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

November 4, 2022

PERMIT TO INSTALL
148-22

ISSUED TO
Bluewater Thermal Solutions

LOCATED AT
800 South Fair Avenue
Benton Harbor, Michigan 49022

IN THE COUNTY OF
Berrien

STATE REGISTRATION NUMBER
P1241

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: **October 6, 2022**	
DATE PERMIT TO INSTALL APPROVED: **November 4, 2022**	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 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))	Flexible Group ID
EUAMMONIA	1,000-gallon bulk storage tank for liquid anhydrous ammonia.	NA
EUBELTLINE701	Belt heat treat line including a heat treat furnace (6 MMBTU/hr) and oil quench. Ammonia may be used in the heat treat furnace. Then parts are washed in a parts washer and enter a tempering furnace (3 MMBTU/hr). The heat treat furnace exhausts to stack SV701, and the tempering furnace exhausts to SV701-T.	FGHEATTREAT
EUBELTLINE702	Belt heat treat line including a heat treat furnace (3.5 MMBTU/hr) and oil quench. Ammonia may be used in the heat treat furnace. Then parts are washed in a parts washer and enter a tempering furnace (1.2 MMBTU/hr). The heat treat furnace exhausts to stack SV702, and the tempering furnace exhausts to SV702-T.	FGHEATTREAT
EUBATCH101	Batch heat treat furnace (0.88 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV101.	FGHEATTREAT
EUBATCH102	Batch heat treat furnace (0.88 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV100-B.	FGHEATTREAT
EUBATCH103	Batch heat treat furnace (0.88 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV100-B.	FGHEATTREAT
EUBATCH201	Batch heat treat furnace (2.5 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV201.	FGHEATTREAT
EUBATCH210	Batch heat treat furnace (1.5 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV210.	FGHEATTREAT
EUBATCH210.5	Batch heat treat furnace (1.5 MMBtu/hr). No oil quench. The furnace may utilize ammonia. Exhausts to stack SV210.	FGHEATTREAT
EUBATCH216	Batch heat treat furnace (1.2 MMBtu/hr) with sealed oil quench. The furnace may utilize ammonia. Exhausts to stack SV216.	FGHEATTREAT
EUTEMPER107	Tempering furnace (0.5 MMBtu/hr). Exhausts to stack SV100-T.	FGHEATTREAT
EUTEMPER108	Tempering furnace (0.5 MMBtu/hr). Exhausts to stack SV100-T.	FGHEATTREAT
EUTEMPER109	Tempering furnace (0.5 MMBtu/hr). Exhausts to stack SV100-T.	FGHEATTREAT
EUTEMPER110	Tempering furnace (0.5 MMBtu/hr). Exhausts to stack SV100-T.	FGHEATTREAT
EUTEMPER203	Tempering furnace (2.2 MMBtu/hr). Exhausts to stack SV203.	FGHEATTREAT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
EUTEMPER230	Tempering furnace (1.0 MMBtu/hr). Exhausts to stack SV230.	FGHEATTREAT
EUTEMPER236	Tempering furnace (1.0 MMBtu/hr). Exhausts to stack SV236.	FGHEATTREAT
EUTIPUP801	Electrically heated tip-up furnace. No ammonia or quench oil use is associated with this furnace.	FGHEATTREAT
EUGEN240	Natural gas fired (2.5 MMBtu/hr) endothermic gas generator. Emissions vent to three stacks located next to each other (SVTRI-STACK).	FGHEATTREAT
EUSPRAYWASH	Five (5) natural gas-heated spray washers (equipment IDs 106, 111, 112, 202, 220) that use an aqueous solution to wash parts.	FGNATGAS
EUSPACEHEAT	Various natural gas-fired space heaters with a total heat input of less than 1.0 MMBtu/hr.	FGNATGAS
EUBLAST401	Blasting machine (Goff tumble blaster) for pre-cleaning prior to heat treating, controlled by a cartridge filter.	FGBLASTING
EUBLAST406	Blasting machine for pre-cleaning prior to heat treating, controlled by a cartridge filter.	FGBLASTING

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.

