

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

May 11, 2018

PERMIT TO INSTALL
9-08L

ISSUED TO
Kellogg USA, Inc.

LOCATED AT
425 Porter Street
Battle Creek, Michigan

IN THE COUNTY OF
Calhoun

STATE REGISTRATION NUMBER
A0563

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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:

April 27, 2018

DATE PERMIT TO INSTALL APPROVED:

May 11, 2018

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO _{2e}	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 conditions 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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

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 (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-102N	Two cereal manufacturing lines (Cereal Line Nos. 1 and 2). Each line consists of a cooked product area, mill area, oven area, and application area. A vacuum process is also associated with this emission unit. See Appendix A for a detailed equipment list.	11-1986 / 01-1988 / 08-01-2009	FG-FACILITY
EU-BULKSTORE	Bulk storage and handling facilities (includes a fines handling system, vacuum cleaning system, and two railcar unloading receivers). See Appendix A for a detailed equipment list.	1961 / 10-1986 / 10-2010 / 11-30-2012	FG-FACILITY
EU-SUGARSHACK	Bulk storage silos and handling processes. See Appendix A for a detailed equipment list.	11-87 / 12-15-1993 / 10-2008	FG-FACILITY
EU-101S	Bran cereal manufacturing line (Cereal Line No. 3). See Appendix A for a detailed equipment list.	01-02-1989 / 03-01-1995 / 07-31-09 / 10-2010 / 03-01-2013 / 06-19-2014 / 08-24-2015 / 03-27-2018	FG-FACILITY
EU-101N	Rice cereal manufacturing line (Cereal Line No. 4). See Appendix A for a detailed equipment list.	01-02-1989 / 11-15-1993 / 03-01-1995 / 10-2008 / 10-2010 / 03-27-2018	FG-FACILITY
EU-DXCOATDRY	Dx Cereal manufacturing line and coating dryer (Cereal Line No. 5). See Appendix A for a detailed equipment list.	02-02-1993 / 03-01-1995 / 08-01-09 / 10-2010 / 11-30-2012 / 03-01-2013 / 09-20-2013 / 12-26-2014 / 08-24-2015	FG-FACILITY
EU-COATER	Bran and rice cereal coater and dryer	01-02-1989 / 03-01-1995 / 07-31-09 / 10-2010 / 03-01-2013 / 06/19/2014 / 08-24-2015 / Date of PTI	FG-FACILITY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-BOILER1	Boiler 1 is a 99 MMBtu/hr natural gas-fired boiler with low NOx burners.	04-28-1987 / 02-2009 / 03-27-2018	FG-FACILITY, FG-BOILERS
EU-BOILER2	Boiler 2 is a 99 MMBtu/hr natural gas-fired boiler with low NOx burners.	04-28-1987 / 02-2009 / 03-27-2018	FG-FACILITY, FG-BOILERS
EU-CLEANERS	Non-janitorial cleaning of various surfaces including production areas using VOC-containing cleaners.	05-20-2011	FG-FACILITY, FG-SANITATION
EU-SANITIZERS	Non-janitorial sanitizing of various surfaces including production areas using VOC-containing sanitizers.	05-20-2011	FG-FACILITY, FG-SANITATION
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 336.1290.			

The following conditions apply to: EU-102N

DESCRIPTION: Two cereal manufacturing lines (Cereal Line Nos. 1 and 2).

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.01 lbs/1000 lbs of exhaust gases*	Test protocol will specify averaging time	CycA-100-1, CycA-200-1, CycB-100-1, CycB-200-1, CycR-100-1, CycP-200-1, Cooker-100-1, Cooker-200-1, Oven-100-1, Oven-200-1, Feeder-100-1, Feeder-200-1, CycR-200-1 (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM	0.02 lb/1000 lbs of exhaust gases*	Test protocol will specify averaging time	Line 1 Cooler (Cooler 100-6), Line 2 Cooler (Cooler 200-6), Vac-100-8, Vac-100-10 (from each stack)	SC V.1	R 336.1331(1)(c)
3. PM	0.04 lb/1000 lbs of exhaust gases*	Test protocol will specify averaging time	Vac-100-11	SC V.1	R 336.1331(1)(c)
4. PM10	0.47 pph	Test protocol will specify averaging time	CycA-100-1, CycB-100-1, CycR-100-1, Cooker-100-1, Feeder-100-1	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
5. PM10	0.53 pph	Test protocol will specify averaging time	CycA-200-1, CycB-200-1, CycR-200-1, Cooker-200-1, Feeder-200-1, CycP-200-1	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
6. PM10	0.15 pph	Test protocol will specify averaging time	Oven-100, Stack SV-100-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
7. PM10	0.43 pph	Test protocol will specify averaging time	Oven-100, Stack SV-100-12	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM10	0.22 pph	Test protocol will specify averaging time	Oven-200, Stack SV-200-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. PM10	0.24 pph	Test protocol will specify averaging time	Oven 200, Stack SV-200-12	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
10. PM10	0.30 pph	Test protocol will specify averaging time	Line 1 Cooler (Cooler 100-6)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
11. PM10	0.35 pph	Test protocol will specify averaging time	Line 2 Cooler (Cooler 200-6)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
12. PM10	0.08 pph	Test protocol will specify averaging time	Vac-100-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
13. PM10	0.11 pph	Test protocol will specify averaging time	Vac-100-10	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
14. PM10	0.15 pph	Test protocol will specify averaging time	Vac-100-11	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain all wet scrubbers associated with EU-102N with a no flow alarm that continuously monitors for presence of scrubbing liquid. **(R 336.1910)**
2. The permittee shall equip and maintain all wet scrubbers associated with EU-102N with instrumentation to measure the scrubbing liquid flow rate. **(R 336.1910)**

V. TESTING/SAMPLING

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

1. Verification of PM and PM10 emission rates from each stack associated with EU-102N by testing, at owner's expense, in accordance with Department requirements may be required. No less than 60 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1331(1)(c), 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, in a satisfactory manner and according to the procedures in Appendix E, the liquid flow rate in the associated scrubbers on a monthly basis. **(R 336.1910)**
2. The permittee shall perform a monthly visible emission check of each control device associated with EU-102N and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
3. The permittee shall perform preventative maintenance on each control device associated with EU-102N, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed horizontally to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-100-01	28	94	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-100-03	22	94	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-100-06	16	94	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-100-08	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-100-10	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-100-11	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-100-12	24	94	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-200-01	28	94	R 336.1225, 40 CFR 52.21(c) & (d)
9. SV-200-03	22	94	R 336.1225, 40 CFR 52.21(c) & (d)
10. SV-200-06	16	94	R 336.1225, 40 CFR 52.21(c) & (d)
11. SV-200-12	24	94	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-BULKSTORE

DESCRIPTION: Bulk storage silos and handling processes (a fines handling system, a vacuum cleaning system, and two railcar unloading receivers).

