"> <li>- Whole bean cleaning and aspiration controlled by the whole bean cyclone and the main exhaust filter.</li> <li>- Hull cleaning and aspiration controlled by the secondary cyclone and the main exhaust filter.</li> <li>- 2 Vertical seed conditioners (VSCA &amp; VSCB) each controlled by a cyclone.</li> <li>- 2 Jet Dryers (A and B) each controlled by a filter.</li> <li>- 2 Hulloosenators (no exhaust to stack).</li> <li>- 2 Crown Cascade Dryers (CCDA &amp; CCDB) controlled by CCD cyclone and the main exhaust filter.</li> <li>- 2 Crackers (no exhaust to stack).</li> <li>- 2 Crown Cascade Coolers (CCCA &amp; CCCB) controlled by CCC cyclone and the main exhaust filter.</li> <li>7 Flakers controlled by 1 cyclone.</li> </ul>	February 10, 2020	NA
EUHULLGRINDING	Hull grinding operations consisting of 2 hammermills controlled by a baghouse.	February 10, 2020	NA

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUPELLETIZING	Hull pelletizing system including pellet cooler. The pellet cooler exhausts to a cyclone.	February 19, 2020	NA
EUMEALGRINDING	Meal grinding operations consisting of 3 hammermills controlled by a baghouse.	February 10, 2020	NA
EUEXTRACTION	Soybean oil extraction process: extractor, 2 evaporators, mineral oil adsorption system (MOS), solvent work tank, desolventizer toaster.	February 10, 2020	FGEXTRACTION
EUDC	Dryer-Cooler: 3 meal dryers and 1 meal cooler each controlled by a cyclone.	February 10, 2020	FGEXTRACTION
EUTANK1	27,000-gallon hexane storage tank, vented to extraction system.	December 20, 2019	FGEXTRACTION
EUTANK2	27,000-gallon hexane storage tank, vented to extraction system.	December 20, 2019	FGEXTRACTION
EUTANK3	27,000-gallon hexane storage tank, vented to extraction system.	December 20, 2019	FGEXTRACTION
EUMEALSTORAGE	Indoor flat storage of crude soybean meal.	February 10, 2020	FGEXTRACTION
EUHULLSTORAGE	4 steel bins for hull storage, each controlled by a baghouse.	February 10, 2020	FGLOADSTORE
EUHULLLOADOUT	2 overhead bins and loadout operations for soybean hulls, into trucks and rail. Bins are each controlled by a baghouse.	February 17, 2020	FGLOADSTORE
EULOADOUT	6 overhead bins and loadout operations for soybean meal, into trucks and rail. Bins are controlled by a baghouse.	February 17, 2020	FGLOADSTORE
EUINGREDIENTS	Receiving ingredients by truck and rail, controlled by a baghouse, and indoor flat storage of ingredients.	June 15, 2020	FGLOADSTORE
EUCOOLINGTWR	3-cell mechanical draft cooling tower with 10,000-gallon basin, equipped with mist/drift eliminators.	January 2020	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.



**EUDRYING1  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION:** Rack dryer with two burners, each 33 MMBtu/hr maximum heat input (Total heat input: 66 MMBtu/hr).

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lbs per 1000 lbs of exhaust gases <sup>a</sup>	Hourly	EUDRYING1	SC V.1	R 336.1331(1)(a)
2. Visible emissions	0 percent opacity <sup>b</sup>	6-minute average	Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh.	SC V.2	40 CFR 60.302(a)(2), 40 CFR 60.303(b)(3)
3. PM10	12.5 pph	Hourly	EUDRYING1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) and (d)
4. PM2.5	9.38 pph	Hourly	EUDRYING1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) and (d)
5. NOx	6.60 pph	Hourly	EUDRYING1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) and (d)
6. CO	11.75 pph	Hourly	EUDRYING1	SC V.1	R 336.1205(1)(a), 40 CFR 52.21(c) and (d)

<sup>a</sup> Calculated on a wet gas basis

<sup>b</sup> This limit applies on and after the 60th day of achieving the maximum production rate, but no later than 180 days after initial startup.

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Grain dried	16,000,000 bushels / yr	12-month rolling time period as determined at the end of each calendar month	EUDRYING1	SC VI.2	R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d)

2. The permittee shall burn only pipeline quality natural gas in EUDRYING1. **(R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The maximum design heat input capacity for the burners of EUDRYING1 shall not exceed 66.0 MMBtu per hour (total for both burners). **(R 336.1205(1)(a) and (3), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the amount of grain processed through EUDRYING1 on a monthly basis. **(R 336.1205(1)(a) and (3), R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))**

#### **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 PM, PM10, PM2.5, NOx, and/or CO emission rates from a single representative exhaust stack of EUDRYING1 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall evaluate visible emissions from EUDRYING1, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and DD. Visible emission observation procedures must have prior approval by the AQD Technical Programs Unit and District Office. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD Technical Programs Unit and District Office within 60 days following the last date of the evaluation. **(R 336.1301, 40 CFR 60.303)**

#### **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 and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1301, 40 CFR 52.21(c) and (d))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the bushels of grain dried in EUDRYING1. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d))**

#### **VII. REPORTING**

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVDRYING1-1	24.5 x 66.2	121.4	R 336.1225, 40 CFR 52.21(c) and (d)
2. SVDRYING1-2	24.5 x 66.2	121.4	R 336.1225, 40 CFR 52.21(c) and (d)
3. SVDRYING1-3	24.5 x 66.2	121.4	R 336.1225, 40 CFR 52.21(c) and (d)
4. SVDRYING1-4	24.5 x 66.2	121.4	R 336.1225, 40 CFR 52.21(c) and (d)
5. SVDRYING1-5	24.5 x 66.2	121.4	R 336.1225, 40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and DD (Standards of Performance for Grain Elevators), as they apply to EUDRYING1. **(40 CFR Part 60 Subparts A & DD)**

<b>EUROADS EMISSION UNIT CONDITIONS</b>
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**DESCRIPTION:** On-site vehicle traffic

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible emissions	5% opacity	6-minute average	EUROADS	SC VI.1	R 336.1301(1)(c), 40 CFR 52.21(c) and (d)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUROADS unless a nuisance minimization plan for fugitive dust, for all plant roadways, the plant yard, and all material handling operations, has been submitted and is implemented and maintained. The plan shall, at a minimum, specify the following:
  - a) Identification of the supervisory personnel responsible for overseeing the implementation of the plan.
  - b) A description of fugitive dust minimization procedures and equipment.
  - c) A description of the methods and frequency of monitoring or surveillance procedures to determine when dust suppression measures are needed.