EUAMMONIA
EMISSION UNIT CONDITIONS

DESCRIPTION

1,000-gallon bulk storage tank for liquid anhydrous ammonia.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Except where specific requirements of these special conditions are applicable and more stringent, EU-AMMONIA shall comply with the Department of Labor and Economic Growth General Industry Safety Standards, Part 78. Storage and Handling of Anhydrous Ammonia – (1910.111) hereinafter Rule 7801. A copy of this document, which may be obtained by contacting the Michigan Occupational Safety and Health Administration, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI 48909-8143, shall be maintained for inspection at the facility.[1] **(R 336.1901)**

2. The permittee shall not operate EU-AMMONIA unless an emergency response plan, to be followed in the event of an emergency, has been approved by the local fire department or county emergency response agency and is implemented and maintained. Prior to each spring season, the permittee shall review this plan with the local fire department or emergency response agency and make any necessary updates.[1] **(R 336.1901)**

3. The permittee shall not operate EU-AMMONIA unless all transfer operations including transport deliveries are performed by a reliable person properly trained and made responsible for proper compliance with all applicable procedures.[1] **(R 336.1901)**

4. Vapor return lines shall be employed whenever necessary to ensure an accidental release from pressure relief valves will not occur during ammonia transfer operations.[1] **(R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. On and after February 2, 2023, the permittee shall not operate EU-AMMONIA unless a remotely operated internal or external positive shut-off valve is installed to allow access for emergency shut-off of all flow from stationary storage containers.[1] **(R 336.1225, R 336.1901)**

2. Any vapor or liquid line equipped with a mechanical connector, exclusive of couplings, requiring venting after ammonia transfer to the ammonia storage tank shall be purged into the storage tank or returned to the supplying vessel, or vented through a control device to minimize the release of ammonia emissions to the atmosphere.[1] **(R 336.1225, R 336.1901)**

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 keep, in a satisfactory manner, records of the date of annual review and approval of the emergency response plan with the local fire department. All records shall be kept on file and made available to the Department upon request.[1] **(R 336.1901)**

VII. REPORTING

1. Within 30 days after installation of the emergency shut-off valve required by SC IV.1, the permittee or the authorized agent pursuant to Rule 204 shall notify the AQD District Supervisor, in writing, of the completion of the activity. **(R 336.1201(7)(a))**

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
FGHEATTREAT	Two (2) belt heat treating lines, seven (7) batch heat treat furnaces, seven (7) tempering furnaces, an electric tip-up furnace, and an endothermic gas generator.	EUBELTLINE701, EUBELTLINE702, EUBATCH101, EUBATCH102, EUBATCH103, EUBATCH201, EUBATCH210, EUBATCH210.5, EUBATCH216, EUTEMPER107, EUTEMPER108, EUTEMPER109, EUTEMPER110, EUTEMPER203, EUTEMPER230, EUTEMPER236, EUTIPUP801, EUGEN240
FGNATGAS	Five (5) natural gas-heated spray washers and various natural gas-fired space heaters.	EUSPRAYWASH, EUSPACEHEAT
FGBLASTING	Two (2) blasting machines for pre-cleaning prior to heat treating, each controlled by a cartridge filter.	EUBLAST401, EUBLAST406

FGHEATTREAT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) belt heat treating lines, seven (7) batch heat treat furnaces, seven (7) tempering furnaces, an electric tip-up furnace, and an endothermic gas generator.