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.02 lbs/1000 lbs exhaust gases*	Test protocol will specify averaging time	Silo-1, Silo-2, Silo-3, Silo-4, Silo-5, Silo-6, Silo-7, Silo-8, Silo-9, Silo-10, Silo-11, Silo-12, Silo-13, Silo-14, Silo-15, Silo-16, Silo-17, Silo-18, Silo-19, Silo-20, Silo-21, Silo-22, Silo-23, Silo-24, Silo-25, Silo-26, Silo-27, Silo-28, Silo-29, Silo-30, Silo-31, Silo-32, BranRec-39, ComboRec-40, Fines-43, Rec-44, Fines-48 (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM10	0.13 pph	Test protocol will specify averaging time	Silo-1, Silo-2, Silo-3, Silo-4, Silo-5, Silo-6, Silo-7, Silo-8, Silo-9, Silo-10, Silo-11, Silo-12, Silo-13, Silo-14, Silo-15, Silo-16, Silo-17, Silo-18, Silo-19, Silo-20, Silo-21, Silo-22, Silo-23, Silo-24, Silo-25, Silo-26, Silo-27, Silo-28, Silo-29, Silo-30, Silo-31, Silo-32 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
3. PM10	0.15 pph	Test protocol will specify averaging time	BranRec-39	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
4. PM10	0.12 pph	Test protocol will specify averaging time	ComboRec-40	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
5. PM10	0.20 pph	Test protocol will specify averaging time	Fines-43	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
6. PM10	0.23 pph	Test protocol will specify averaging time	Rec-44	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
7. PM10	0.54 pph	Test protocol will specify averaging time	Fines-48	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM2.5	0.54 pph	Test protocol will specify averaging time	Fines-48	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. Opacity	10 percent	Six minute average	Silo-1, Silo-2, Silo-3, Silo-4, Silo-5, Silo-6, Silo-7, Silo-8, Silo-9, Silo-10, Silo-11, Silo-12, Silo-13, Silo-14, Silo-15, Silo-16, Silo-17, Silo-18, Silo-19, Silo-20, Silo-21, Silo-22, Silo-23, Silo-24, Silo-25, Silo-26, Silo-27, Silo-28, Silo-29, Silo-30, Silo-31, Silo-32, BranRec-39, ComboRec-40, Fines-43, Rec-44, Fines-48 (from each stack)	SC VI.1	R 336.1301(1)(c)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. Verification of PM, PM10, and PM2.5 emission rates from each stack associated with EU-BULKSTORE by testing, at owner's expense, in accordance with Department requirements may be required. No less than 60 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1331(1)(c), 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 perform a monthly visible emission check of each control device associated with EU-BULKSTORE and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
2. The permittee shall perform preventative maintenance on each control device associated with EU-BULKSTORE, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-SUGARSHACK

DESCRIPTION: Bulk storage silos and handling processes

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.02 lbs/1000 lbs exhaust gases*	Test protocol will specify averaging time	Silo-35, Silo-36, Silo-37, Silo-38, SugRec-45, SugRec-46, SugRec-47 (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM10	0.131 pph	Test protocol will specify averaging time	Silo-35, Silo-36, Silo-37, Silo-38, SugRec-46 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
3. PM10	0.263 pph	Test protocol will specify averaging time	SugRec-45	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
4. PM10	0.076 pph	Test protocol will specify averaging time	SugRec-47	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
5. Opacity	10 percent	Six minute average	Silo-35, Silo-36, Silo-37, Silo-38, SugRec-45, SugRec-46, SugRec-47 (from each stack)	SC VI.1	R 336.1301(1)(c)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. Verification of PM and PM10 emission rates from at least one piece of process equipment associated with EU-SUGARSHACK by testing, at owner's expense, in accordance with Department requirements may be required. No less than 60 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1331(1)(c), 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 perform a monthly visible emission check of each control device associated with EU-SUGARSHACK and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
2. The permittee shall perform preventative maintenance on each control device associated with EU-SUGARSHACK, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed downwards to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-90W-02	8	92	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-90W-05	8	92	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-90W-01	8	92	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-90W-04	8	92	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-90W-07	8	80	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-90W-10	10	65	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-90W-08	8	35	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-101S

DESCRIPTION: Bran line (Cereal Line No. 3)