If at any time the nuisance minimization plan fails adequately address fugitive dust emissions from EUROADS, the permittee shall amend the plan within 45 days after such an event occurs. The permittee shall also amend the plan within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the plan and any amendments to the plan to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the plan or amended plan 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 336.1301(1)(c), 40 CFR 52.21(c) and (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. All haul roads routinely travelled by trucks shipping and receiving grain at the facility shall be paved. **(R 336.1301, 40 CFR 52.21(c) and (d))**

**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 conduct and record weekly non-certified visual emission observations of on-site vehicle traffic when traffic is present. **(R 336.1301(1)(c), R 336.1303, 40 CFR 52.21 (c) and (d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

NA

**EUPREP  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION:** Processes to prepare soybeans for extraction vented to stack SVPREP, including the following:

- Whole bean cleaning and aspiration controlled by the whole bean cyclone and the main exhaust filter.
- Hull cleaning and aspiration controlled by the secondary cyclone and the main exhaust filter.
- 2 Vertical seed conditioners (VSCA & VSCB) each controlled by a cyclone.
- 2 Jet Dryers (A and B) each controlled by a filter.
- 2 Hulloosenators (no exhaust to stack).
- 2 Crown Cascade Dryers (CCDA & CCDB) controlled by CCD cyclone and the main exhaust filter.
- 2 Crackers (no exhaust to stack).
- 2 Crown Cascade Coolers (CCCA & CCCB) controlled by CCC cyclone and the main exhaust filter.
- 7 Flakers controlled by 1 cyclone.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** cyclones and filters

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.0153 gr/dscf	Hourly	EUPREP (SVPREP)	SC V.1	R 336.1205(1), R 336.1331(1)(c)
2. PM	16.17 lb/hr	Hourly	EUPREP (SVPREP)	SC V.1	R 336.1205(1)
3. PM10	9.44 lb/hr	Hourly	EUPREP (SVPREP)	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
4. PM2.5	8.09 lb/hr	Hourly	EUPREP (SVPREP)	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
5. Visible Emissions	10% opacity	6-minute average	Exhaust from each process listed in SC IV.1	SC VI.3	R 336.1301(1)(c)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUPREP unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cyclones and filters corresponding to various processes in EUPREP (listed in SC IV.1), has been submitted 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, R 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

- 1. The permittee shall not operate portions of EUPREP listed in the table below unless the corresponding control device is installed, maintained, and operated in a satisfactory manner. For the fabric filters, satisfactory operation includes maintaining the baghouse pressure drop within the range specified in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

	<b>Process</b>	<b>Corresponding Control Device</b>
a)	Whole bean cleaning and aspiration	Cyclone and main exhaust fabric filter
b)	Vertical seed conditioners (VSCA & VSCB)	Cyclones
c)	Jet Dryers (A and B)	Fabric filters
d)	Crown Cascade Dryers (CCDA & CCDB)	Cyclone and main exhaust fabric filter
e)	Crown Cascade Coolers (CCCA & CCCB)	Cyclone and main exhaust fabric filter
f)	Hull screener and secondary aspirator	Cyclone and main exhaust fabric filter
g)	The vacuum exhaust fan for the flakers	Cyclone

- 2. The permittee shall equip and maintain each fabric filter in EUPREP with a pressure differential gauge. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

**V. TESTING/SAMPLING**

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

- 1. Within 180 days after commencement of initial startup, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUPREP (SVPREP) 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>
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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

**VI. MONITORING/RECORDKEEPING**

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

- 1. The permittee shall monitor and record the following: **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
  - a) Keep, in a satisfactory manner, a record of the days when equipment in EUPREP is operating,
  - b) Monitor the pressure differential for each fabric filter in EUPREP continuously, and

- c) Record the pressure differential for each fabric filter in EUPREP on a daily basis when the equipment is operating.
- 2. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the cyclones and filters corresponding to various processes in EUPREP, as specified in the MAP at the frequency specified in the MAP. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
- 3. The permittee shall conduct and record weekly non-certified visual emission observations of exhaust from the processes listed in SC IV.1. **(R 336.1301(1)(c))**

**VII. REPORTING**

- 1. The permittee shall submit notifications containing the required information listed in §63.9 to the AQD District Supervisor within the time frames specified in 40 CFR 63.9. **(40 CFR 63.2860(b))**
- 2. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPREP. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVPREP	99	215	40 CFR 52.21 (c) and (d)

**IX. OTHER REQUIREMENTS**

NA



**EUHULLGRINDING  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION:** Hull grinding operations consisting of 2 hammermills

