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

November 5, 2021

PERMIT TO INSTALL 88-21

ISSUED TO Grand Haven Board of Light & Power

LOCATED AT 1231 North Third Street Grand Haven, Michigan 49417

IN THE COUNTY OF

Ottawa

STATE REGISTRATION NUMBER B1976

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:

March 12, 2021

DATE PERMIT TO INSTALL APPROVED: November 5, 2021	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 SPECIAL CONDITIONS	7
FLEXIBLE GROUP SUMMARY TABLE	7
FGSNOWMELT	8
FGENGINES	10
FGFACILITY CONDITIONS	14

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
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm MM	Millimeter Million
MW	
NMOC	Megawatts 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
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
hð	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 (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-BOILER1	4 MMBTU/hr natural gas-fired boiler to provide hot water for building heat and the snowmelt system.	11/2020	FGSNOWMELT
EU-BOILER2	4 MMBTU/hr natural gas-fired boiler to provide hot water for building heat and the snowmelt system.	11/2020	FGSNOWMELT
EU-BOILER3	4 MMBTU/hr natural gas-fired boiler to provide hot water for building heat and the snowmelt system.	11/2020	FGSNOWMELT
EU-BOILER4	4 MMBTU/hr natural gas-fired boiler to provide hot water for building heat and the snowmelt system.	11/2020	FGSNOWMELT
EU-BOILER5	4 MMBTU/hr natural gas-fired boiler to provide hot water for building heat and the snowmelt system.	11/2020	FGSNOWMELT
EU-ENGINE1	3,500 brake-horsepower (bhp) (2.5 MW) natural gas-fired reciprocating internal combustion engine (RICE) equipped with an oxidation catalyst to reduce CO and VOC emissions.	TBD	FGENGINES
EU-ENGINE2	3,500 bhp (2.5 MW) natural gas-fired RICE equipped with an oxidation catalyst to reduce CO and VOC emissions.	TBD	FGENGINES
EU-ENGINE3	3,500 bhp (2.5 MW) natural gas-fired RICE equipped with an oxidation catalyst to reduce CO and VOC emissions.	TBD	FGENGINES
EU-ENGINE4	3,500 bhp (2.5 MW) natural gas-fired RICE equipped with an oxidation catalyst to reduce CO and VOC emissions.	TBD	FGENGINES
EU-ENGINE5	3,500 bhp (2.5 MW) natural gas-fired RICE equipped with an oxidation catalyst to reduce CO and VOC emissions.	TBD	FGENGINES

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
	Five (5) boilers supplying hot water for building heat and the snowmelt system.	EU-BOILER1,
		EU-BOILER2,
FGSNOWMELT		EU-BOILER3,
		EU-BOILER4,
		EU-BOILER5
FGENGINES	Five (5) natural gas-fired RICE	EU-ENGINE1,
		EU-ENGINE2,
		EU-ENGINE3,
		EU-ENGINE4,
		EU-ENGINE5

FGSNOWMELT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five (5) boilers supplying hot water for building heat and the snowmelt system.

Emission Unit: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

The permittee shall only burn natural gas in each boiler in FGSNOWMELT. (R 336.1702, 40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, and EU-BOILER5, individually, shall not exceed a maximum of 4 MMBTU per hour. (40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. <u>REPORTING</u>

 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 trial operation of FGSNOWMELT. (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. SVBLR1 ^a	10	30	40 CFR 52.21(c) & (d)	
2. SVBLR2 ^a	10	30	40 CFR 52.21(c) & (d)	
3. SVBLR3 ^a	10	30	40 CFR 52.21(c) & (d)	
4. SVBLR4 ^a	10	30	40 CFR 52.21(c) & (d)	
5. SVBLR5 ^a	10	30	40 CFR 52.21(c) & (d)	
^a SC IX.1 contains the date of compliance for the stack height and unobstructed configuration				

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the minimum height above ground and unobstructed configuration from SVBLR1, SVBLR2, SVBLR3, SVBLR4, SVBLR5 upon completion of relocation of EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, and EU-BOILER5. (40 CFR 52.21(c) & (d))

FGENGINES FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five (5) natural gas-fired RICE

Emission Unit: EU-ENGINE1, EU-ENGINE2, EU-ENGINE3, EU-ENGINE4, EU-ENGINE5

POLLUTION CONTROL EQUIPMENT

Oxidation Catalyst to control CO and VOC on each engine

I. EMISSION LIMIT(S)

		Time Period /		Monitoring /	Underlying
Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Applicable Requirements
1. NO _x	1.0 g/bhp-hr or 82 ppmvd at 15% O ₂ ^a	Hourly	Each engine in FGENGINES	SC V.1, SC V.2	R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), Table 1 of 40 CFR 60 Subpart JJJJ
2. NO _x	91 tpy	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2	R 336.1205(1)(a) & (b)
3. CO	2.0 g/bhp-hr or 270 ppmvd at 15% O ₂ ^a	Hourly	Each engine in FGENGINES	SC V.1, SC V.2	40 CFR 60.4233(e), Table 1 of 40 CFR 60 Subpart JJJJ
4. CO	91 tpy	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2	R 336.1205(1)(a) & (b)
5. VOC	0.7 g/bhp-hr or 60 ppmvd at 15% O ₂ ^{a,b}	Hourly	Each engine in FGENGINES	SC V.1, SC V.2	40 CFR 60.4233(e), Table 1 of 40 CFR 60 Subpart JJJJ
6. VOC	6.2 pph ^c	Hourly	Each engine in FGENGINES	SC V.2	R 336.1205(1)(a), R 336.1702(a)
7. VOC	73 tpy ^c	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2	R 336.1205(1)(a) & (b)
8. Formaldehyde (CAS No. 50-00-0)	0.8 pph	Hourly	Each engine in FGENGINES	SC V.2	R 336.1205(1)(a)

^a Owners and operators may choose to comply with the emission standards in units of either g/bhp-hr or ppmvd at 15% O2.