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.002 lbs/1000 lbs of exhaust gases*	Hourly	Cooker-700-3, Convey-700-5 (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM	0.004 lbs/1000 lbs of exhaust gases*	Hourly	PelletDryer-700-6, Mill-700-7/8, HoodsDrums-700-11, Fines-700-12, Cooler-700-18 (from each stack)	SC V.1	R 336.1331(1)(c)
3. PM	0.02 lbs/1000 lbs of exhaust gases*	Hourly	Oven 700 Stack SV-700-9	SC V.1	R 336.1331(1)(c)
4. PM	0.010 lbs/1000 lbs of exhaust gases*	Hourly	CenVac-700-13, CenVac-700-17, Oven-700 Stack SV-700-10 (from each stack)	SC V.1	R 336.1331(1)(c)
5. PM10	0.06 pph	Hourly	Cooker-700-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
6. PM2.5	0.06 pph	Hourly	Cooker-700-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
7. PM10	0.13 pph	Hourly	Convey-700-5	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM2.5	0.13 pph	Hourly	Convey-700-5	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. PM10	0.24 pph	Hourly	PelletDryer-700-6	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
10. PM2.5	0.24 pph	Hourly	PelletDryer-700-6	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
11. PM10	0.29 pph	Hourly	Mill 700 Stack SV-700-7	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
12. PM2.5	0.29 pph	Hourly	Mill 700 Stack SV-700-7	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
13. PM10	0.34 pph	Hourly	Mill 700 Stack SV-700-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
14. PM2.5	0.34 pph	Hourly	Mill 700 Stack SV-700-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
15. PM10	0.24 pph	Hourly	Oven 700 Stack SV-700-9	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
16. PM2.5	0.24 pph	Hourly	Oven 700 Stack SV-700-9	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
17. PM10	0.22 pph	Hourly	Oven 700 Stack SV-700-10	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
18. PM2.5	0.22 pph	Hourly	Oven 700 Stack SV-700-10	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
19. PM10	0.16 pph	Hourly	HoodsDrums-700-11	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
20. PM2.5	0.16 pph	Hourly	HoodsDrums-700-11	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
21. PM10	0.12 pph	Hourly	Fines-700-12	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
22. PM2.5	0.12 pph	Hourly	Fines-700-12	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
23. PM10	0.009 pph	Hourly	CenVac-700-13	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
24. PM2.5	0.009 pph	Hourly	CenVac-700-13	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
25. PM10	0.03 pph	Hourly	CenVac-700-17	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
26. PM2.5	0.03 pph	Hourly	CenVac-700-17	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
27. PM10	0.36 pph	Hourly	Cooler-700-18	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
28. PM2.5	0.36 pph	Hourly	Cooler-700-18	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
29. Opacity	10 percent	Six-minute average	EU-101S	SC VI.2	R 336.1301(1)(c)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain all wet scrubbers associated with EU-101S with a no flow alarm that continuously monitors for presence of scrubbing liquid. **(R 336.1910)**

2. The permittee shall equip and maintain all wet scrubbers associated with EU-101S with instrumentation to measure the scrubbing liquid flow rate. **(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 from commencement of trial operation, unless the permittee has maintained the demonstration that the most recent acceptable test remains valid and representative for each equipment, the permittee shall verify PM_{2.5}, PM₁₀, and PM emission rates from EU-101S, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the Reference Test Method Table below. 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. 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 336.1205, R 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) and (d))**

Reference Test Method Table

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM ₁₀ /PM _{2.5}	40 CFR Part 51, Appendix M

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, in a satisfactory manner and according to the procedures in Appendix E, the liquid flow rate in the associated scrubbers on a monthly basis. **(R 336.1910)**
2. The permittee shall perform a monthly visible emission check of each control device associated with EU-101S and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
3. The permittee shall perform preventative maintenance on each control device associated with EU-101S, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**
4. 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))**
5. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each flavoring material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of Cooler-700-18, Oven 700 Stack SV-700-9, CenVac-700-13, CenVac-700-17, Oven-700 Stack SV-700-10 portion of EU-101S (proposed project) 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 the proposed project. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-700-1	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-700-2	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-700-3	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-700-4	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-700-5	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-700-6	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-700-7	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-700-8	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
9. SV-700-9	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
10. SV-700-10	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
11. SV-700-11	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
12. SV-700-12	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
13. SV-700-13	NA	94	R 336.1225, 40 CFR 52.21(c) & (d)
14. SV-700-17	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
15. SV-700-18	48	94	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-COATER

DESCRIPTION: Bran and rice cereal coater and dryer

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.005 lbs/1000 lbs of exhaust gases*	Hourly	Coater Cooler-700-14	SC V.1	R 336.1331(1)(c)
2. PM	0.025 lbs/1000 lbs of exhaust gases*	Hourly	Coater Cooler-700-15	SC V.1	R 336.1331(1)(c)
3. PM	0.01 lbs/1000 lbs of exhaust gases*	Hourly	Coater Drum-700-16	SC V.1	R 336.1331(1)(c)
4. PM10	0.38 pph	Hourly	Coater Cooler-700-14	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
5. PM2.5	0.38 pph	Hourly	Coater Cooler-700-14	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
6. PM10	0.57 pph	Hourly	Coater Dryer-700-15	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
7. PM2.5	0.57 pph	Hourly	Coater Dryer-700-15	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM10	0.36 pph	Hourly	Coater Drum-700-16	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. PM2.5	0.36 pph	Hourly	Coater Drum-700-16	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
10. VOC	12.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-COATER	SC V.2, SC VI.6	R 336.1225, R 336.1702(a)
11. VOC	655.2 lbs/day	Calendar day	EU-COATER	SC V.2, SC VI.6	R 336.1205(1)(a)
12. Opacity	10 percent	Six-minute average	EU-COATER	SC VI.2	R 336.1301(1)(c)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain all wet scrubbers associated with EU-COATER with a no flow alarm that continuously monitors for presence of scrubbing liquid. **(R 336.1910)**
2. The permittee shall equip and maintain all wet scrubbers associated with EU-COATER with instrumentation to measure the scrubbing liquid flow rate. **(R 336.1910)**

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 each stack associated with EU-COATER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in Reference Test Method Table below. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) and (d))**

Reference Test Method Table

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

2. Upon request from the AQD District Supervisor, the permittee shall verify VOC emission rates, or overall control efficiency, from EU-COATER by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (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, in a satisfactory manner and according to the procedures in Appendix E, the liquid flow rate in the associated scrubbers on a monthly basis. **(R 336.1910)**
2. The permittee shall perform a monthly visible emission check of each control device associated with EU-COATER and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
3. The permittee shall perform preventative maintenance on each control device associated with EU-COATER, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**

4. 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))**
5. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each flavoring material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**
6. The permittee shall keep the following information on a daily basis for EU-COATER:
 - a. On a daily basis, the amount of each VOC-containing flavoring material used in products made on EU-COATER.
 - b. Effective VOC content of each flavoring material. The effective VOC content shall be calculated using the equation below:

$$VOC_{eff} = E + [PG * R]$$

Where,

- VOC_{eff} = Effective VOC content of flavor (%)
E = Percent content of all VOC constituents besides propylene glycol (%)
PG = Percent propylene glycol content of flavor (%)
R = Propylene Glycol Emittance rate (%)

The emittance rate (R) shall be equal to 30% (0.3). A different emittance rate may be used only upon submission and approval by the AQD District Supervisor.