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** One baghouse controls both hammermills.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.005 gr/dscf	Hourly	EUHULLGRINDING	SC V.1	R 336.1205(1), R 336.1331(1)(c)
2. PM	0.27 lb/hr	Hourly	EUHULLGRINDING	SC V.1	R 336.1205(1)
3. PM10	0.27 lb/hr	Hourly	EUHULLGRINDING	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
4. PM2.5	0.27 lb/hr	Hourly	EUHULLGRINDING	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
5. Visible Emissions	5% opacity	6-minute average	EUHULLGRINDING	SC VI.3	R 336.1301(1)(c)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUHULLGRINDING unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted 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 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUHULLGRINDING unless the baghouse controlling both hammermills is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the baghouse pressure drop within the range specified in the MAP. **(R 336.1205, R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip and maintain the baghouse for EUHULLGRINDING with a pressure differential gauge. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

#### **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 PM, PM10, and PM2.5 emission rates from EUHULLGRINDING by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the following: **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
  - a) keep, in a satisfactory manner, a record of the days when equipment in EUHULLGRINDING is operating,
  - b) monitor the pressure differential for the EUHULLGRINDING fabric filter continuously, and
  - c) record the pressure differential for the EUHULLGRINDING fabric filter on a daily basis when the equipment is operating.
2. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the EUHULLGRINDING baghouse, as specified in the MAP. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall conduct and record weekly non-certified visual emission observations of exhaust from EUHULLGRINDING. **(R 336.1301(1)(c))**

#### **VII. REPORTING**

1. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUHULLGRINDING. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVHULLGRINDING	18	119	40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENTS**

NA

**EUPelletizing  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION:** Hull pelletizing system including pellet cooler.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** The pellet cooler exhaust to a cyclone.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.026 gr/dscf	Hourly	EUPelletizing	SC V.1	R 336.1205(1), R 336.1331(1)(c)
2. PM	1.60 lb/hr	Hourly	EUPelletizing	SC V.1	R 336.1205(1)
3. PM10	0.80 lb/hr	Hourly	EUPelletizing	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
4. PM2.5	0.80 lb/hr	Hourly	EUPelletizing	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
5. Visible Emissions	15% opacity	6-minute average	EUPelletizing	SC VI.2	R 336.1301(1)(c)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUPelletizing unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the cyclone, has been submitted 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 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate the pellet cooler of EUPELLETIZING unless the cyclone is installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after commencement of initial startup, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUPELLETIZING by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the EUPELLETIZING cyclone, as specified by the MAP. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall conduct and record weekly non-certified visual emission observations of exhaust from EUPELLETIZING. **(R 336.1301(1)(c))**

#### **VII. REPORTING**

1. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPELLETIZING. **(R 336.1201(7)(a))**

#### **VIII. STACK/VENT RESTRICTIONS**

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPELLETIZING	21	119	40 CFR 52.21(c) and (d)

#### **IX. OTHER REQUIREMENTS**

NA

**EUMEALGRINDING  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION:** Meal grinding operations consisting of 3 hammermills

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** One baghouse controls 3 hammermills.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.005 gr/dscf	Hourly	EUMEALGRINDING	SC V.1	R 336.1205(1), R 336.1331(1)(c)
2. PM	0.80 lb/hr	Hourly	EUMEALGRINDING	SC V.1	R 336.1205(1)
3. PM10	0.80 lb/hr	Hourly	EUMEALGRINDING	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
4. PM2.5	0.80 lb/hr	Hourly	EUMEALGRINDING	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
5. Visible Emissions	5% opacity	6-minute average	EUMEALGRINDING	SC VI.3	R 336.1301(1)(c)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUMEALGRINDING unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the baghouse, has been submitted 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 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUMEALGRINDING unless the baghouse controlling the three hammermills is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the baghouse pressure drop within the range specified in the MAP. **(R 336.1205, R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip and maintain the baghouse for EUMEALGRINDING with a pressure differential gauge. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after commencement of initial startup, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUMEALGRINDING by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the following: **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
  - a) Keep, in a satisfactory manner, a record of the days when equipment in EUMEALGRINDING is operating.
  - b) Monitor the pressure differential for the EUMEALGRINDING fabric filter continuously.
  - c) Record the pressure differential for the EUMEALGRINDING fabric filter on a daily basis when the equipment is operating.
2. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the EUMEALGRINDING baghouse, as specified in the MAP. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall conduct and record weekly non-certified visual emission observations of exhaust from EUMEALGRINDING. **(R 336.1301(1)(c))**

#### **VII. REPORTING**

1. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUMEALGRINDING. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVMEALGRINDING	34	130	40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENTS**

NA



<b>EUCOOLINGTWR EMISSION UNIT CONDITIONS</b>
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**DESCRIPTION:** 3-cell mechanical draft cooling tower with 10,000-gallon basin.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT:** mist/drift eliminators

**I. EMISSION LIMITS**

NA

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall equip and maintain EUCOOLINGTWR with mist/drift eliminators with a vendor-certified maximum drift rate of 0.005 percent or less. **(R 336.1205, R 336.1910, 40 CFR 52.21(c) and (d))**

**V. TESTING/SAMPLING**

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

1. If a valid vendor certification is not available, the permittee may be required, upon request by the Department, to verify drift loss from EUCOOLINGTWR by testing, at owner's expense, in accordance with Department requirements. The permittee shall use the most recent version of the Cooling Technology Institute's Acceptable Test Code (ATC) 140, unless the AQD approves use of an alternate method. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Determination of drift loss includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(40 CFR 52.21(c) and (d))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a record of the vendor's certification required in SC IV.1, for the life of EUCOOLINGTWR. **(R 336.1205, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall maintain a record of any maintenance conducted for EUCOOLINGTWR. **(40 CFR 52.21(c) and (d))**

**VII. REPORTING**

NA

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVCOOLTWR1	166	32	40 CFR 52.21(c) and (d)
2. SVCOOLTWR2	166	32	40 CFR 52.21(c) and (d)
3. SVCOOLTWR3	166	32	40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENTS**

