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

AUGUST_12, 2020

PERMIT TO INSTALL 94-20

ISSUED TO CARGILL SALT, INC

LOCATED AT 916 SOUTH RIVERSIDE AVENUE ST. CLAIR, MICHIGAN 48079

> IN THE COUNTY OF ST. CLAIR

STATE REGISTRATION NUMBER A6240

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:

August 6, 2020

DATE PERMIT TO INSTALL APPROVED: August 12, 2020	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm BTU °C	Actual cubic feet per minute British Thermal Unit Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
	Hazardous Air Pollutant
Hg	Mercury
hr HP	Hour Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	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
SO₂ TAC	Sulfur Dioxide
	Toxic Air Contaminant Temperature
Temp THC	Total Hydrocarbons
tpy	Tons per year
	Microgram
μg 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.

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- 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 Description	
Emission Unit ID	(Including Process Equipment & Control Device(s))	Flexible Group ID
EUTEMPBOILER1	Temporary, portable boiler. Fuel: Natural gas. Maximum heat input capacity of 98.4 MMBTU/hr. Cleaver Brooks Model NOS-2A-67. Boiler is equipped with low NOx burners.	FGTEMPBOILERS
EUTEMPBOILER2	Temporary, portable boiler. Fuel: Natural gas. Maximum heat input capacity of 98.4 MMBTU/hr. Cleaver Brooks Model NOS-2A-67. Boiler is equipped with low NOx burners.	FGTEMPBOILERS

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.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGTEMPBOILERS	Two temporary, portable boilers.	EUTEMPBOILER1,
	Fuel: Natural gas.	EUTEMPTBOILER2
	Maximum heat input capacity of 98.4 MMBTU/hr (each boiler).	
	Cleaver Brooks Model NOS-2A-67.	
	Both boilers are equipped with low NOx burners.	

FGTEMPBOILERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two, temporary, portable boilers. Fuel: Natural gas. Maximum heat input capacity of 98.4 MMBTU/hr (each boiler). Cleaver Brooks Model NOS-2A-67.

Emission Unit: EUTEMPBOILER1, EUTEMPTBOILER2

POLLUTION CONTROL EQUIPMENT

Both boilers are equipped with low NOx burners.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in FGTEMPBOILERS. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate either boiler in FGTEMPBOILERS for more than a total of 4320 hours. (R 336.1205, R 336.1224, R 336.1225)
- 2. The permittee shall not operate FGTEMPBOILERS unless the low NOx burners are installed and operating properly. Proper operation includes operating and maintaining the boilers in accordance with the boiler manufacturer's written recommendations. (R 336.1205, R 336.1225)
- 3. The permittee shall not operate FGTEMPBOILERS simultaneously with the existing 248.5 MMBTU/hr natural gas-fired boiler (EUBOILER15), except for initial test operation ("shakedown") of FGTEMPBOILERS or initial test operation ("shakedown") of EUBOILER15 after it has been repaired. (R 336.1205)

IV. DESIGN/EQUIPMENT PARAMETER(S)

The maximum design heat input capacity for each boiler of FGTEMPBOILERS shall not exceed 98.4 MMBtu per hour on a fuel heat input basis. (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))

V. <u>TESTING/SAMPLING</u>

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))

 The permittee shall keep records of the monthly and total hours of operation for each boiler of FGTEMPBOILERS. Record shall be completed by the last day of the month, for the preceding month. The permittee shall keep all records and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225)

VII. <u>REPORTING</u>

 The permittee shall provide written notification of when the boilers are placed on the site and when they are removed from the site, to demonstrate the temporary status of each boiler in FGTEMPBOILERS. The permittee shall submit this notification to the AQD District Supervisor within 15 days of placement or removal. (R 336.1205, 40 CFR Part 60 Subpart Dc, 40 CFR Part 63 Subpart JJJJJJ)

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:

St	ack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVT	EMPBOILER1	48	21.5	R 336.1225,
				40 CFR 52.21(c) and (d)
2. SVT	EMPBOILER2	48	21.5	R 336.1225,
				40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

- 1. If either boiler of FGTEMPBOILERS remains on-site for more than 180 consecutive days, the permittee shall comply with the applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to the boiler. **(40 CFR Part 60 Subparts A & Dc)**
- If either boiler of FGTEMPBOILERS remains on-site for more than 12 consecutive months, the permittee shall comply with the applicable provisions of the federal National Emissions Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and JJJJJJ, as they apply to FGTEMPBOILERS. (40 CFR Part 63 Subpart JJJJJJ)