- c. VOC mass emissions calculations determining the daily emission rate in pounds per calendar day, as calculated using the following equation:

$$VOC_d = \left(\sum_{i=1}^n (M_i \times VOC_{eff_i}) \right)$$

Where,

- VOC_d = EU-COATER daily VOC emissions (pounds)
 M_i = Flavoring usage (pounds) for flavoring i
 $VOC_{eff, i}$ = Effective VOC content (%) for flavoring i
n = Total number of flavorings used

- d. VOC mass emission calculations determining the monthly emissions rate in tons per calendar month, as calculated using the following equation.

$$VOC_m = \left(\sum_{i=1}^j VOC_{d_i} \right) / 2000$$

Where,

- VOC_m = EU-COATER monthly VOC emissions (tons per calendar month)
 $VOC_{d, i}$ = EU-COATER daily VOC emissions (lb/day) for day i
j = number of days in month

- e. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period, as determined by the end of each calendar month.

$$VOC_a = \left(\sum_{i=1}^{12} VOC_{m_i} \right)$$

Where,

- VOC_a = EU-COATER annual VOC emissions (tons per 12-month rolling time period)
- VOC_{m,i} = EU-COATER monthly VOC emissions (ton/month) for month i

The permittee shall keep all records on file at the facility, using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-700-14*	NA	50	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-700-15*	23.0	50	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-700-16	18.6	94	R 336.1225, 40 CFR 52.21(c) & (d)

*Stacks SV-700-14 and SV-700-15 shall be discharged unobstructed vertically to the ambient air.

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-101N

DESCRIPTION: Rice line (Cereal Line No. 4)

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.002 lbs/1000 lbs of exhaust gases*	Hourly	Fines-800-18, Mod7Cooler-800-26, Cooker-800-1, (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM	0.003 lbs/1000 lbs of exhaust gases*	Hourly	Mod9Dryer-800-2, Mill-800 Stack SV-800-3, Mill-800 Stack SV-800-4, FFCooler-800-22, Mod12Cooler-800-24 (from each stack)	SC V.1	R 336.1331(1)(c)
3. PM	0.004 lbs/1000 lbs of exhaust gases*	Hourly	Mod12Dryer-800-5, RiceTemp-800-9, HoodsDrums-800-8, Kone 800-27, (from each stack)	SC V.1	R 336.1331(1)(c)
4. PM	0.006 lbs/1000 lbs of exhaust gases*	Hourly	CookerPlenum-800-23	SC V.1	R 336.1331(1)(c)
5. PM	0.051 lbs/1000 lbs of exhaust gases*	Hourly	Oven-800-6	SC V.1	R 336.1331(1)(c)
6. PM	0.01 lbs/1000 lbs of exhaust gases*	Hourly	CenVac-800-19, CenVac-800-20, CenVac-800-25 (from each stack)	SC V.1	R 336.1331(1)(c)
7. PM10	0.20 pph	Hourly	FFCooler-800-22	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM2.5	0.20 pph	Hourly	FFCooler-800-22	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. PM10	0.08 pph	Hourly	Cooker-800-1	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
10. PM2.5	0.08 pph	Hourly	Cooker-800-1	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
11. PM10	0.14 pph	Hourly	Mod9Dryer-800-2	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
12. PM2.5	0.14 pph	Hourly	Mod9Dryer-800-2	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
13. PM10	0.15 pph	Hourly	Mill-800 Stack SV-800-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
14. PM2.5	0.15 pph	Hourly	Mill-800 Stack SV-800-3	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
15. PM10	0.14 pph	Hourly	Mill-800 Stack SV-800-4	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
16. PM2.5	0.14 pph	Hourly	Mill-800 Stack SV-800-4	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
17. PM10	0.22 pph	Hourly	Mod12Dryer-800-5	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
18. PM2.5	0.22 pph	Hourly	Mod12Dryer-800-5	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
19. PM10	0.67 pph	Hourly	Oven-800-6	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
20. PM2.5	0.67 pph	Hourly	Oven-800-6	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
21. PM10	0.11 pph	Hourly	HoodsDrums-800-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
22. PM2.5	0.11 pph	Hourly	HoodsDrums-800-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
23. PM10	0.05 pph	Hourly	RiceTemp-800-9	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
24. PM2.5	0.05 pph	Test protocol will specify averaging time	RiceTemp-800-9	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
25. PM10	0.04 pph	Hourly	Fines-800-18	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
26. PM2.5	0.04 pph	Hourly	Fines-800-18	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
27. PM10	0.02 pph	Hourly	CookerPlenum-800-23, CenVac-800-19, CenVac-800-20, CenVac-800-25 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
28. PM2.5	0.02 pph	Hourly	CookerPlenum-800-23, CenVac-800-19, CenVac-800-20, CenVac-800-25 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
29. PM10	0.21 pph	Hourly	Mod12Cooler-800-24	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
30. PM2.5	0.21 pph	Hourly	Mod12Cooler-800-24	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
31. PM10	0.13 pph	Hourly	Mod7Cooler-800-26	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
32. PM2.5	0.13 pph	Hourly	Mod7Cooler-800-26	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
33. PM10	0.28 pph	Hourly	Kone-800-27	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
34. PM2.5	0.28 pph	Hourly	Kone-800-27	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
35. Opacity	10 percent	Six-minute average	HoodsDrums-800-8, CenVac-800-19, CenVac-800-20, CenVac-800-25, Fines-800-18, Cooke-800-1, Mod9Dryer-800-2, Mod12Dryer-800-5, Mod12Cooler-800-24, RiceTemp-800-9, Mill-800, CookePlenum-800-23, FFCooler-800-22, Mod7Cooler-800-26, Kone-800-27 (from each stack)	SC VI.2	R 336.1301(1)(c)
36. Opacity	15 percent	Six-minute average	Oven-800-6	SC VI.2	R 336.1301(1)(c)
*Calculated on a dry gas basis.					

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain all wet scrubbers and rotoclone(s) associated with EU-101N with a no flow alarm that continuously monitors for presence of scrubbing liquid. **(R 336.1910)**
2. The permittee shall equip and maintain all wet scrubbers and rotoclone(s) associated with EU-101N with instrumentation to measure the scrubbing liquid flow rate. **(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 from commencement of trial operation, unless the permittee has maintained the demonstration that the most recent acceptable test remains valid and representative for each equipment, the permittee shall verify PM2.5, PM10, and PM emission rates from EU-101N, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the Reference Test Method Table below. 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. 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 336.1205, R 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) and (d))**

Reference Test Method Table

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

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, in a satisfactory manner and according to the procedures in Appendix E, the liquid flow rate in the associated scrubbers and rotoclone(s) on a monthly basis. **(R 336.1910)**
2. The permittee shall perform a monthly visible emission check of each control device associated with EU-101N and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
3. The permittee shall perform preventative maintenance on each control device associated with EU-101N, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of Mod7Cooler-800-26, Cooker-800-1, Mill-800 Stack SV-800-3, Mill-800 Stack SV-800-4, FFCooler-800-22, Mod12Cooler-800-24, Oven-800-6, HoodsDrums-800-8, Kone-800-27, CenVac-800-19, CenVac-800-20, CenVac-800-25, FFCooler-800-22 portion of EU-101N (proposed project) 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 the proposed project. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed horizontally to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-800-1	20	94	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-800-2	25	94	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-800-3	30	94	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-800-4	30	94	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-800-5	28	94	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-800-6	20	94	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-800-8	22	94	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-800-9	16	94	R 336.1225, 40 CFR 52.21(c) & (d)
9. SV-800-18	20	94	R 336.1225, 40 CFR 52.21(c) & (d)
10. SV-800-19	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
11. SV-800-20	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
12. SV-800-22	29	94	R 336.1225, 40 CFR 52.21(c) & (d)
13. SV-800-23	16	94	R 336.1225, 40 CFR 52.21(c) & (d)
14. SV-800-24	29	94	R 336.1225, 40 CFR 52.21(c) & (d)
15. SV-800-25	6	94	R 336.1225, 40 CFR 52.21(c) & (d)
16. SV-800-26	32	94	R 336.1225, 40 CFR 52.21(c) & (d)
17. SV-800-27*	30	50	R 336.1225, 40 CFR 52.21(c) & (d)
* Discharged unobstructed vertically upwards to the ambient air			

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-DXCOATDRY

DESCRIPTION: Dx Cereal manufacturing line and coating dryer (Cereal Line No. 5.)

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: See Appendix A.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.01 lbs/1000 lbs of exhaust gases*	Test protocol will specify averaging time	Appl-900, Dryer-900-3, Cooler-900-4, Fines-900-7, Fines-900-8, MarBit-900-10, CenVac-900-11, ExtruderConveyor-900-12, CoaterConveyor-900-13 (from each stack)	SC V.1	R 336.1331(1)(c)
2. PM10	0.17 pph	Test protocol will specify averaging time	Stack SV-900-10 associated with MarBit-900-10 and Appl-900	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
3. PM2.5	0.17 pph	Test protocol will specify averaging time	Stack SV-900-10 associated with MarBit-900-10 and Appl 900	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
4. PM10	0.43 pph	Test protocol will specify averaging time	Stack SV -900-3 associated with Appl-900, Dryer-900-3, Bwash-900	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
5. PM2.5	0.43 pph	Test protocol will specify averaging time	Stack SV -900-3 associated with Appl-900, Dryer-900-3, Bwash-900	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
6. PM10	0.48 pph	Test protocol will specify averaging time	Cooler-900-4	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
7. PM2.5	0.48 pph	Test protocol will specify averaging time	Cooler-900-4	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
8. PM10	0.52 pph	Test protocol will specify averaging time	Fines-900-7	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
9. PM2.5	0.52 pph	Test protocol will specify averaging time	Fines-900-7	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
10. PM10	0.83 pph	Test protocol will specify averaging time	Fines-900-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
11. PM2.5	0.83 pph	Test protocol will specify averaging time	Fines-900-8	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
12. PM10	0.03 pph	Test protocol will specify averaging time	CenVac-900-11	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
13. PM2.5	0.03 pph	Test protocol will specify averaging time	CenVac-900-11	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
14. PM10	0.36 pph	Test protocol will specify averaging time	ExtruderConveyor-900-12, CoaterConveyor-900-13 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
15. PM2.5	0.36 pph	Test protocol will specify averaging time	ExtruderConveyor-900-12, CoaterConveyor-900-13 (from each stack)	SC V.1	R 336.1205, 40 CFR 52.21 (c) & (d)
16. VOC	24.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-DXCOATDRY	SC V.2, SC VI.6	R 336.1225, R 336.1702(a)
17. VOC	1,073 lb/day	Calendar day	EU-DXCOATDRY	SC V.2, SC VI.6	R 336.1205(1)(a)
18. Opacity	10 percent	Six minute average	Appl-900, Dryer-900-3, Cooler-900-4, Fines-900-7, Fines-900-8, MarBit-900-10, CenVac-900-11, ExtruderConveyor-900-12, CoaterConveyor-900-13 (from each stack)	SC VI.2	R 336.1301(1)(c)

*Calculated on a dry gas basis.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain the rotoclones associated with EU-DXCOATDRY with a no flow alarm that continuously monitors for presence of scrubbing liquid when operating. **(R 336.1910)**
2. The permittee shall equip and maintain the rotoclones associated with EU-DXCOATDRY with instrumentation to measure the scrubbing liquid flow rate. **(R 336.1910)**

V. TESTING/SAMPLING

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

1. Verification of PM, PM10, and PM2.5 emission rates from each stack associated with EU-DXCOATDRY by testing, at owner's expense, in accordance with Department requirements may be required. No less than 60 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1331(1)(c), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**
2. Upon request from the District Supervisor, the permittee shall verify the VOC emission rate from EU-DXCOATDRY, or overall control efficiency, by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of VOC emission rate includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702(a), 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, in a satisfactory manner and according to the procedures in Appendix E, the liquid flow rate in the associated rotoclones on a monthly basis. **(R 336.1910)**
2. The permittee shall perform a monthly visible emission check of each control device associated with EU-DXCOATDRY and identified in Appendix A, according to the procedure in Appendix B. **(R 336.1910)**
3. The permittee shall perform preventative maintenance on each control device associated with EU-DXCOATDRY, and identified in Appendix A, as described in the Preventative Maintenance Plan in Appendix E. The permittee shall keep a written record of all preventative maintenance that is performed. **(R 336.1910)**
4. 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))**
5. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each flavoring material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**
6. The permittee shall keep the following information on a daily basis for EU-DXCOATDRY:
 - a. On a daily basis, the amount of each VOC-containing flavoring material used in products made on EU-DXCOATDRY.