NA

**FLEXIBLE GROUP SPECIAL CONDITIONS**

**FLEXIBLE GROUP SUMMARY TABLE**

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

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FGHANDLING	Grain shipping and receiving operations, grain handling, and grain storage. Loading and unloading operations and grain handling are subject to NSPS DD for Grain Elevators. Emissions from loadout and receiving are controlled by a baghouse. Fugitive particulate emissions are minimized by an oil spray on the grain.	EUSHIPRECEIVE, EUHANDLING, EUBINS
FGLOADSTORE	Soybean hull and meal storage and loadout, and ingredient receiving and storage. Each emission unit is controlled by a baghouse.	EUHULLSTORAGE, EUHULLLOADOUT, EULOADOUT, EUIINGREDIENTS
FGEXTRACTION	Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 3 hexane storage tanks controlled by mineral oil adsorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone, and storage of crude soybean meal.	EUEXTRACTION, EUDC, EUTANK1, EUTANK2, EUTANK3, EUMEALSTORAGE
FGBOILERS	Two (2) natural gas fired boilers, each with maximum heat input of 95 MMBtu/hr.	EUBOILER1, EUBOILER2
FGBOILERMACT	Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply with this subpart upon startup.	EUBOILER1, EUBOILER2

**FGHANDLING  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION:** Grain shipping and receiving operations, grain handling, and grain storage. Loading and unloading operations and grain handling are subject to NSPS DD for Grain Elevators.

**Emission Units:** EUSHIPRECEIVE, EUHANDLING, EUBINS

**POLLUTION CONTROL EQUIPMENT:** Emissions from loadout and receiving are controlled by a baghouse. Fugitive particulate emissions are minimized by an oil spray on the grain.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lbs per 1000 lbs of gas <sup>a</sup>	Hourly	Process emissions from SVSHIPRECEIVE	SC V.1	R 336.1331(1)(a)
2. PM	0.01 gr/dscf	At least 60 minutes and 60 dscf	Process emissions from SVSHIPRECEIVE	SC V.1	40 CFR 60.302(b)(1)
3. Visible emissions	0% opacity	6-minute average	Process emissions from SVSHIPRECEIVE	SC V.2	40 CFR 60.302(b)(2)
4. Visible emissions	5% opacity	6-minute average	Fugitive emissions from truck and railcar unloading	SC V.2	R 336.1301(1)(c), 40 CFR 52.21(c) and (d), 40 CFR 60.302(c)(1)
5. Visible emissions	5% opacity	6-minute average	Fugitive emissions from railcar loading	SC V.2	40 CFR 60.302(c)(1)
6. Visible emissions	0% opacity	6-minute average	Fugitive emissions from grain handling	SC V.2	40 CFR 60.302(c)(2)
7. Visible emissions	10% opacity	6-minute average	Fugitive emissions from truck loading	SC V.2	40 CFR 60.302(c)(3)

<sup>a</sup> Calculated on a wet gas basis

**II. MATERIAL LIMITS**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Grain Received	48,000,000 Bu/yr	12-month rolling time period as determined at the end of each calendar month	EUSHIPRECEIVE	SC VI.3	R 336.1205, 40 CFR 52.21(c) and (d)
2. Grain Shipped	48,000,000 Bu/yr	12-month rolling time period as determined at the end of each calendar month	EUSHIPRECEIVE	SC VI.3	R 336.1205, 40 CFR 52.21(c) and (d)

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FGHANDLING unless a malfunction abatement plan (MAP) as described in Rule 911(2), for proper operation of the particulate collection equipment, baghouse, and the oil spray equipment has been submitted 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 and fugitive dust minimization equipment, 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 and fugitive dust minimization equipment 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 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any grain shipping or receiving equipment (EUSHIPRECEIVE) unless the shipping and receiving building baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the baghouse pressure drop within the range specified in the MAP. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall not operate grain handling operations (EUHANDLING), unless the oil application system is installed and operated in a satisfactory manner to minimize airborne particulate generated by the grain. **(R 336.1205, R 336.1301, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall equip and maintain the dust collector for EUSHIPRECEIVE with a pressure differential gauge. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

### **V. TESTING/SAMPLING**

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

1. Within 60 days of achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall verify and quantify PM emission concentration from SVSHIPRECEIVE by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission 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 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.302(b)(1))**
2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall evaluate visible emissions from any FGHANDLING NSPS DD affected facility, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and DD. Visible emission observation procedures must have prior

approval by the AQD Technical Programs Unit and District Office. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD Technical Programs Unit and District Office within 60 days following the last date of the evaluation. **(R 336.1301, 40 CFR 60.303)**

**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 and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall monitor and record the following: **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
  - a) Keep, in a satisfactory manner, a record of the days when equipment in EUSHIPRECEIVE is operating,
  - b) Monitor the pressure differential for the EUSHIPRECEIVE fabric filter continuously, and
  - c) Record the pressure differential for the EUSHIPRECEIVE fabric filter on a daily basis when the equipment is operating.
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amount of grain received and the amount of grain shipped through EUSHIPRECEIVE. The permittee shall keep records on file and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21(c) and (d))**
4. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the baghouse and the oil spray equipment, as specified in the MAP. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

**VII. REPORTING**

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**
2. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGHANDLING. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVSHIPRECEIVE	42	158.9	40 CFR 52.21 (c) and (d)

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and DD (Standards of Performance for Grain Elevators), as they apply to any affected facility in FGHANDLING. **(40 CFR Part 60 Subparts A & DD)**

**FGLOADSTORE  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION:** Soybean hull and meal storage and loadout, and ingredient receiving and storage.

