

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

June 17, 2021

**PERMIT TO INSTALL**  
270-96D

**ISSUED TO**  
The Hillshire Brands Company

**LOCATED AT**  
8300 96<sup>th</sup> Avenue  
Zeeland, Michigan 49464

**IN THE COUNTY OF**  
Ottawa

**STATE REGISTRATION NUMBER**  
A5805

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:<br><b>May 28, 2021</b> |            |
| DATE PERMIT TO INSTALL APPROVED:<br><b>June 17, 2021</b>                        | SIGNATURE: |
| DATE PERMIT VOIDED:   | SIGNATURE: |
| DATE PERMIT REVOKED:  | SIGNATURE: |

## PERMIT TO INSTALL

### Table of Contents

|  |    |
|--|----|
| COMMON ACRONYMS .....                      | 2  |
| POLLUTANT / MEASUREMENT ABBREVIATIONS..... | 3  |
| GENERAL CONDITIONS .....                   | 4  |
| EMISSION UNIT SPECIAL CONDITIONS.....      | 6  |
| EMISSION UNIT SUMMARY TABLE .....          | 6  |
| FLEXIBLE GROUP SUMMARY TABLE .....         | 7  |
| FGWOODSMOKEOVENS .....                     | 8  |
| FGFACILITY CONDITIONS.....                 | 11 |

## COMMON ACRONYMS

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

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

### POLLUTANT / MEASUREMENT ABBREVIATIONS

|                  |  |
|------------------|--|
| acfm             | Actual cubic feet per minute                                     |
| BTU              | British Thermal Unit   |
| °C               | Degrees Celsius  |
| CO               | Carbon Monoxide  |
| CO <sub>2e</sub> | Carbon Dioxide Equivalent  |
| dscf             | Dry standard cubic foot  |
| dscm             | Dry standard cubic meter   |
| °F               | Degrees Fahrenheit   |
| gr               | Grains   |
| HAP              | Hazardous Air Pollutant  |
| Hg               | Mercury  |
| hr               | Hour   |
| HP               | Horsepower   |
| H <sub>2</sub> S | Hydrogen Sulfide   |
| kW               | Kilowatt   |
| lb               | Pound  |
| m                | Meter  |
| mg               | Milligram  |
| mm               | Millimeter   |
| MM               | Million  |
| MW               | Megawatts  |
| NMOC             | Non-Methane Organic Compounds                                    |
| NO <sub>x</sub>  | Oxides of Nitrogen   |
| ng               | Nanogram   |
| PM               | Particulate Matter   |
| PM10             | Particulate Matter equal to or less than 10 microns in diameter  |
| PM2.5            | Particulate Matter equal to or less than 2.5 microns in diameter |
| pph              | Pounds per hour  |
| ppm              | Parts per million  |
| ppmv             | Parts per million by volume                                      |
| ppmw             | Parts per million by weight                                      |
| psia             | Pounds per square inch absolute                                  |
| psig             | Pounds per square inch gauge                                     |
| scf              | Standard cubic feet  |
| sec              | Seconds  |
| SO <sub>2</sub>  | Sulfur Dioxide   |
| TAC              | Toxic Air Contaminant  |
| Temp             | Temperature  |
| THC              | Total Hydrocarbons   |
| tpy              | Tons per year  |
| µg               | Microgram  |
| µm               | Micrometer or Micron   |
| VOC              | Volatile Organic Compounds                                       |
| yr               | Year   |

## GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

## EMISSION UNIT SPECIAL CONDITIONS

### EMISSION UNIT SUMMARY TABLE

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

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s)) | Flexible Group ID    |
|------------------|--|----------------------|
| EUALKAR4A        | Alkar Batch Oven #4A meat smoking oven utilizing liquid smoke.                 | FGWOODSMOK<br>EOVENS |
| EUALKAR5A        | Alkar Batch Oven #5A meat smoking oven utilizing liquid smoke.                 | FGWOODSMOK<br>EOVENS |
| EUALK-P2BATCH13  | Alkar Batch Oven #13 (Formerly Alkar Batch Oven #1)                            | FGWOODSMOK<br>EOVENS |
| EUALK-P2BATCH14  | Alkar Batch Oven #14 (Formerly Alkar Batch Oven #2)                            | FGWOODSMOK<br>EOVENS |
| EUMAUR4          | Maurer Oven #4 (Formerly Maurer Oven #3)                                       | FGWOODSMOK<br>EOVENS |
| EUMAUR2          | Maurer Oven #2 (Formerly Maurer Oven #6)                                       | FGWOODSMOK<br>EOVENS |
| EUMAUR3          | Maurer Oven #3 (Formerly Maurer Oven #8)                                       | FGWOODSMOK<br>EOVENS |
| EUMAUR5          | Maurer Oven #5 (Formerly Maurer Oven #9)                                       | FGWOODSMOK<br>EOVENS |
| EUKSI-P2BATCH7   | KSI #7   | FGWOODSMOK<br>EOVENS |