- b. Effective VOC content of each flavoring material. The effective VOC content shall be calculated using the equation below:

$$VOC_{eff} = E + [PG * R]$$

Where,

- VOC_{eff} = Effective VOC content of flavor (%)
E = Percent content of all VOC constituents besides propylene glycol (%)
PG = Percent propylene glycol content of flavor (%)
R = Propylene Glycol Emittance rate (%)

The emittance rate (R) shall be equal to 30% (0.3). A different emittance rate may be used only upon submission and approval by the AQD District Supervisor.

- c. VOC mass emissions calculations determining the daily emission rate in pounds per calendar day, as calculated using the following equation:

$$VOC_d = \left(\sum_{i=1}^n (M_i \times VOC_{eff_i}) \right)$$

Where,

- VOC_d = EU-DXCOATDRY daily VOC emissions (pounds)
 M_i = Flavoring usage (pounds) for flavoring i
 $VOC_{eff,i}$ = Effective VOC content (%) for flavoring i
n = Total number of flavorings used

- d. VOC mass emission calculations determining the monthly emissions rate in tons per calendar month, as calculated using the following equation.

$$VOC_m = \left(\sum_{i=1}^j VOC_{d_i} \right) / 2000$$

Where,

- VOC_m = EU-DXCOATDRY monthly VOC emissions (tons per calendar month)
 $VOC_{d,i}$ = EU-DXCOATDRY daily VOC emissions (lb/day) for day i
j = number of days in month

- e. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period, as determined by the end of each calendar month.

$$VOC_a = \left(\sum_{i=1}^{12} VOC_{m_i} \right)$$

Where,

- VOC_a = EU-DXCOATDRY annual VOC emissions (tons per 12-month rolling time period)
 $VOC_{m,i}$ = EU-DXCOATDRY monthly VOC emissions (ton/month) for month i

The permittee shall keep all records on file at the facility, using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and make them available to the Department upon request.
(R 336.1205, R 336.1225, R 336.1702(a))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed horizontally to the ambient air:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-900-3	30	94	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-900-04	26	94	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-900-07	30	94	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-900-08	34	94	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-900-10	16	94	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-900-12	22	94	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-900-13	22	94	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-900-11	6	94	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-BOILERS	Powerhouse boilers	EU-BOILER1, EU-BOILER2
FG-SANITATION	Cleaning and sanitizing chemical usage for non-janitorial activities.	EU-CLEANERS, EU-SANITIZERS
FG-FACILITY	All process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.	-

The following conditions apply to: FG-BOILERS

DESCRIPTION: Powerhouse Boilers

Emission Units: EU-BOILER1, EU-BOILER2

POLLUTION CONTROL EQUIPMENT: Low NOx burners

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	0.10 lbs/MMBtu when firing natural gas	Test protocol will specify averaging time	FG-BOILERS	SC V.1	40 CFR 52.21(j)(2)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall burn only pipeline quality natural gas in FG-BOILERS. (R 336.1205(1)(a), R 336.1225)

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. Verification of NOx emission rates from FG-BOILERS by testing, at owner's expense, in accordance with Department requirements may be required. No less than 60 days prior to the testing, the permittee shall submit a complete test plan to the AQD. 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 within 60 days following the last date of the test. (R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j)(2))

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), 40 CFR 52.21(c) and (d))**
2. The permittee shall keep 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. The records must indicate the total amount of natural gas used in FG-BOILERS. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV37-01	90	150	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV37-02	90	150	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV37-03	38	76	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: FG-SANITATION

DESCRIPTION: Cleaning and sanitizing chemical usage for non-janitorial activities.

EMISSION UNIT ID: EU-CLEANERS, EU-SANITIZERS

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	36.1 tpy	12-month rolling time period as determined at the end of each calendar month	FG-SANITATION	SC VI.2	R 336.1225, R 336.1702(a)

II. MATERIAL LIMITS

- The permittee shall not use cleaning and sanitizing products (material) in excess of the limits specified in the following table based upon 12-month rolling time period as determined at the end of each calendar month:

Material Usage Group (As-Purchased VOC Content in % by Wt.)	Material Usage Limit (lb/12-month rolling time period)
VOC content greater than 0% and less than or equal to 5%	120,000
VOC content greater than 5% and less than or equal to 10%	70,000
VOC content greater than 10% and less than or equal to 20%	40,000
VOC content greater than 20% and less than or equal to 35%	40,000
VOC content greater than 35% and less than or equal to 60%	55,000
VOC content greater than 60% and less than or equal to 100%	4,000

(R 336.1205(1)(a), R 336.1225, R 336.1702(a))

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall capture all waste cleaning and sanitizing products (materials) and shall store them in closed containers. For the purposes of this condition, waste materials do not include those that are rinsed to sewer or those that evaporate as part of operation of FG-SANITATION processes. Waste materials include only those materials that are no longer in active use as part of the process and that are remaining at the facility for future disposal. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1225, R 336.1702(a))**

2. The permittee shall handle all VOC and / or HAP containing materials, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1205(3), R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. Upon request from the District Supervisor, the permittee shall verify the VOC content of any cleaning or sanitizing material by testing at owner's expense, in accordance with Department requirements. The test shall use a method approved by the District Supervisor as appropriate for the nature of the material to be tested. If the test results and the formulation values should differ, the permittee shall use the test results to determine compliance. **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

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), 40 CFR 52.21(c) and (d))**
2. The permittee shall keep the following information on a calendar month basis for FG-SANITATION:
 - a. Amount of each VOC-containing cleaning and sanitizing product used.
 - b. VOC content of each cleaning and sanitizing product.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month as calculated using the following equation:

$$VOC_s = \left[\sum_{i=1}^n (M_i \times VOC_i) \right]$$

Where:

VOC_s = FG-SANITATION monthly VOC emissions

M_i = Product usage in pounds per month for cleaning and sanitizing product i

VOC_i = VOC content (%) for cleaning and sanitizing product i

n = Total number of cleaning and sanitizing products used

- d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

$$VOC_a = \left[\sum_{i=1}^{12} VOC_{s,i} \right]$$

Where:

VOC_a = FG-SANITATION annual VOC emission rate in tons per 12-month rolling time period

$VOC_{s,i}$ = FG-SANITATION monthly VOC emission rate in tons per month for month i

The permittee shall keep all records on file at the facility, using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or manufacturer VOC content testing or some combination as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**
4. The permittee shall keep usage records to show compliance with the SC II.1, in a format acceptable to the AQD District Supervisor, indicating the type of material used on a calendar month basis. The records must indicate the name of material and its VOC content as determined in SC VI.3. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply Source-Wide to: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. CO	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
2. SO ₂	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
3. NO _x	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
4. VOC	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
5. PM	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
6. PM _{2.5}	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
7. PM ₁₀	89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.2	R 336.1205(3)
8. Each Individual HAP	9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.3	R 336.1205(3)
9. Aggregate HAPs	22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.3	R 336.1205(3)
10. Carbon Dioxide Equivalent (CO _{2e})	89,900 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.4, SC VI.5	R 336.1205(3)
11. Furfural (CAS No. 98-01-1)	1.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.6	R 336.1225(2)

II. MATERIAL LIMITS

1. The permittee shall not exceed the following fuel usages in FG-FACILITY:
 - a. 1,350 million standard cubic feet of natural gas per 12-month rolling time period

(R 336.1205(1)(a))

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

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 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(3))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO, SO₂, NO_x, VOC, PM, PM_{2.5}, and PM₁₀ emission calculation records for FG-FACILITY, as required by SC I.1, SC I.2, SC I.3, SC I.4, SC I.5, SC I.6, and SC I.7. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
3. The permittee shall keep the following information on a monthly basis for FG-FACILITY:
 - a. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - b. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

If stack test results for FG-FACILITY exist for any of the aforementioned pollutants, those stack test results may be used to estimate pollutant emission subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the applicable emission factor listed in the Emission Limit Table shall be used to estimate the emissions of a pollutant from FG-FACILITY. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

4. The permittee shall keep natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in million standard cubic feet on a monthly and 12-month rolling time period basis. The records must indicate the total amount of natural gas used in FG-FACILITY as required by SC II.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO_{2e} emission calculation records for FG-FACILITY, as required by SC I.10. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

6. The permittee shall keep the following information on a calendar month basis for FG-FACILITY:
- a. Pounds (with water) of each Furfural (CAS No. 98-01-1) containing material used.
 - b. Where applicable, pounds (with water) of each Furfural (CAS No. 98-01-1) containing material reclaimed.
 - c. The Furfural (CAS No. 98-01-1) content (with water) in percent (%) by weight of each material used.
 - d. Furfural (CAS No. 98-01-1) mass emission calculations determining the monthly emission rate in tons per calendar month.
 - e. Furfural (CAS No. 98-01-1) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance or an alternate method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.¹ **(R 336.1225(2))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

APPENDIX A
Emission Unit / Process Group Table

Emission Unit/ Flexible Group ID	EU Description	Associated Equipment ID	Equipment Description	Control Device ID	Control Device
EU-102N	Cereal Line #1	CycA-100-1	Cyclone	CDRC-100-1	Wet Rotoclone
		Feeder-100-1	Material Feeder	CDRC-100-1	Wet Rotoclone
		CycB-100-1	Cyclone	CDRC-100-1	Wet Rotoclone
		CycR-100-1	Cyclone	CDRC-100-1	Wet Rotoclone
		Cooker-100-1	Material Cooker	CDRC-100-1	Wet Rotoclone
		Oven-100	Oven	NA	NA
	Cereal Line #2	CycA-200-1	Cyclone	CDRC-200-1	Wet Rotoclone
		Feeder-200-1	Material Feeder	CDRC-200-1	Wet Rotoclone
		CycB-200-1	Cyclone	CDRC-200-1	Wet Rotoclone
		CycP-200-1	Cyclone	CDRC-200-1	Wet Rotoclone
		Cooker-200-1	Material Cooker	CDRC-200-1	Wet Rotoclone
		CycR-200-1	Cyclone	CDRC-200-1	Wet Rotoclone
		Oven-200	Oven	NA	NA
		Vac-100-8	Vacuum	CDBH-100-8	Baghouse
		Vac-100-10	Vacuum	CDBH-100-10	Baghouse
		Vac-100-11	Vacuum	CDBH-100-11	Baghouse
	Cereal Line #1- Coolers	Cooler-100-6	Cooler	CDRC-100-6	Wet Rotoclone
	Cereal Line #2- Coolers	Cooler-200-6	Cooler	CDRC-200-6	Wet Rotoclone
EU- DXCOATDRY	Cereal Line #5- Coating Line & Dryer	Appl-900	Coating Applicator	CDRC-900-3/10	2 Wet Rotoclones
		Dryer-900-3	Dryer	CDRC-900-3	Wet Rotoclone
		Cooler-900-4	Cooler	CDRC-900-4	Wet Rotoclone
		Fines-900-7	Material Handling	CDBH-900-7	2 Parallel Baghouses
		Fines-900-8	Material Handling	CDBH-900-8	2 Parallel Baghouses
		MarBit-900-10	Material Handling	CDRC-900-10	Wet Rotoclone
		CenVac-900-11	Vacuum	CDBH-900-11	Baghouse
		ExtrudeConveyor-900-12	Vacuum	CDRC-900-12	Wet Rotoclone
		CoaterConveyor-900-13	Vacuum	CDRC-900-13	Wet Rotoclone
		EU-101S	Cereal Line #3	Cooker-700-3	Cooker
Convey-700-5	Conveyor			CDWS-700-5	Wet Scrubber
Pellet Dryer-700-6	Dryer			CDWS-700-6	Wet Scrubber
Mill-700	Mill			CDWS-700-7	Wet Scrubber
				CDWS-700-8	Wet Scrubber
Oven-700	Oven			CDWS-700- 9/10	2 Wet Scrubbers
HoodsDrums-700-11	Drums/Material Handling			CDWS-700-11	Wet Scrubber
Fines-700-12	Material Handling			CDBH-700-12	Baghouse
CenVac-700-13	Vacuum			CDBH-700-13	Baghouse
CenVac 700-17	Vacuum			CDBH-700-17	Baghouse
Cooler-700-18	Cooler			CDBH-700-18	Baghouse
EU-COATER	Cereal Line #3 and 4 Coaters			Coater Cooler-700-14	Cooler
		Coater Dryer-700-15	Dryer	CDRC-700-15	Wet Rotoclone
		Coater Drum-700-16	Coating Drum	CDWS-700-16	Wet Scrubber

EU-101N	Cereal Line #4	Cooker-800-1	Cooker	CDWS-800-1	Wet Scrubber
		Mod9Dryer-800-2	Dryer	CDWS-800-2	Wet Scrubber
		Mill-800	Mill	CDWS-800-3/4	2 Wet Scrubbers
		Mod12Dryer-800-5	Dryer	CDWS-800-5	Wet Scrubber
		Oven-800-6	Oven	CDWS-800-6	Wet Scrubber
		HoodsDrums-800-8	Drums/Material Handling	CDWS-800-8	Wet Scrubber
		RiceTemp-800-9	Material Handling	CDBH-800-9	Baghouse
		Fines-800-18	Material Handling	CDBH-800-18	Baghouse
		CenVac-800-19	Vacuum	CDBH-800-19	Baghouse
		CenVac-800-20	Vacuum	CDBH-800-20	Baghouse
		FFCooler-800-22	Cooler	CDBH-800-22	Baghouse
		CookerPlenum-800-23	Cooker Steam Plenum	NA	NA
		Mod12Cool-800-24	Cooler	CDWS-800-24	Wet Scrubber
		CenVac-800-25	Vacuum	CDBH-800-25	Baghouse
Mod7Cooler-800-26	Cooler	CDRC-800-26	Wet Rotoclone		
Kone-800-27	Packing Lines	CDRC-800-27	Wet Rotoclone		
FG-BOILERS	2 Boilers	Boiler-1	Boiler	None	None
		Boiler-2	Boiler	None	None
EU-BULKSTORE	Bulk Storage	Silo-1	Silo	CDCF-1	Cartridge Filter
		Silo-2	Silo	CDCF-2	Cartridge Filter
		Silo-3	Silo	CDCF-3	Cartridge Filter
		Silo-4	Silo	CDCF-4	Cartridge Filter
		Silo-5	Silo	CDCF-5	Cartridge Filter
		Silo-6	Silo	CDCF-6	Cartridge Filter
		Silo-7	Silo	CDCF-7	Cartridge Filter
		Silo-8	Silo	CDCF-8	Cartridge Filter
		Silo-9	Silo	CDCF-9	Cartridge Filter
		Silo-10	Silo	CDCF-10	Cartridge Filter
		Silo-11	Silo	CDCF-11	Cartridge Filter
		Silo-12	Silo	CDCF-12	Cartridge Filter
		Silo-13	Silo	CDCF-13	Cartridge Filter
		Silo-14	Silo	CDCF-14	Cartridge Filter
		Silo-15	Silo	CDCF-15	Cartridge Filter
		Silo-16	Silo	CDCF-16	Cartridge Filter
		Silo-17	Silo	CDCF-17	Cartridge Filter
		Silo-18	Silo	CDCF-18	Cartridge Filter
		Silo-19	Silo	CDCF-19	Cartridge Filter
		Silo-20	Silo	CDCF-20	Cartridge Filter
		Silo-21	Silo	CDCF-21	Cartridge Filter
		Silo-22	Silo	CDCF-22	Cartridge Filter
		Silo-23	Silo	CDCF-23	Cartridge Filter
		Silo-24	Silo	CDCF-24	Cartridge Filter
		Silo-25	Silo	CDCF-25	Cartridge Filter
		Silo-26	Silo	CDCF-26	Cartridge Filter
		Silo-27	Silo	CDCF-27	Cartridge Filter
		Silo-28	Silo	CDCF-28	Cartridge Filter
		Silo-29	Silo	CDCF-29	Cartridge Filter
		Silo-30	Silo	CDCF-30	Cartridge Filter
		Silo-31	Silo	CDCF-31	Cartridge Filter
		Silo-32	Silo	CDCF-32	Cartridge Filter
		BranRec-39	Receiver	CDBH-39	2 Parallel Baghouses
		ComboRec-40	Receiver	CDBH-40	Baghouse
Fines-43	Material Handling	CDBH-43	Baghouse		

		Rec-44	Vacuum	CDBH-44	Baghouse
		Fines-48	Material Handling	CDRC-48	Wet Rotoclone
EU-SUGARSHACK	Bulk Storage	Silo-35	Silo	CDCF-35	Cartridge Filter
		Silo-36	Silo	CDCF-36	Cartridge Filter
		Silo-37	Silo	CDCF-37	Cartridge Filter
		Silo-38	Silo	CDCF-38	Cartridge Filter
		SugRec-45	Receiver	CDBH-45	Baghouse
		SugRec-46	Vacuum	CDBH-46	Baghouse
		SugRec-47	Receiver	CDBH-47	Baghouse
FG-SANITATION	EU-CLEANERS	Sanitation-1	Solvent Usage	None	None
	EU-SANITIZERS	Sanitation -2	Solvent Usage	None	None

APPENDIX B

Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in Tables for EU-102N, EU-101S, EU-BULKSTORE, EU-SUGARSHACK, EU-101N, FG-BOILERS, and EU-DXCOATDRY.

1. The permittee shall record the results of a monthly (daily for FG-BOILERS when firing oil) 6-minute visible emission check of each stack (See Appendix C). Visible emissions shall be recorded as "observed" or "not observed".
2. The visible emission check shall simply verify the presence or absence of visible emissions and need not follow the procedures specified in Federal Reference Test Method 9. Therefore, multiple stacks may be observed simultaneously.
3. Each visible emission check shall be taken during maximum routine operating conditions during daylight hours.
4. If visible emissions are observed, the permittee shall immediately implement the Malfunction Abatement Plan that is approved by the AQD District Supervisor.

APPENDIX D

Preventative Maintenance Plans

The permittee submitted an acceptable preventative maintenance plan for the facility. The plan incorporates all of the emission units listed in the Permit that requires preventative maintenance. Any proposed modifications to the plan shall be submitted to and approved by the AQD District Supervisor.