**Emission Units:** EUHULLSTORAGE, EUHULLLOADOUT, EULOADOUT, EUINGREDIENTS

**POLLUTION CONTROL EQUIPMENT:** baghouses

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.10 lbs per 1000 lbs of gas <sup>a</sup>	Hourly	baghouse emissions from EULOADOUT	SC V.1	R 336.1331(1)(a)
2. PM	0.10 lbs per 1000 lbs of gas <sup>a</sup>	Hourly	baghouse emissions from EUINGREDIENTS	SC V.1	R 336.1331(1)(a)
3. PM10	0.005 gr/dscf	Hourly	baghouse emissions from EULOADOUT	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
4. PM10	0.005 gr/dscf	Hourly	baghouse emissions from EUINGREDIENTS	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
5. PM2.5	0.005 gr/dscf	Hourly	baghouse emissions from EULOADOUT	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
6. PM2.5	0.005 gr/dscf	Hourly	baghouse emissions from EUINGREDIENTS	SC V.1	R 336.1205(1), 40 CFR 52.21 (c) and (d)
7. Visible Emissions	10% opacity	6-minute average	Fugitive emissions from loading and unloading	SC VI.3	R 336.1301(1)(c)

<sup>a</sup> Calculated on a wet gas basis

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any emission unit in FGLOADSTORE unless a malfunction abatement plan (MAP) as described in Rule 911(2), for proper operation of the corresponding baghouse has been submitted 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 and fugitive dust minimization equipment, 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 and fugitive dust minimization equipment 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, R 336.1301, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUHULLSTORAGE, EUHULLLOADOUT, EULOADOUT, or the receiving operations of EUINGREDIENTS unless the corresponding baghouse or baghouses are installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the baghouse pressure drop within the range specified in the MAP. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip and maintain each fabric baghouse in FGLOADSTORE with a pressure differential gauge. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after commencement of initial startup, the permittee shall verify PM, PM10, and PM2.5 emission rates from the EULOADOUT baghouse and PM, PM10, and PM2.5 emission rates from the EUINGREDIENTS baghouse by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the following: **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
  - a) Keep, in a satisfactory manner, a record of the days when each emission unit in FGLOADSTORE is operating.
  - b) Monitor the pressure differential for each fabric filter in FGLOADSTORE continuously.
  - c) Record the pressure differential for each fabric filter in FGLOADSTORE on a daily basis when the equipment is operating.
2. The permittee shall keep, in a satisfactory manner, records of maintenance, corrective procedures, operational changes, and other parameters for the cyclones and filters corresponding to various processes in FGLOADSTORE, as specified in the MAP at the frequency specified in the MAP. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall conduct and record weekly non-certified visual emission observations of fugitive emissions from loading and unloading. **(R 336.1301(1)(c))**



**VII. REPORTING**

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**
2. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGLOADSTORE. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHULLSTORAGE1 *	10	70	40 CFR 52.21 (c) and (d)
2. SVHULLSTORAGE2 *	10	70	40 CFR 52.21 (c) and (d)
3. SVHULLSTORAGE3 *	10	70	40 CFR 52.21 (c) and (d)
4. SVHULLSTORAGE4 *	10	70	40 CFR 52.21 (c) and (d)
5. SVHULLLOADOUT1 *	10	117	40 CFR 52.21 (c) and (d)
6. SVHULLLOADOUT2 *	10	117	40 CFR 52.21 (c) and (d)
7. SVLOADOUT (ingredient receiving and meal loadout)	45	168.5	40 CFR 52.21 (c) and (d)
* Exhausts horizontally.			

**IX. OTHER REQUIREMENTS**

NA

## FGEXTRACTION FLEXIBLE GROUP CONDITIONS

**DESCRIPTION:** Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 3 hexane storage tanks controlled by mineral oil adsorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone, and storage of crude soybean meal.

**Emission Units:** EUEXTRACTION, EUDC, EUTANK1, EUTANK2, EUTANK3, EUMEALSTORAGE

**POLLUTION CONTROL EQUIPMENT:** mineral oil adsorption system (MOS)

### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	14.30 pph	Hourly	EUEXTRACTION (SVVENTFAN)	SC V.1	R 336.1205(1), R 336.1225, R 336.1702(a)
2. VOC	62.63 tpy	12-month rolling time period as determined at the end of each calendar month	EUEXTRACTION (SVVENTFAN)	SC VI.10	R 336.1205(1), R 336.1225, R 336.1702(a)
3. VOC	30.25 pph	Hourly	EUDC (SVDC)	SC V.1	R 336.1205(1), R 336.1225, R 336.1702(a)
4. VOC	132.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUDC (SVDC)	SC VI.10	R 336.1205(1), R 336.1225, R 336.1702(a)
5. PM	0.033 gr/dscf	Hourly	EUDC (SVDC)	SC V.1	R 336.1331(1)(c)
6. PM10	4.00 pph	Hourly	EUDC (SVDC)	SC V.1	R 336.1205(1), 40 CFR 52.21(c) and (d)
7. PM2.5	3.20 pph	Hourly	EUDC (SVDC)	SC V.1	R 336.1205(1), 40 CFR 52.21(c) and (d)
8. Visible Emissions	15% opacity	6-minute average	EUDC (SVDC)	SC VI.15	R 336.1301(1)(c)

### II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	3,800 tons per day	Calendar day	FGEXTRACTION	SC VI.2	R 336.1225, R 336.1702(a), R 336.1331(1)(c), 40 CFR 52.21(c) and (d)
2. Total extraction solvent loss	0.250 gallon per ton of soybeans processed <sup>a</sup>	3-month rolling time period as determined at the end of each calendar month	FGEXTRACTION	SC VI.6	R 336.1702(a)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
3. Total extraction solvent loss	0.150 gallon per ton of soybeans processed <sup>a</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION	SC VI.7	R 336.1225, R 336.1702(a)
4. Total extraction solvent loss	0.2 gallon per ton of soybeans processed <sup>a, b</sup>	12-operating month rolling time period as determined at the end of each calendar month	FGEXTRACTION	SC VI.8	40 CFR 63.2840
5. Total extraction solvent loss	1.0 gallon per ton of soybeans processed <sup>c</sup>	3-month rolling time period as determined at the end of each calendar month	FGEXTRACTION	SC VI.9	R 336.1702(a)

<sup>a</sup> This limit does not apply during the *initial startup period*, defined in 40 CFR Part 63.2872.  
<sup>b</sup> This limit is found in Table 1 of 40 CFR 63.2840, for conventional soybean processing at a new source, and applies only during *operating months*, which are defined in 40 CFR Part 63.2872.  
<sup>c</sup> This limit applies only during the *initial startup period*, defined in 40 CFR Part 63.2872.

### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FGEXTRACTION unless a malfunction abatement plan (MAP) as described in Rule 911(2), for proper operation of the Mineral Oil Adsorption System (MOS) and the EUDC cyclones has been submitted 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 and fugitive dust minimization equipment, 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 and fugitive dust minimization equipment operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d) Per 40 CFR 63.2852, the permittee shall develop a written Startup, Shutdown, and Malfunction (SSM) Plan, in accordance with 40 CFR 63.2852 and 40 CFR 63.6(e)(3). The SSM Plan may be part of the MAP if it meets all applicable requirements of 40 CFR Subpart GGGG. The SSM plan shall provide detailed procedures for operating and maintaining FGEXTRACTION to minimize HAP emissions during a qualifying SSM event for which the source chooses the §63.2850(e)(2) malfunction period, or the §63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions.

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 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d), 40 CFR 63.2852)**

2. If FGEXTRACTION experiences an unscheduled shutdown as a result of a malfunction or continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then the permittee shall meet the requirements associated with one of two compliance options listed in paragraphs 40 CFR 63.2850(e)(1) through (2) within 15 days of the beginning date of the malfunction. **(40 CFR 63.2850(e))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate the FGEXTRACTION unless the Mineral Oil Adsorption System (MOS) and the EUDC cyclones are installed and operating properly and in accordance with the approved MAP. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip each hexane storage tank in FGEXTRACTION with a closed vent system that routes vapors back to the process and to the MOS control system. **(R 336.1225, R 336.1702(a), R 336.1910)**
3. Except during initial startup of FGEXTRACTION or for tank clean outs, the permittee shall not add extraction solvent to EUTANK1, EUTANK2, or EUTANK3 or the solvent work tank unless the vent from the respective tank is tied into the MOS and the MOS is installed and operating properly and in accordance with the approved MAP. **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**
4. The permittee shall not operate any dryer or cooler portion of EUDC if the cyclone associated with that dryer or cooler is not installed and operating properly and in accordance with the approved MAP. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
5. The permittee shall equip and maintain the desolventizer toaster sparge deck with a device to measure the temperature, and a low temperature alarm. **(R 336.1225, R 336.1702(a), R 336.1910)**
6. The permittee shall equip and maintain the absorber system with a device to measure changes in the vacuum across the system. **(R 336.1225, R 336.1702(a), R 336.1910)**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after commencement of initial startup, the permittee shall verify VOC emission rates from EUEXTRACTION (SVEXTRACTION), and the VOC, PM, PM10, and PM2.5 emission rates from EUDC (SVDC) by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1331(1)(c), R 336.1702(a), R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1331(1)(c), 40 CFR 52.21(c) and (d), 40 CFR 63.2840)**

2. The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period records of the tons of soybeans fed to FGEXTRACTION, as measured at EUPREP. **(R 336.1225, R 336.1702(a), R 336.1331(1)(c), 40 CFR 52.21(c) and (d), 40 CFR 63.2840, 40 CFR 63.2855)**
3. The permittee shall record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in each shipment received. **(R 336.1225, R 336.1702(a), Table 1 of 40 CFR 63.2850)**
4. The permittee shall calculate and record, in a satisfactory manner, the monthly weighted average volume fraction of HAP in the extraction solvent received. **(R 336.1225, R 336.1702(a), 40 CFR 63.2850, 40 CFR 63.2854)**
5. The permittee shall keep, in a satisfactory manner, monthly records of the actual extraction solvent loss, in gallons, for FGEXTRACTION. **(R 336.1225, R 336.1702(a), 40 CFR 63.2840, Table 1 of 40 CFR 63.2850, 40 CFR 63.2853)**
6. After the initial startup period, the permittee shall calculate and record, in a satisfactory manner, the gallons total extraction solvent loss per ton of soybeans processed for FGEXTRACTION on a monthly and 3-month rolling time period basis, as required by SC II.2. **(R 336.1702(a))**
7. After the initial startup period, the permittee shall calculate and record, in a satisfactory manner, the gallons total extraction solvent loss per ton of soybeans processed for FGEXTRACTION on a monthly and 12-month rolling time period basis, as required by SC II.3. **(R 336.1225, R 336.1702(a))**
8. For each operating month, which is defined in 40 CFR Part 63.2872, the permittee shall calculate and record, in a satisfactory manner, the gallons total extraction solvent loss per ton of soybeans processed for FGEXTRACTION for the previous 12-operating month rolling time period, as required by SC II.4. **(40 CFR 63.2840)**
9. For the initial startup period, the permittee shall calculate and record, in a satisfactory manner, the gallons total extraction solvent loss per ton of soybeans processed for FGEXTRACTION, on a monthly and 3-month rolling time period basis, as required by SC II.5. **(R 336.1702(a))**
10. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period VOC emission calculation records for EUEXTRACTION (SVEXTRACTION) and EUDC (SVDC), as required by SC I.2 and SC I.4. Emission calculations shall be based on the most recent stack test data. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1), R 336.1225, R 336.1702(a))**
11. The permittee shall keep, in a satisfactory manner, the following records for FGEXTRACTION to demonstrate compliance with the Solvent Extraction for Vegetable Oil Production NESHAP: **(40 CFR 63.2850, 40 CFR 63.2862)**
  - a) The permittee shall meet the recordkeeping requirements by startup of FGEXTRACTION. **(40 CFR 63.2862(a))**
  - b) A plan for demonstrating compliance (as described in §63.2851) and a SSM plan (as described in §63.2852). Each plan shall describe the procedures for obtaining and recording data and determining compliance. **(40 CFR 63.2862(b))**
  - c) Records of the items under 40 CFR 63.2862(c), if any oilseed listed in 40 CFR 63.2832(a)(2) is processed in FGEXTRACTION. **(40 CFR 63.2862(c))**
  - d) After FGEXTRACTION has processed an oilseed listed in 40 CFR 63.2832(a)(2) for 12 operating months, and FGEXTRACTION is not operating during an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items under 40 CFR 63.2862(d) by the end of the calendar month following each operating month. **(40 CFR 63.2862(d))**