^b For the purposes of 40 CFR Part 60 Subpart JJJJ, emissions of formaldehyde should not be included when calculating volatile organic compounds.

^c This emission limit is for VOCs and the compliance demonstration must include formaldehyde.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in each engine within FGENGINES. (R 336.1205(1)(a), R 336.1702(a))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall operate and maintain each unit in FGENGINES such that it meets the emission limits in SC I.1, I.3, and I.5 over the entire life of the engine. **(40 CFR 60.4234)**
- 2. Within 180 days after trial operation, the permittee shall submit, implement, and maintain a malfunction abatement plan (MAP) as described in Rule 911(2) for FGENGINES. 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 90 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the AQD 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 336.1910, R 336.1911)

- The permittee shall keep a maintenance plan for FGENGINES and shall, to the extent practicable, maintain and operate each unit in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4243(b)(2)(ii))
- 4. The permittee shall not operate FGENGINES for more than 23,500 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(1)(a) & (b))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The nameplate capacity of each unit in FGENGINES shall not exceed 3,500 HP. (R 336.1205(1)(a) & (b))
- 2. The permittee shall equip and maintain each unit in FGENGINES with a non-resettable hours meter to continuously monitor the operating hours of operation. (R 336.1205(1)(a) & (b))
- The permittee shall not operate each engine within FGENGINES unless each respective oxidation catalyst is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for each unit in FGENGINES as required in SC III.2. (R 336.1205(1)(a) & (b), R 336.1702, R 336.1910)

V. TESTING/SAMPLING

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

- 1. In order to demonstrate compliance for the emission limits for NO_x, CO and VOC (excluding formaldehyde) in SC I.1, I.3, and I.5:
 - a. Conduct an initial performance test within one year after startup of the engine.
 - b. Conduct subsequent performance testing every 8,760 operating hours or 3 years, whichever comes first thereafter to demonstrate compliance.
 - c. The performance tests shall be conducted according to 40 CFR 60.4244 and Table 2 of 40 CFR Part 60 Subpart JJJJ.

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 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. (40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR 60.4245(d), Table 2 of 40 CFR Part 60 Subpart JJJJ)

2. Within one year of initial startup, the permittee shall verify NO_x, CO, VOC, and formaldehyde emission rates from each engine within FGENGINES by testing at owner's expense, in accordance with Department requirements. The hourly emission rates shall be determined by the average of acceptable runs. Testing shall be performed using an approved EPA Method listed below.

Pollutant	Test Method Reference		
NOx	40 CFR Part 60, Appendix A		
CO	40 CFR Part 60, Appendix A		
VOCs	40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A		
Formaldehyde	40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A		

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 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 336.1702, R 336.1902, 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(1)(a))
- The permittee shall calculate and record in a satisfactory manner monthly and 12-month rolling time period NO_x, CO, and VOC mass emission records for FGENGINES, as required by SC I.2, I.4, and I.7. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (b))
- 3. The permittee shall monitor and record in a satisfactory manner monthly and 12-month rolling time period hours of operation of FGENGINES, as required by SC III.4. 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) & (b))
- 4. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 and maintenance records documenting that each unit in FGENGINES meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR 60.4245)

- 5. The permittee shall keep records of the following information for each engine within FGENGINES:
 - a) All notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ and all documentation supporting any notification.
 - b) Maintenance conducted on each unit in FGENGINES.
 - c) Documentation that each unit in FGENGINES meets the emission standards in 40 CFR 60.4233(e). (40 CFR 60.4243(b)(1), 40 CFR 60.4245(a))

VII. <u>REPORTING</u>

- 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 trial operation of each engine within FGENGINES. (R 336.1201(7)(a))
- 2. The permittee must submit an initial notification within 30 days of commencement of construction as required in 40 CFR 60.7(a)(1), for each engine within FGENGINES that has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231. The notification must include the following information:
 - a) Name and address of the owner or operator;
 - b) The address of the affected source;
 - c) The engine make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - d) The engine emission control equipment; and
 - e) Fuel used in the engine. (40 CFR 60.4245(c))

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. SVENGINE1	20	60	40 CFR 52.21(c) & (d)
2. SVENGINE2	20	60	40 CFR 52.21(c) & (d)
3. SVENGINE3	20	60	40 CFR 52.21(c) & (d)
4. SVENGINE4	20	60	40 CFR 52.21(c) & (d)
5. SVENGINE5	20	60	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine within FGENGINES. (40 CFR Part 60 Subparts A and JJJJ)
- The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each unit in FGENGINES. (40 CFR Part 63 Subparts A and ZZZZ)

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

Control devices within each emission unit.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Formaldehyde (CAS No. 50- 00-0)	9.6 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)(a) & (b)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

- 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. The permittee shall keep records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (b))
- The permittee shall keep, in a satisfactory manner, emission calculations for Formaldehyde (CAS No. 50-00-0) in tons per 12-month rolling time period. Emission calculations shall be performed based on throughput records and emission factors obtained from the most recent source-specific emission testing, emission factors from the manufacturer, USEPA AP-42, or other methods approved by the AQD District Supervisor. (R 336.1205(1)(a) & (b))

Grand Haven Board of Light & Power (B1976) Permit No. 88-21

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA