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

December 4, 2024

PERMIT TO INSTALL
206-08K

ISSUED TO
Keebler Company

LOCATED AT
310 28th Street SE
Grand Rapids, Michigan 49548

IN THE COUNTY OF
Kent

STATE REGISTRATION NUMBER
B4395

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: **September 19, 2024**	
DATE PERMIT TO INSTALL APPROVED: **December 4, 2024**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

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

GENERAL CONDITIONS

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

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

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

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

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

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

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal 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 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
EUOVEN1B	An 11.58 MMBtu/hr natural gas fired oven used in the baking process which emits VOCs.	01-01-2011 / 02-20-2019 / 09-27-2022	FGPRECONTROL FGOVENS
EUOVEN2	A 9.6 MMBtu/hr natural gas fired oven used in the baking process which emits VOCs.	01-01-1986 / 01-01-2010 / 02-20-2019 / 09-27-2022	FGPRECONTROL FGOVENS
EUOVEN4	A 15.0 MMBtu/hr natural gas fired oven used in the baking process which emits ammonia and VOCs.	01-01-1998 / 03-16-18 / 02-20-2019 / 09-27-2022	FGPRECONTROL FGOVENS
EUOVEN5	A 15.0 MMBtu/hr natural gas fired oven used in the baking process which emits ammonia and VOCs.	01-01-1976 / 03-16-18 / 02-20-2019 / 09-27-2022	NA
EUOVEN6	A 15.7 MMBtu/hr natural gas fired oven used in the baking process which emits ammonia and VOCs.	01-01-2006 / 03-16-2018 / 02-20-2019 / 01-14-2021 / 09-27-2022	FGPRECONTROL FGOVENS
EUOVEN7	An 11.0 MMBtu/hr natural gas fired oven used in the baking process. Emissions are VOC in nature.	01-01-1979 / 02-15-13 / 02-20-2019 / 09-27-2022	FGPRECONTROL FGOVENS
EUDEHUM	A desiccant dryer for facility's compressed air supply with a 0.4 MMBtu/hr direct-fired natural gas burner for desiccant regeneration.	01-01-2011	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.

EUDEHUM
EMISSION UNIT CONDITIONS

DESCRIPTION

A desiccant dryer for facility's compressed air supply with a 0.4 MMBtu/hr direct-fired natural gas burner for desiccant regeneration.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EUDEHUM. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of EUDEHUM shall not exceed 0.4 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (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))**

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

EUOVEN5
EMISSION UNIT CONDITIONS

DESCRIPTION

A 15.0 MMBtu/hr natural gas fired oven used in the baking process.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUOVEN5. This includes detaching the fuel lines from the emission unit. **(R 336.1201)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

FLEXIBLE GROUP SPECIAL CONDITIONS

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
FGPRECONTROL	Consists of all operational ovens, and applies only before the catalytic oxidizers are operational.	EUOVEN1B EUOVEN2 EUOVEN4 EUOVEN6 EUOVEN7
FGOVENS	Consists of all operational ovens and the two catalytic oxidizers, and applies only after the catalytic oxidizers are operational.	EUOVEN1B EUOVEN2 EUOVEN4 EUOVEN6 EUOVEN7

FGPRECONTROL
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Consists of all operational ovens, and applies only before the catalytic oxidizers are operational.

Emission Unit: EUOVEN1B, EUOVEN2, EUOVEN4, EUOVEN6, EUOVEN7

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	25.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN1B	SC VI.3	R 336.1225, R 336.1702(a)
2. VOCs	25.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN2	SC VI.3	R 336.1225, R 336.1702(a)
3. Acetoin (CAS No. 513-86-0	0.8 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN2	SC VI.3	R 336.1225(1)
4. VOCs	5.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN4	SC VI.3	R 336.1225, R 336.1702(a)
5. Ammonia	9.3 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN4	SC VI.4	R 336.1224, R 336.1225
6. VOCs	29.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN6	SC VI.3	R 336.1225, R 336.1702(a)
7. Ammonia	21.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN6	SC VI.4	R 336.1224, R 336.1225
8. VOCs	25.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUOVEN7	SC VI.3	R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste food ingredient and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1702(a))**

2. The permittee shall handle all VOC containing food ingredients 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 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of EUOVEN1B shall not exceed 11.58 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

2. The heat input capacity of EUOVEN2 shall not exceed 9.6 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

3. The heat input capacity of EUOVEN4 shall not exceed 15.0 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

4. The heat input capacity of EUOVEN6 shall not exceed 15.7 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

5. The heat input capacity of EUOVEN7 shall not exceed 11.0 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

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 food ingredient 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)**

2. Upon request from the AQD District Supervisor, the permittee shall verify the emittance rate from FGPRECONTROL for 2,3 pentanedione (CAS No. 600-14-6), glycerin (CAS No. 56-81-5), and triacetin (CAS No. 102-76-1), 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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, 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 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), R 336.1225, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each VOC-containing food ingredient used in FGPRECONTROL. The permittee shall maintain the following information:
   a) Food ingredient ID Number.
   b) The amount of each VOC constituent contained within the food ingredient, in percent by weight.
   c) VOC content of the food ingredient, in percent by weight.
   d) Content of the following compound in each food ingredient in percent by weight:
      i. 2,3 pentanedione (CAS No. 600-14-6),
      ii. propylene glycol (CAS No. 57-55-6),
      iii. glycerin (CAS No. 56-81-5),
      iv. triacetin (CAS No. 102-76-1).

   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 336.1205(3), R 336.1225, R 336.1702(a))**

3. The permittee shall keep the following information on a monthly basis for FGPRECONTROL:
   a) Amount of each VOC-containing food ingredient used.
   b) Effective VOC content of each food ingredient used. The effective VOC content shall be calculated using the following equation:

      $VOC_{eff} = E + \sum_{i=1}^{n}(PGi * Ri)$

      Where:

      VOC_{eff} = Effective VOC content of the Food ingredient (%)

      E = Percent content of all VOC constituents besides those listed in SC VI.2d (%)

      PG_i = Percent of each compound listed in SCVI.2d of food ingredient (%)

      R_i = Emittance rate of each compound listed in SCVI.2d (%)

      The emittance rate (R_i) for each compound shall be as follows.
      i. 2,3 pentanedione (CAS No. 600-14-6) – 15%,
      ii. propylene glycol (CAS No. 57-55-6) – 15%,
      iii. glycerin (CAS No. 56-81-5) – 2%,
      iv. triacetin (CAS No. 102-76-1) – 1%,
      v. All others – 100%

   c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month as calculated using the following equation:

      $$VOC_m = \left[\sum_{i=1}^{n}(M_i \times VOC_{eff_i})\right] \div 2000 + C$$

      Where:

      VOC_m = FGPRECONTROL monthly VOC emission rate in tons per month

      M_i = Food ingredient usage, in pounds per month, for food ingredient i

      $VOC_{eff,\ i}$ = Effective VOC content (%) for food ingredient i

      C = Potential VOC emissions, in tons per month, from natural gas combustion

      n = Total number of food ingredients 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.

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

Where:

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

$VOC_{m,i}$ = FGPRECONTROL monthly VOC emission rate in tons per month for month i

e) The permittee shall keep the following information on calendar month basis for FGPRECONTROL:
   a) The amount of each acetoin (CAS No. 513-86-0) containing food ingredient used.
   b) The acetoin (CAS No. 513-86-0) content, in weight percent, of each food ingredient used.
   c) The acetoin (CAS No. 513-86-0) mass emission calculations determining the monthly emission rate in tons per calendar month.
   d) The acetoin (CAS No. 513-86-0) 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. **(R 336.1225, R 336.1702(a))**

4. The permittee shall keep the following information on a monthly basis for FGPRECONTROL:
   a) The amount of ammonium bicarbonate used.
   b) Ammonia mass emission calculations determining the monthly emission rate in tons per calendar month, as calculated using the following equation:

$$NH_{3m} = (M \text{ x } 0.2154) \div 2000$$

Where:

NH_{3m} = FGPRECONTROL monthly ammonia emission rate in tons per calendar month

M = Ammonium bicarbonate usage in pounds per month

   c) Ammonia 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, as calculated using the following equation:

$$NH_{3a} = \left[\sum_{i=1}^{12} (NH_3)_{mi}\right]$$

Where:

NH_{3a} = FGPRECONTROL annual emission rate in tons per 12-month rolling time period

$NH_{3m,i}$ = FGPRECONTROL monthly ammonia emission rate in tons per calendar month for month i

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 336.1224, R 336.1225)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-OV1B-1/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-OV1B-2/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-OV1B-3/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-OV1B-4/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-OV1B-5/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-OV1B-6/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-OV1B-7/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
8. SV-OV1B-8/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
9. SV-OV1B-9/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
10. SV-OV1B-10/11	8.0	25.8	R 336.1225, 40 CFR 52.21(c) & (d)
11. SV-OV1B-11/11	10.0	19.5	R 336.1225, 40 CFR 52.21(c) & (d)
12. SV-OV2-1/7	13.8	25.6	R 336.1225, 40 CFR 52.21(c) & (d)
13. SV-OV2-2/7	13.8	25.6	R 336.1225, 40 CFR 52.21(c) & (d)
14. SV-OV2-3/7	13.8	27.6	R 336.1225, 40 CFR 52.21(c) & (d)
15. SV-OV2-4/7	13.8	25.6	R 336.1225, 40 CFR 52.21(c) & (d)
16. SV-OV2-5/7	13.8	25.6	R 336.1225, 40 CFR 52.21(c) & (d)
17. SV-OV2-6/7	13.8	27.6	R 336.1225, 40 CFR 52.21(c) & (d)
18. SV-OV2-7/7	13.8	25.6	R 336.1225, 40 CFR 52.21(c) & (d)
19. SV-OV4-1/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
20. SV-OV4-2/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
21. SV-OV4-3/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
22. SV-OV4-4/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
23. SV-OV4-5/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
24. SV-OV4-6/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
25. SV-OV4-7/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
26. SV-OV4-8/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
27. SV-OV4-9/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
28. SV-OV4-10/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
29. SV-OV4-11/11	12	43.1	R 336.1225, 40 CFR 52.21(c) & (d)
30. SV-OV6-2/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
31. SV-OV6-3/11	12	30.1	R 336.1225, 40 CFR 52.21(c) & (d)
32. SV-OV6-4/11	12	30.1	R 336.1225, 40 CFR 52.21(c) & (d)
33. SV-OV6-5/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
34. SV-OV6-6/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
35. SV-OV6-7/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
36. SV-OV6-8/11	12	22.6	R 336.1225, 40 CFR 52.21(c) & (d)
37. SV-OV6-9/11	12	30.1	R 336.1225, 40 CFR 52.21(c) & (d)
38. SV-OV6-10/11	12	30.1	R 336.1225, 40 CFR 52.21(c) & (d)
39. SV-OV6-11/11	12	41.6	R 336.1225, 40 CFR 52.21(c) & (d)
40. SV-OV7-1/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
41. SV-OV7-2/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
42. SV-OV7-3/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
43. SV-OV7-4/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
44. SV-OV7-5/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
45. SV-OV7-6/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
46. SV-OV7-7/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
47. SV-OV7-8/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
48. SV-OV7-9/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
49. SV-OV7-10/12	12	39.6	R 336.1225, 40 CFR 52.21(c) & (d)
50. SV-OV7-11/12	12	48.0	R 336.1225, 40 CFR 52.21(c) & (d)
51. SV-OV7-12/12	12	59.0	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal.[1] **(R 336.1225(4))**

2. After the initial commencement of operation of the catalytic oxidizers in FGOVENS, the permittee shall cease operating EUOVEN1B, EUOVEN2, EUOVEN4, EUOVEN6, and EUOVEN7 under the conditions set out in FGPRECONTROL, and begin operation under the conditions set out in FGOVENS. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. **(R 336.1225, R 336.1702(a), R 336.1910)**

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

FGOVENS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Consists of five natural gas fired ovens and two catalytic oxidizers, used in the baking process. This flexible group applies only after the catalytic oxidizers are operational.

Emission Unit: EUOVEN1B, EUOVEN2, EUOVEN4, EUOVEN6, EUOVEN7

POLLUTION CONTROL EQUIPMENT

Two catalytic oxidizers (CATOX1, CATOX2) designed and operated to achieve 95% destruction of VOC emissions. Each operates at up to 6.5 MMBTU/hr.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Ammonia	2.0 tpy	12 month rolling time period as determined at the end of each calendar month	FGOVENS	SC VI.6	R 336.1224, R 336.1225

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Ammonium Bicarbonate	114,000 lb/yr	12-month rolling time period as determined at the end of each calendar month	FGOVENS	SC VI.6	R 336.1205(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste food ingredient and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1702(a))**

2. The permittee shall handle all VOC containing food ingredients 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 336.1224, R 336.1225, R 336.1702(a))**

3. The permittee shall not operate FGOVENS unless a minimum temperature of 700 °F at the inlet of the catalytic oxidizer is maintained. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**

4. The permittee shall not operate FGOVENS unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted within 30 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:

   a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21)**

5. Within 180 days after initial commencement of operation of CATOX1 and CATOX2 the permittee shall either maintain a pressure drop between each enclosure and the adjacent area or maintain a facial velocity of 200 feet per minute though each natural draft opening of each oven enclosure on a 3-hour block average basis. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**

6. The permittee shall not operate FGOVENS without the use of CATOX1 and CATOX2 for more than 100 hours within the first 180 days of initial commencement of operation of CATOX1 and CATOX2. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. **(R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Except as described in SC III.6, the permittee shall not operate FGOVENS unless the catalytic oxidizes are installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor. Satisfactory operation of the catalytic oxidizers includes a minimum VOC capture efficiency of 100 percent (by weight), a minimum VOC destruction efficiency of 95 percent (by weight), a minimum catalyst bed inlet temperature of 700 °F, and a maximum space velocity of 37,500 inverse hours. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21, R 336.1910)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, acceptable to the AQD District Supervisor, a temperature monitoring device to continuously monitor and record the inlet and outlet temperatures of the catalytic oxidizer catalyst bed. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, acceptable to the AQD District Supervisor, a device to monitor and record the time and duration of each catalytic oxidizer bypass. **(R 336.1224, R 336.1702, R 336.1910, R 336.1911, 40 CFR 52.21)**

4. Within 180 days after initial commencement of operation of CATOX1 and CATOX2 the permittee shall not operate FGOVENS unless each enclosure is installed, maintained and operated in a satisfactory manner as specified in SC III.5. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. Satisfactory operation requires the following:
   a) The direction of the air flow at all times must be into the enclosure; and either
   b) The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
   c) There must be a pressure drop between the enclosure and the adjacent area.

   (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)

5. The heat input capacity of CATOX1 and CATOX2 shall not exceed a maximum of 6.5 MMBTU/hr each. **(R 336.1225, R 336.1702, 40 CFR 52.21(c)&(d))**

6. The heat input capacity of EUOVEN1B shall not exceed 11.58 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

7. The heat input capacity of EUOVEN2 shall not exceed 9.6 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

8. The heat input capacity of EUOVEN4 shall not exceed 15.0 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

9. The heat input capacity of EUOVEN6 shall not exceed 15.7 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

10. The heat input capacity of EUOVEN7 shall not exceed 11.0 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

V. TESTING/SAMPLING

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

1. Upon request from the AQD District Supervisor, the permittee shall verify the VOC content of any food ingredient 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)**

2. Upon request from the AQD District Supervisor, the permittee shall verify the emittance rate from FGOVENS for 2,3 pentanedione (CAS No. 600-14-6), glycerin (CAS No. 56-81-5), triacetin (CAS No. 102-76-1), and propylene glycol (CAS No. 57-55-6) 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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

3. Within 60 days of achieving the maximum production rate, but not later than 180 days after commencement of initial installation, the permittee shall verify and quantify VOC emission rates and destruction efficiency from the catalytic oxidizers by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. 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 336.1224, R 336.1225, R 336.1702)**

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), R 336.1225, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each VOC-containing food ingredient used in FGOVENS. The permittee shall maintain the following information:
   a) Food ingredient ID Number.
   b) The amount of each VOC constituent contained within the food ingredient, in percent by weight.

c) VOC content of the food ingredient, in percent by weight.
d) Content of the following compound in each food ingredient in percent by weight:
   i. 2,3 pentanedione (CAS No. 600-14-6),
   ii. propylene glycol (CAS No. 57-55-6),
   iii. glycerin (CAS No. 56-81-5),
   iv. triacetin (CAS No. 102-76-1),

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 336.1205(3), R 336.1225, R 336.1702(a))**

3. The permittee shall keep the following information on a monthly basis for FGOVENS:
   a) Amount of each VOC-containing food ingredient used.
   b) Effective VOC content of each food ingredient used. The effective VOC content shall be calculated using the following equation:

$VOC_{eff} = E + \sum_{i=1}^{n}(PGi * Ri)$

Where:

VOC_{eff} = Effective VOC content of the Food ingredient (%)

E = Percent content of all VOC constituents besides those listed in SC VI.2d (%)

PG_i = Percent of each compound listed in SCVI.2d of food ingredient (%)

R_i = Emittance rate of each compound listed in SCVI.2d (%)

The emittance rate (R_i) for each compound shall be as follows.
   i. 2,3 pentanedione (CAS No. 600-14-6) – 15%,
   ii. propylene glycol (CAS No. 57-55-6) – 15%,
   iii. glycerin (CAS No. 56-81-5) – 2%,
   iv. triacetin (CAS No. 102-76-1) – 1%,
   v. All others – 100%

   c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month as calculated using the following equation:

$$VOC_m = \left[\sum_{i=1}^{n}(M_i \times VOC_{eff_i})\right] \div 2000 + C$$

Where:

VOC_m = FGOVENS monthly VOC emission rate in tons per month

M_i = Food ingredient usage, in pounds per month, for food ingredient i

$VOC_{eff,\,i}$ = Effective VOC content (%) for food ingredient i

C = Potential VOC emissions, in tons per month, from natural gas combustion

n = Total number of food ingredients 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.

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

Where:

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

$VOC_{m,i}$ = FGOVENS monthly VOC emission rate in tons per month for month i

   e) Upon installation of CATOX1 and CATOX2, annual VOC emission calculations shall be the cumulative emission rate of VOCs during the first 12-months, and the annual emission rate of VOCs thereafter, 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. **(R 336.1225, R 336.1702(a))**

4. The permittee shall continuously monitor and record, in a satisfactory manner acceptable to the AQD District Supervisor, the inlet and outlet temperatures of the catalytic oxidizer catalyst bed. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910, 40 CFR 52.21)**

5. The permittee shall record the time and duration of each catalytic oxidizer bypass. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.1911, 40 CFR 52.21)**

6. The permittee shall keep, in a satisfactory manner, the following information on a monthly basis for FGOVENS:
   a) The total amount, in pounds, of all ammonium bicarbonate processed, per calendar month.
   b) The total amount, in pounds, of all ammonium bicarbonate processed, per 12-month rolling time period as determined at the end of each calendar month.
   c) Ammonia mass emission calculations determining the monthly emission rate in tons per calendar month, as calculated using the following equation:

   $$NH_{3m} = (M \ x \ 0.2154) \div 2000$$

   Where:
   NH_{3m} = FGOVENS monthly ammonia emission rate in tons per calendar month
   M = Ammonium bicarbonate usage in pounds per month
   d) Ammonia 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, as calculated using the following equation:

   $$NH_{3a} = \left[\sum_{i=1}^{12} (NH_3)_{m,i}\right]$$

   Where:
   NH_{3a} = FGOVENS annual emission rate in tons per 12-month rolling time period
   $(NH3)_{m,i}$ = FGOVENS monthly ammonia emission rate in tons per calendar month for month i

   The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205)**

7. Within 180 days of initial commencement of operation of CATOX1 and CATOX2 the permittee shall monitor and record, in a satisfactory manner, the following:
   a) The direction of air flow into each enclosure at all times; and either
   b) The facial velocity of air flow through all natural draft openings above the facial velocity limit; or
   c) The pressure drop at or above the pressure drop limit specified in the MAP.

   Data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep records of the 3-hour block average of the facial velocity or pressure drop. The permittee shall keep all records on file and make them available to the Department upon request. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. **(R 336.1702, R 336.1224, R 336.1225)**

VII. REPORTING

1. Within 30 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 the initial installation of the catalytic oxidizers. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCATOX1	52	60	R 336.1224 R 336.1225 40 CFR 52.21(c)&(d)
2. SVCATOX2	52	60	R 336.1224 R 336.1225 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal.[1] **(R 336.1225(4))**

2. Prior to the initial commencement of operation of the catalytic oxidizers in FGOVENS, the permittee shall operate EUOVEN1B, EUOVEN2, EUOVEN4, EUOVEN6, and EUOVEN7 under the conditions set out in FGPRECONTROL. After the initial commencement of operation of the catalytic oxidizers, the permittee shall operate EUOVEN1B, EUOVEN2, EUOVEN4, EUOVEN6, and EUOVEN7 under the conditions set out in FGOVENS. Initial commencement of operation shall be considered to be the time when the oxidizers are first used to control emissions for production. **(R 336.1225, R 336.1702(a), R 336.1910)**

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

FGFACILITY CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	Less than 90.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(3)
2. VOCs	2090 lb/day	Calendar day	FGFACILITY	SC VI.2	R 336.1205(1)(a)
3. Benzaldehyde (CAS No. 100-52-7)	1.1 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1225(2)
4. Acetaldehyde (CAS No. 75-07-0)	0.9 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1225(2)
5. Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(3)
6. Aggregate HAPs	Less than 22.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.5	R 336.1205(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material, as received and as applied, using manufacturer's formulation data. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 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 the following information on a daily basis for FGFACILITY:
   a) Amount of each VOC-containing food ingredient used, in gallons or pounds.
   b) Where applicable, gallons or pounds of each VOC-containing food ingredient reclaimed.

   c) VOC emission calculations determining the daily emission rate in pounds per calendar day using the following equation:

$$VOCd = \left[\sum_{i=1}^{n}(Di \ \ x \ VOCi)\right] + (EVd)$$

   Where:

   VOC_d = Daily VOC emission rate in pounds per calendar day

   D_i = Food ingredient usage, in pounds per day, for food ingredient i

   $VOCi$ = VOC content for food ingredient i.

   EV_d = Daily VOC emissions, in pounds per calendar day, from all activities other than food ingredient usage.

   n = Total number of food ingredients used

   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. **(R 336.1205(3))**

3. The permittee shall keep the following information on a monthly basis for FGFACILITY:
   a) The amount of VOC emissions, in tons per calendar month, from all VOC-containing food ingredients used.
   b) The amount of VOC emissions, in tons per calendar month, from all activities other than food ingredient usage.
   c) The amount of VOC emissions, in tons per calendar month, from all activities (including food ingredient usage) combined.
   d) The amount of VOC emissions, in tons per 12-month rolling time period as determined at the end of each calendar month, from all activities combined.

   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. **(R 336.1205(3))**

4. The permittee shall keep the following information on a monthly basis for FGFACILITY:
   a) The amount of each benzaldehyde (CAS No. 100-52-7) and acetaldehyde (CAS No. 75-07-0) containing food ingredient used.
   b) The benzaldehyde (CAS No. 100-52-7) and acetaldehyde (CAS No. 75-07-0) content, in weight percent, of each food ingredient used.
   c) Benzaldehyde (CAS No. 100-52-7) and acetaldehyde (CAS No. 75-07-0) mass emission calculations determining the monthly emission rate in tons per calendar month.
   d) Benzaldehyde (CAS No. 100-52-7) and acetaldehyde (CAS No. 75-07-0) 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))**

5. The permittee shall keep the following information on a calendar month basis for FGFACILITY:
   a) Gallons or pounds of each HAP containing material used.
   b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
   c) HAP content, in pounds per gallon or percent by weight, of each HAP containing material used.
   d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
   e) Individual and aggregate HAP emission calculations determining the cumulative emission rate of each during the first 12-months and the annual emission rate of each thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(3))**

   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. **(R 336.1205(3))**

VII. REPORTING

1. NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. NA

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