Emission Unit: EUBELTLINE701, EUBELTLINE702, EUBATCH101, EUBATCH102, EUBATCH103, EUBATCH201, EUBATCH210, EUBATCH210.5, EUBATCH216, EUTEMPER107, EUTEMPER108, EUTEMPER109, EUTEMPER110, EUTEMPER203, EUTEMPER230, EUTEMPER236, EUTIPUP801, EUGEN240

POLLUTION CONTROL EQUIPMENT

Flame curtain on each heat treating and tempering furnace, except for EUTIPUP801

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO_X	445 lb NO_X/MMscf heat input	Hourly	FGHEATTREAT	SC V.1, SC VI.6	40 CFR 52.21(c) and (d)
2. VOCs (as propane)	0.8 lb/ton metal treated	Hourly	FGHEATTREAT	SC V.1, SC VI.6	R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d)
3. Ammonia	0.04 lb/ton metal treated [1]	Hourly	FGHEATTREAT	SC V.1, 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. Natural gas	150.0 MMscf/yr	12-month rolling time period as determined at the end of each calendar month.	FGHEATTREAT	SC VI.3	R 336.1225, 40 CFR 52.21(c) and (d)
2. Metal Parts Treated	45,000 lb per 8-hour shift[1, A]	Per 8-hour shift	FGHEATTREAT	SC VI.4	R 336.1205, R 336.1225
3. Metal Parts Treated	30,000,000 lb/yr [A]	12-month rolling time period as determined at the end of each calendar month.	FGHEATTREAT	SC VI.5	R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d)

[A] This limit does not include metal treated in EUTIPUP801.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use ammonia in any tempering furnace in FGHEATTREAT. This includes EUTEMPER107, EUTEMPER108, EUTEMPER109, EUTEMPER110, EUTEMPER203, EUTEMPER230, and EUTEMPER236.[1] **(R 336.1224, R 336.1225)**

2. The permittee shall not use endothermic gas in any furnace in FGHEATTREAT unless the temperature of the furnace is maintained at 1400°F or higher. **(R 336.1224, R 336.1225, 40 CFR 52.21(c) and (d))**

3. The permittee shall not perform nitriding (utilize ammonia) in any furnace in FGHEATTREAT unless the temperature of the furnace is maintained at 1450°F or higher while using ammonia.[1] **(R 336.1224, R 336.1225)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any heat treat furnace in FGHEATTREAT (excluding EUTIPUP801) unless a device monitoring the temperature inside the furnace is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, 40 CFR 52.21(c) and (d))**

2. The permittee shall not operate any heat treat or tempering furnace in FGHEATTREAT (excluding EUTIPUP801) unless the flame curtains are installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the flame curtain according to manufacturer specifications. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**

3. The permittee shall not operate FGHEATTREAT unless a scale to measure the total weight of metal being heat treated is installed, maintained, and operated in a satisfactory manner. The permittee shall calibrate the scale at least one time per calendar year. **(R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**

V. TESTING/SAMPLING

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

1. By no later than August 1, 2023, the permittee shall verify NO_X, VOCs (as propane), and Ammonia emission rates from FGHEATTREAT by testing at owner's expense, in accordance with Department requirements. Testing shall be performed on representative emission units as approved by the AQD District Supervisor. Representative testing must include at least one belt heat treat line (the heat treating and tempering furnace portions of the line), at least one batch heat treat furnace, and at least one batch tempering furnace. If applicable, testing shall include the oil quench and endothermic gas and ammonia injection portions of the process. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NO_X	40 CFR Part 60, Appendix A
VOCs (as propane)	40 CFR Part 60, Appendix A
Ammonia	40 CFR Part 63, Appendix A (Method 320)

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 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The test plan shall identify the representative furnaces to be tested, and describe how the natural gas heat input, metal throughput, and amount of ammonia injected for each representative furnace will be measured during the testing. 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 336.2001, 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 and make them available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. All records shall be kept on file at the facility and made available to the Department upon request. **(R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of the quench oil and gases fed into the endothermic gas generator, including the weight percent of each component. The data may consist of 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 and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

3. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage in FGHEATTREAT in MMscf per calendar month, and per 12-month rolling time period as determined at the end of each calendar month. Unless a meter is installed to measure natural gas throughput for FGHEATTREAT separately from other equipment at the facility, natural gas usage for FGHEATTREAT shall be assumed equal to the natural gas usage for the facility. **(R 336.1205, R 336.1225, 40 CFR 52.21(c) and (d))**

4. The permittee shall monitor and record, in a satisfactory manner, pounds of metal treated in FGHEATTREAT (not including metal treated in EUTIPUP801), for each 8-hour shift.[1] **(R 336.1225)**