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.

### FLEXIBLE GROUP SUMMARY TABLE

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

| <b>Flexible Group ID</b> | <b>Flexible Group Description</b>                                   | <b>Associated Emission Unit IDs</b>  |
|--------------------------|---|--|
| FGWOODSMOKEOVENS         | Meat smoking ovens utilizing either liquid smoke and/or wood smoke. | EUALKAR4A,<br>EUALKAR5A,<br>EUALK-P2BATCH13,<br>EUALK-P2BATCH14,<br>EUMAU4,<br>EUKSI-P2BATCH7,<br>EUMAU2,<br>EUMAU3,<br>EUMAU5 |

**FGWOODSMOKEOVENS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Meat smoking ovens utilizing either liquid smoke and/or wood smoke.

**Emission Unit:** EUALKAR4A, EUALKAR5A, EUALK-P2BATCH13, EUALK-P2BATCH14, EUMAUR4, EUKSI-P2BATCH7, EUMAUR2, EUMAUR3, EUMAUR5

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| <b>Pollutant</b> | <b>Limit</b>  | <b>Time Period / Operating Scenario</b> | <b>Equipment</b> | <b>Monitoring / Testing Method</b> | <b>Underlying Applicable Requirements</b> |
|------------------|---|---|------------------|------------------------------------|---|
| 1. PM            | 0.24 pounds per 1,000 pounds of exhaust gas, on a dry gas basis | Hourly                                  | FGWOODSMOKEOVENS | GC 13                              | R 336.1331                                |

**II. MATERIAL LIMIT(S)**

| <b>Material</b> | <b>Limit</b>        | <b>Time Period / Operating Scenario</b>                                      | <b>Equipment</b>                                 | <b>Monitoring / Testing Method</b> | <b>Underlying Applicable Requirements</b> |
|-----------------|---------------------|--|--|------------------------------------|---|
| 1. Wood chips   | 647.4 tons per year | 12-month rolling time period as determined at the end of each calendar month | FGWOODSMOKEOVENS except EUALKAR4A and EUALKAR5A  | SC VI.2                            | R 336.1205                                |
| 2. Liquid smoke | 510 tons per year   | 12-month rolling time period as determined at the end of each calendar month | FGWOODSMOKEOVENS, except EUALKAR4A and EUALKAR5A | SC VI.2                            | R 336.1205                                |
| 3. Liquid smoke | 7.5 tons per year   | 12-month rolling time period as determined at the end of each calendar month | EUALKAR4A and EUALKAR5A combined                 | SC VI.2                            | R 336.1205, R 336.1225                    |

4. The permittee shall not burn wood in EUALKAR4A or EUALKAR5A. (R 336.1205, R 336.1225)

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

NA

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702)
2. The permittee shall keep records of the following:
  - a. The total amount of liquid smoke, in pounds or tons, used on a monthly basis and 12-month rolling time period basis as determined at the end of each calendar month for all emission units under FGSMOKEOVENS except for EUALKAR4A and EUALKAR5A.
  - b. The total amount of wood chips, in pounds or tons, used on a monthly basis and 12-month rolling time period basis as determined at the end of each calendar month for FGSMOKEOVENS.
  - c. The total amount, in pounds or tons, of liquid smoke used in EUALKAR4A and EUALKAR5A combined, per 12-month rolling time period as determined at the end of each calendar month

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)