- e) For each SSM event subject to an initial startup period as described in §63.2850(c)(2) or (d)(2), or a malfunction period as described in §63.2850(e)(2), record the items under 40 CFR 63.2862(e) by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. **(40 CFR 63.2862(e))**
12. The permittee shall record the desolventizer toaster sparge deck temperature hourly during operation. If the temperature is lower than 195°F, then the permittee shall: **(R 336.1225, R 336.1702(a), R 336.1910)**
    - a) Promptly examine the cause of the variance.
    - b) Respond as needed to minimize the possibility of exceeding any emission limits in this permit.
    - c) Implement any measures necessary to return the affected parameter(s) to the normal range.
    - d) Record the date and time that the variance occurred, and record the measures taken to return the affected parameter(s) to the normal range.
  13. The permittee shall record the percent LEL in main gas vent a minimum of four times daily. If the percent LEL is greater than 50%, then the permittee shall: **(R 336.1225, R 336.1702(a), R 336.1910)**
    - a) Promptly examine the cause of the variance.
    - b) Respond as needed to minimize the possibility of exceeding any emission limits in this permit.
    - c) Implement any measures necessary to return the affected parameter(s) to the normal range.
    - d) Record the date and time that the variance occurred, and record the measures taken to return the affected parameter(s) to the normal range.
  14. The permittee shall monitor the operating parameters specified in the MAP, at the frequency specified in the MAP. The permittee shall keep a record of the times that a monitored parameter is found to be outside of the normal range. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a), R 336.1910)**
  15. The permittee shall conduct and record weekly non-certified visual emission observations of exhaust from EUDC (SVDC). **(R 336.1301(1)(c))**

## **VII. REPORTING**

1. The permittee shall submit notifications containing the required information listed in §63.9 to the AQD District Supervisor within the time frames specified in 40 CFR 63.9. **(40 CFR 63.2860(b))**
2. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGEXTRACTION. **(R 336.1201(7)(a))**
3. Within 10 days after a tank clean out or other event that causes tank vapors to be vented without being controlled by the MOS, the permittee shall notify the AQD District Supervisor, in writing, of the event or activity. **(R 336.1201(7)(a))**
4. The permittee shall submit an initial notification of compliance status, and subsequent annual compliance certifications. Each of these reports shall contain the following information:
  - a) The name and address of the owner or operator.
  - b) The physical address of the vegetable oil production process.
  - c) Each listed oilseed type processed during the previous 12 operating months covered by the report.
  - d) Each HAP identified under §63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period covered by the report.
  - e) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
  - f) A compliance certification indicating whether the source complied with all of the requirements of 40 CFR 63 Subpart GGGG throughout the 12 operating months used for the report, including a certification of the items below:

- i. The initial notification shall certify that a plan for demonstrating compliance (as described in §63.2851) and SSM plan (as described in §63.2852) are complete and available on-site for inspection.
- ii. Each report must certify that the permittee is following the procedures described in the plan for demonstrating compliance.
- iii. Each report must certify that the compliance ratio is less than or equal to 1.00.

The permittee shall submit the initial notification of compliance status report to the AQD District Supervisor no later than 60 days after determining the initial 12 operating months compliance ratio. This report is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The first annual compliance certification is due 12 calendar months after the permittee submits the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. **(40 CFR 63.2860(d), 40 CFR 63.2861(a))**

- 5. The permittee shall submit a deviation notification report by the end of the calendar month following the month in which it was determined that the compliance ratio exceeded 1.00, in accordance with 40 CFR 63.2861(b), to the AQD District Supervisor. **(40 CFR 63.2861(b))**
- 6. If FGEXTRACTION is operated under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2) or a malfunction period subject to §63.2850(e)(2), the permittee shall submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs 40 CFR 63.2861(c)(1) through (3). **(40 CFR 63.2861(c))**
- 7. The permittee shall submit immediate SSM reports, in accordance with 40 CFR 63.2861(d), to the AQD District Supervisor. **(40 CFR 63.2861(d))**

**VIII. STACK/VENT RESTRICTIONS**

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEXTRACTION *	8.04	35	R 336.1225, 40 CFR 52.21(c) and (d)
2. SVDC	61	122	R 336.1225, 40 CFR 52.21(c) and (d)

\* Exhausts horizontally.

**IX. OTHER REQUIREMENTS**

- 1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production as specified in 40 CFR Part 63 Subparts A and GGGG, as they apply to FGEXTRACTION. **(40 CFR Part 63.2832, 40 CFR Part 63 Subparts A & GGGG)**

<b>FGBOILERS FLEXIBLE GROUP CONDITIONS</b>
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**DESCRIPTION:** Two (2) natural gas fired boilers, each with maximum heat input of 95 MMBtu/hr.