5. The permittee shall monitor and record, in a satisfactory manner, the pounds of metal treated in FGHEATTREAT (not including metal treated in EUTIPUP801), per calendar month, and pounds of metal processed per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205, R 336.1702(a), 40 CFR 52.21(c) and (d))**

6. The permittee shall keep records of the most recently completed stack test results for FGHEATTREAT and the resulting emission factors for NOx (lb NO_X/MMscf heat input), VOC (lbs VOC/ton metal), and Ammonia (lb Ammonia/ton metal) based on a completed stack test that is acceptable to the AQD District Supervisor. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**

7. The permittee shall keep records of each time the scale is calibrated, as required in SC IV.3. **(R 336.1205, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**

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. SV101*	10	27	R 336.1225, 40 CFR 52.21(c) and (d)
2. SV100-B*	12	27	R 336.1225, 40 CFR 52.21(c) and (d)
3. SV100-T*	24	29	R 336.1225, 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
4. SV201*	12	29	R 336.1225, 40 CFR 52.21(c) and (d)
5. SV203*	12	29	R 336.1225, 40 CFR 52.21(c) and (d)
6. SV210*	24	29	R 336.1225, 40 CFR 52.21(c) and (d)
7. SV216*	24	29	R 336.1225, 40 CFR 52.21(c) and (d)
8. SV230*	30	29	R 336.1225, 40 CFR 52.21(c) and (d)
9. SV236*	30	29	R 336.1225, 40 CFR 52.21(c) and (d)
10. SV701*	40	38	R 336.1225, 40 CFR 52.21(c) and (d)
11. SV701-T*	12	38	R 336.1225, 40 CFR 52.21(c) and (d)
12. SV702*	16	38	R 336.1225, 40 CFR 52.21(c) and (d)
13. SV702-T*	8	38	R 336.1225, 40 CFR 52.21(c) and (d)
14. SVTRI-STACK1*	18	29	R 336.1225, 40 CFR 52.21(c) and (d)
15. SVTRI-STACK2*	18	29	R 336.1225, 40 CFR 52.21(c) and (d)
16. SVTRI-STACK3*	18	29	R 336.1225, 40 CFR 52.21(c) and (d)

*Stack is obstructed (rain cap).

IX. OTHER REQUIREMENT(S)

NA

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

FGNATGAS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five (5) natural gas-heated spray washers and various natural gas-fired space heaters.

Emission Unit: EUSPRAYWASH, EUSPACEHEAT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not burn fuels other than natural gas in FGNATGAS. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity of EUSPACEHEAT shall not exceed 2.0 MMBtu/hr. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**

2. The maximum design heat input capacity of EUSPRAYWASH shall not exceed 1.10 MMBtu/hr. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (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))**

1. The permittee shall maintain records of the nameplate heat input capacity for each spray washer and heater in FGNATGAS. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**

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).

FGBLASTING
EMISSION UNIT CONDITIONS

DESCRIPTION

Two (2) blasting machines for pre-cleaning prior to heat treating, each controlled by a cartridge filter.

Emission Unit: EUBLAST401, EUBLAST406

POLLUTION CONTROL EQUIPMENT

Cartridge-style fabric filters.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBLAST401 or EUBLAST406 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the associated fabric filter, has been submitted within 90 days of permit issuance, and is implemented and maintained. 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 336.1225, R 336.1331, R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUBLAST401 or EUBLAST406 unless the associated fabric filter is installed, maintained, and operated in a satisfactory manner acceptable to the AQD District Supervisor. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331)**

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 keep a record of all maintenance and repairs on the fabric filters according to the MAP required by SC III.1. **(R 336.1225, R 336.1331, R 336.1910, R 336.1911)**

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. SV401*	NA	6	40 CFR 52.21(c) and (d)
2. SV406*	NA	6	40 CFR 52.21(c) and (d)

*Stack is horizontal.

IX. OTHER REQUIREMENT(S)

NA

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