**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:

| <b>Stack &amp; Vent ID</b>      | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b>                              |
|---------------------------------|---|---|--|
| 1. SVALK-P2BATCH13 <sup>A</sup> | 24.0  | 36.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 2. SVALK-P2BATCH14 <sup>A</sup> | 24.0  | 36.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 3. SVMAUR2                      | 18.0  | 36.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 4. SVMAUR3A <sup>A</sup>        | 12.0  | 36.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 5. SVMAUR3B <sup>A</sup>        | 12.0  | 36.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 6. SVMAUR4 <sup>A</sup>         | 16.0  | 38.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |

| <b>Stack &amp; Vent ID</b>   | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b>                              |
|--|---|---|--|
| 7. SVMAUR5 <sup>A</sup>  | 12.0  | 42.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 8. SVKSI-P2BATCH7 <sup>A</sup>   | (11 X 16)   | 41.0                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 9. SVALKAR4A <sup>A</sup>  | 18  | 34.6                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| 10. SVALKAR5A <sup>A</sup>   | 18  | 34.6                                      | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d) |
| <sup>A</sup> These stacks are not required to discharge unobstructed vertically upwards (e.g. rain cap, horizontal discharge or downward discharge are acceptable along with vertical discharge) |   |   |  |

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## FGFACILITY CONDITIONS

### DESCRIPTION

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

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

| Pollutant            | Limit                | Time Period / Operating Scenario  | Equipment  | Monitoring / Testing Method | Underlying Applicable Requirements |
|----------------------|----------------------|---|------------|-----------------------------|------------------------------------|
| 1. CO <sub>2</sub> e | Less than 89,000 tpy | 12-month rolling time period as determined at the end of each calendar month. | FGFACILITY | SC VI.2                     | R 336.1205(1)(a),<br>R 336.1205(3) |
| 2. NO <sub>x</sub>   | Less than 70 tpy     | 12-month rolling time period as determined at the end of each calendar month. | FGFACILITY | SC VI.2                     | R 336.1205(1)(a),<br>R 336.1205(3) |
| 3. CO                | Less than 80 tpy     | 12-month rolling time period as determined at the end of each calendar month. | FGFACILITY | SC VI.2                     | R 336.1205(1)(a),<br>R 336.1205(3) |

#### II. MATERIAL LIMIT(S)

- The fuel usage for FGFACILITY shall not exceed the following limits per year based on a 12-month rolling time period as determined at the end of each calendar month:

| Material               | Limit                | Time Period / Operating Scenario   | Equipment                              | Testing / Monitoring Method | Underlying Applicable Requirements |
|------------------------|----------------------|--|--|-----------------------------|------------------------------------|
| a. Natural Gas         | 1,300 MMcf           | 12-month rolling time period as determined at the end of each calendar month | FGFACILITY                             | SC VI.4                     | R 336.1205(1)(a),<br>R 336.1205(3) |
| b. Wood chips          | 647.4 tons per year  | 12-month rolling time period as determined at the end of each calendar month | FGFACILITY                             | SC VI.4                     | R 336.1205(1)(a),<br>R 336.1205(3) |
| c. CO <sub>2</sub> gas | 10,000 tons per year | 12-month rolling time period as determined at the end of each calendar month | Sausage mixing equipment at FGFACILITY | SC VI.5                     | R 336.1205(1)(a),<br>R 336.1205(3) |

| <b>Material</b>   | <b>Limit</b>           | <b>Time Period / Operating Scenario</b>                                      | <b>Equipment</b>             | <b>Testing / Monitoring Method</b> | <b>Underlying Applicable Requirements</b> |
|-------------------|------------------------|--|------------------------------|------------------------------------|---|
| d. No. 2 Fuel Oil | 4,965 gallons per year | 12-month rolling time period as determined at the end of each calendar month | Diesel Engines at FGFACILITY | SC VI.4                            | R 336.1205(1)(a), R 336.1205(3)           |

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

NA

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a), R 336.1205(3))
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO<sub>2</sub>e, NO<sub>x</sub> and CO emission calculation records for FGFACILITY. 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 336.1205(3))
3. The permittee shall monitor, in a satisfactory manner, the fuel usage for all fuel burning processes located at FGFACILITY on a continuous basis. (R 336.1205(1)(a), R 336.1205(3))
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period fuel use records (includes wood chip, natural gas, and No. 2 Fuel Oil, each separately) for FGFACILITY. 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 336.1205(3))
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO<sub>2</sub> gas usage records for the sausage mixing equipment at FGFACILITY. 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 336.1205(3))

**VII. REPORTING**

NA

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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