

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

August 30, 2022

**PERMIT TO INSTALL**  
54-14A

**ISSUED TO**  
Morton Salt, Inc.

**LOCATED AT**  
180 6<sup>th</sup> Street  
Manistee, Michigan 49660

**IN THE COUNTY OF**  
Manistee

**STATE REGISTRATION NUMBER**  
B1824

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>August 23, 2022</b> |            |
| DATE PERMIT TO INSTALL APPROVED:<br><b>August 30, 2022</b>                         | SIGNATURE: |
| DATE PERMIT VOIDED:  | SIGNATURE: |
| DATE PERMIT REVOKED:   | SIGNATURE: |

## PERMIT TO INSTALL

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## COMMON ACRONYMS

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

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

### POLLUTANT / MEASUREMENT ABBREVIATIONS

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

## GENERAL CONDITIONS

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

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

## EMISSION UNIT SPECIAL CONDITIONS

### EMISSION UNIT SUMMARY TABLE

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

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))   | Installation Date /<br>Modification Date | Flexible Group ID |
|------------------|--|--|-------------------|
| EUPPELLPROD      | Water softener pellet production which includes pellet briquetting machines, a Rotex 522A vibratory screen, belt conveyors, bucket elevators, and an enclosed crusher to recycle pellets. Controlled by a 33,000 cfm baghouse known as the MAC dust collector. | 10/24/1989<br>04/15/1996                 | FGPELLPRETZEL     |
| EUPRETZELSALT    | Totally enclosed pretzel salt production system which includes: a main crusher, a pellet press, a screw conveyor, a recycle crusher, a bucket elevator, and a sizing screener. Controlled by a 33,000 cfm baghouse known as the MAC dust collector.            | 05/29/2014                               | FGPELLPRETZEL     |

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 SPECIAL CONDITIONS

### FLEXIBLE GROUP SUMMARY TABLE

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

| <b>Flexible Group ID</b> | <b>Flexible Group Description</b>   | <b>Associated Emission Unit IDs</b> |
|--------------------------|---|-------------------------------------|
| FGPELLPRETZEL            | Water softener pellet production line and a pretzel salt production line, which are both controlled by a common baghouse. | EUPPELLPROD<br>EUPRETZELSALT        |

**FGPELLPRETZEL  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

A totally enclosed pretzel salt production system which includes a main crusher, a pellet press, a screw conveyor, a recycle crusher, a bucket elevator, a sizing screener; and a water softener pellet production system which includes pellet briquetting machines, a Rotex 522A vibratory screen, belt conveyors, bucket elevators, and an enclosed crusher to recycle pellets.

**Emission Unit:** EUPELLPROD, EUPRETZELSALT

**POLLUTION CONTROL EQUIPMENT**

33,000 cfm baghouse known as the MAC dust collector.

**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>                     |
|------------------------------|----------------------------|---|--|--|---|
| PM                           | 0.014 gr/dscf <sup>2</sup> | Hourly                                  | FGPELLPRETZEL                                    | SC V.1<br>SC V.2<br>SC VI.1<br>SC VI.2 | 40 CFR 60.672(a)<br>R 336.1331(1)(b)                          |
| PM 10                        | 3.56 lbs/hr <sup>2</sup>   | Hourly                                  | FGPELLPRETZEL                                    | SC V.1<br>SC V.2<br>SC VI.1<br>SC VI.2 | 40 CFR 52.21(c) & (d)<br>R 336.1205(1)(a) & (3)<br>R 336.2001 |
| PM 2.5                       | 2.53 lbs/hr <sup>2</sup>   | Hourly                                  | FGPELLPRETZEL                                    | SC V.1<br>SC V.2<br>SC VI.1<br>SCVI.2  | 40 CFR 52.21(c) & (d)<br>R 336.1205(1)(a) & (3)<br>R 336.2001 |
| Visible Emissions (fugitive) | 7% opacity <sup>2</sup>    | 6-minute average                        | Openings in the building enclosing FGPELLPRETZEL | SC V.3<br>SC VI.4                      | 40 CFR 60.672(b) & (e)<br>R 336.1301(1)(b)                    |

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate FGPELLPRETZEL unless the baghouse is installed and operating properly. Satisfactory operation includes maintaining operating parameters within the ranges specified in the MAP. **(R 336.1910)**
2. Salt that is collected in and recovered from the baghouse shall be handled in a manner that minimizes the introduction of air contaminants to the outer air. **(R 336.1370)**

3. The permittee shall operate and maintain the baghouse with a differential pressure gauge. **(R 336.1301, R 336.1910)**
4. The compliant differential pressure range across the baghouse shall be included in the AQD approved MAP. This compliant differential pressure range shall be determined by performance testing. **(R 336.1910, R 336.1911(2)(b))**

**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))**

1. . No later than June 2023, the permittee shall verify PM, PM10, and PM2.5 emission rates from FGPELLPRETZEL, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, R 336.2802, 40 CFR 60.672, 40 CFR 60.675(b)(1))**

2. . The permittee shall verify PM, PM10, and PM2.5 emission rates from FGPELLPRETZEL, by testing at owner's expense, in accordance with Department requirements once every five years, unless an alternate testing schedule is approved by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, R 336.2802, 40 CFR 60.672, 40 CFR 60.675(b)(1))**

3. The permittee shall determine compliance with visible emissions from the building housing FGPELLPRETZEL, completed according to 40 CFR 60.675, using Method 9 observations every 5 years during performance testing. The duration of the observations is 30 minutes total for evaluation of visible emissions of each side of the building and roof. Compliance with the applicable fugitive emission limits must be based on the average of the five 6-minute averages. **(R 336.1301, 40 CFR 60.11, 40 CFR 60.675 (c)(3), 40 CFR 60.675(d), and 40 CFR Part 60, Subpart OOO, Tables 1 and 3)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the pressure drop across the baghouse on a daily basis when FGPELLPRETZEL is operating in a manner and with instrumentation acceptable to the AQD. **(R 336.1910, R 336.1911(2)(b))**
2. The permittee shall conduct and document 30-minute visible emissions observations using EPA Method 22, on a quarterly basis from the stack when FGPELLPRETZEL is operating. If during the observation there are any visible emissions detected, the problem contributing to visible emissions shall be corrected within 24 hours, and the permittee shall re-perform the non-certified visible emissions observation, and document whether there are no longer visible emissions observed when FGPELLPRETZEL is operating. **(40 CFR 60.674(c))**
3. The permittee shall record each visible emission observation from the stack, including the date and any corrective actions taken, in a written or electronic logbook. The permittee shall keep these records on file at the facility and make them available to the AQD upon request. **(40 CFR 60.676(b)(1))**

## **VII. REPORTING**

1. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
3. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5), 40 CFR 60.676(f))**

## **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> |
|----------------------------|---|---|---|
| SV-PELLPRETZ               | 32 x 32   | 51  | <b>R 336.1331</b>                         |

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the Standards of Performance for Nonmetallic Mineral Processing Plants, as specified in 40 CFR Part 60, Subpart A and Subpart OOO. **(40 CFR Part 60, Subparts A and OOO)**

### **Footnotes:**

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