**Emission Units:** EUBOILER1, EUBOILER2

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	9.31 pph	Hourly	Each boiler in FGBOILERS	SC V.1	R 336.1205(1), 40 CFR 52.21(c) and (d)
2. CO	7.82 pph	Hourly	Each boiler in FGBOILERS	SC V.1	R 336.1205(1), 40 CFR 52.21(d)

**II. MATERIAL LIMITS**

1. The permittee shall burn only pipeline quality natural gas in FGBOILERS. **(R 336.1205(1), R 336.1224, R 336.1225, R 336.1331, R 336.1702(a), 40 CFR 52.21(c) and (d), 40 CFR 63.11195(e))**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate FGBOILERS unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted 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 336.1331, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The maximum design heat input capacity for each boiler in FGBOILERS shall not exceed 95.0 MMBtu per hour on a fuel heat input basis. **(R 336.1205(1), 40 CFR Part 60 Subpart Dc)**
2. The permittee shall install, calibrate, maintain, and operate, in a satisfactory manner, a device to monitor and record the fuel usage rate for each boiler in FGBOILERS on a continuous basis. **(R 336.1205(1), R 336.1225, R 336.1702(a), 40 CFR 52.21(c), and (d), 40 CFR 60.48c(g))**



#### **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 NOx and CO emission rates from one or more boiler in FGBOILERS by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1902, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1331, 40 CFR 52.21(c) and (d))**
2. The permittee shall keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis, and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used in each boiler in FGBOILERS. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21(c) and (d)), 40 CFR 60.48c(g)(2)**
3. The permittee shall maintain records of information necessary for all required notifications and reports for FGBOILERS, as well as information necessary to demonstrate compliance with the emission limits of this permit, including the following:
  - a) Monitoring data;
  - b) Verification of heat input capacity required to show compliance with SC IV.1;
  - c) Identification, type and the amounts of fuel combusted in FGBOILERS on a calendar month basis;
  - d) All records required by 40 CFR 60.7, 60.48c;
  - e) All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1), R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1912, 40 CFR 60.7(f))**

#### **VII. REPORTING**

1. The permittee shall provide written notification of the date construction commences and actual startup of FGBOILERS, in accordance with 40 CFR 60.7 and 60.48c. The notification shall include the design heat input, an identification of the fuels to be combusted and the annual capacity factor for FGBOILERS. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7, 40 CFR 60.48c)**
2. Within 10 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGBOILERS. **(R 336.1201(7)(a))**

**VIII. STACK/VENT RESTRICTIONS**

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

<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>
1. SVBOILER1	52	82	40 CFR 52.21(c) and (d)
2. SVBOILER2	52	82	40 CFR 52.21(c) and (d)

**IX. OTHER REQUIREMENTS**

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

## **FGBOILERMACT FLEXIBLE GROUP CONDITIONS**

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

**Emission Units:** EUBOILER1, EUBOILER2

**POLLUTION CONTROL EQUIPMENT:** NA

### **I. EMISSION LIMITS**

NA

### **II. MATERIAL LIMITS**

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

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. **(40 CFR 63.7500(a))**
  - a) The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
  - b) At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(e))**
4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7515(d), stated in SC III.4, following the initial compliance date specified in 40 CFR 63.7495(a), stated in SC IX.3. Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 CFR 63.7515(d), stated in SC III.4. **(40 CFR 63.7510(g))**
5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
  - a) Conduct the first annual tune-up no later than 13-months after the initial startup of the new or reconstructed boiler or process heater, the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater, or the first 5-year tune-up no later than 61-months after the initial startup of the new or reconstructed boiler or process heater.
  - b) Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c. Each annual tune-up

specified in 40 CFR 63.7540(a)(10) must be no more than 13-months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61-months after the previous tune-up. **(40 CFR 63.7515(d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

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 must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
  - a) A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
  - b) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
2. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
3. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3-years. **(40 CFR 63.7560(c))**

#### **VII. REPORTING**

1. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.2 through SC VII, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
2. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
3. As specified in 40 CFR 63.9(b)(4) and (5), the permittee must submit an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
4. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30-days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
  - a) The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
  - b) The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**

- c) The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
5. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
6. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.8, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**
- a) The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3, and ending on December 31 after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1, 2, or 5-years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
- b) The first semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
- c) Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1, 2, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
- d) Each subsequent semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**
7. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
- a) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
- b) 40 CFR 63.7550(c)(5) is as follows:
- i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
- ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
- iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
- iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
- v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
8. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**

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

## **VIII. STACK/VENT RESTRICTIONS**

NA

## **IX. OTHER REQUIREMENTS**

1. 40 CFR Part 63, Subpart DDDDD applies to new or reconstructed affected sources as described in paragraph (a)(2) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
  - a) The affected source of 40 CFR Part 63, Subpart DDDDD is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in 40 CFR 63.7575, located at a major source. **(40 CFR 63.7490(a)(2))**
2. A boiler or process heater is:
  - a) New if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
3. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD by April 1, 2013, or upon startup of each boiler or process heater, whichever is later. **(40 CFR 63.7495(a))**
4. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
5. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
6. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
  - a) If the boiler or process heater has a heat input capacity of 10 MMBtu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. The tune-up must be conducted while burning the type of fuel or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12-months prior to the tune-up. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**
    - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36-months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete

the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**

- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36-months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
  - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
  - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
  - vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
    - (1) The concentrations of CO in the effluent stream in ppm by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
    - (2) A description of any corrective actions taken as a part of the tune-up. **40 CFR 63.7540(a)(10)(vi)(B))**
    - (3) The type and amount of fuel used over the 12-months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
- b) If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 MMBtu per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5-years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72-months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5-years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. **(40 CFR 63.7540(a)(12))**
- c) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30-calendar days of startup. **(40 CFR 63.7540(a)(13))**
7. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**