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

DECEMBER 3, 2020

PERMIT TO INSTALL
169-01C

ISSUED TO
HEAT TREATING SERVICES CORP. OF AMERICA

LOCATED AT
915 CESAR E. CHAVEZ AVENUE
PONTIAC, MICHIGAN 48340

IN THE COUNTY OF
OAKLAND

STATE REGISTRATION NUMBER
N6726

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: **November 18, 2020**	
DATE PERMIT TO INSTALL APPROVED: **December 3, 2020**	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))	Installation Date / Modification Date	Flexible Group ID
EUQUENCH	An HR-1 Roller Hearth Line 15,000,000 Btu/hour Surface Combustion Natural Gas Fired Hardening Furnace, an HR-1 Roller Hearth Line 3,000,000 Btu/hour Surface Combustion Natural Gas Fired Draw Furnace, and an HR-1 Roller Hearth Line 3,000 Gallon Oil Quench Tank and Drain Table.	1998	
EU-HR2	HR 2 11,000,000 Btu/hour GE Continuous Belt Model Natural Gas Fired Furnace	1998	
EU-R5	An 11.28 MMBtu/hour natural gas-fired hardening furnace line.	2013	
EU-R7	A 13.33 MMBtu/hour natural gas-fired hardening furnace line.	2016	
EU-R8	A 24.55 MMBTU/hr natural gas-fired metal heat treating line. This line consists of a hardening furnace, 6,000 Gallon Oil Quench Tank and Drain Table, a “Fast Cool” section used to cool unquenched parts or heat quenched parts, and a tempering furnace.	TBD	

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.

EUQUENCH
EMISSION UNIT CONDITIONS

DESCRIPTION

An HR-1 Roller Hearth Line 15,000,000 Btu/hour Surface Combustion Natural Gas Fired Hardening Furnace, an HR-1 Roller Hearth Line 3,000,000 Btu/hour Surface Combustion Natural Gas Fired Draw Furnace, and an HR-1 Roller Hearth Line 3,000 Gallon Oil Quench Tank and Drain Table.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Flame curtain

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	16.55 tpy	12-month rolling time period as determined at the end of each calendar month	EUQUENCH	SC V.1, SC VI.3	R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Metal	23,500 tpy	12-month rolling time period as determined at the end of each calendar month	EUQUENCH	SC VI.3	R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUQUENCH 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 336.1225, R 336.1702(a), R 336.1910)**

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup, the permittee shall verify VOC emission rates from EUQUENCH through the determination of a VOC emission factor (in lbs VOC/ton of metal) by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, 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 60 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 336.1702(a))**

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. **(R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of the quench oil, including the weight percent of each component. The data may consist of Material 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 keep the following information for EUQUENCH:
   a) The tons of metal processed per calendar month.
   b) The tons of metal processed per 12-month rolling time period as determined at the end of each calendar month.
   c) The VOC emission factor (in lbs VOC/ton metal) for EUQUENCH based on a completed stack test and acceptable to the AQD District Supervisor. Until a stack test is completed, and a site-specific VOC emission factor has been determined, the interim emission factor to be used shall be 1.41 lb VOC/ton of metal processed.
   d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
   e) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. **(R 336.1702(a))**

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. SV-HR1-A	18	39.25	R336.1225, 40 CFR 52.21 (c) & (d)
2. SV-HR1-B	10.5	35.5	R336.1225, 40 CFR 52.21 (c) & (d)
3. SV-HR1-C	14.5	37.8	R336.1225, 40 CFR 52.21 (c) & (d)
4. SV-HR1-D	18.5	39.5	R336.1225, 40 CFR 52.21 (c) & (d)
5. SV-HR1-E	14.5	39.25	R336.1225, 40 CFR 52.21 (c) & (d)
6. SV-HR1-F	18.5	38.3	R336.1225, 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
7. SV-HR1-G	24.5	38.6	R336.1225, 40 CFR 52.21 (c) & (d)
8. SV-HR1-H	16.5	40.3	R336.1225, 40 CFR 52.21 (c) & (d)
9. SV-HR1-I	9.5	33.8	R336.1225, 40 CFR 52.21 (c) & (d)
10. SV-HR1-J	30	40.5	R336.1225, 40 CFR 52.21 (c) & (d)
11. SV-HR1-K	24.5	42	R336.1225, 40 CFR 52.21 (c) & (d)
12. SV-HR1-L	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
13. SV-HR1-M	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
14. SV-HR1-N	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
15. SV-HR1-O	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
16. SV-HR1-P	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
17. SV-HR1-Q	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
18. SV-HR1-R	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
19. SV-HR1-S	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
20. SV-HR1-T	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
21. SV-HR1-U	14.5	36.3	R336.1225, 40 CFR 52.21 (c) & (d)
22. SV-HR1-V	28.5	38.6	R336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

EU-HR2
EMISSION UNIT CONDITIONS

DESCRIPTION

HR 2 11,000,000 Btu/hour GE Continuous Belt Model Natural Gas Fired Furnace

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EU-HR2. **(R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

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. SV-HR2-A	22	32.5	R336.1225, 40 CFR 52.21 (c) & (d)
2. SV-HR2-B	22	36.8	R336.1225, 40 CFR 52.21 (c) & (d)
3. SV-HR2-C	13	35	R336.1225, 40 CFR 52.21 (c) & (d)
4. SV-HR2-D	13	35	R336.1225, 40 CFR 52.21 (c) & (d)
5. SV-HR2-E	28.75	42	R336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

EU-R5
EMISSION UNIT CONDITIONS

DESCRIPTION

An 11.28 MMBtu/hour natural gas-fired hardening furnace line.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in RU-R5. **(R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

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. SV-R5-A	14	33	R336.1225, 40 CFR 52.21 (c) & (d)
2. SV-R5-B	14	33	R336.1225, 40 CFR 52.21 (c) & (d)
3. SV-R5-C	14	33	R336.1225, 40 CFR 52.21 (c) & (d)
4. SV-R5-D	14	33	R336.1225, 40 CFR 52.21 (c) & (d)
5. SV-R5-E	12	30.75	R336.1225, 40 CFR 52.21 (c) & (d)
6. SV-R5-F	12	30.75	R336.1225, 40 CFR 52.21 (c) & (d)
7. SV-R5-G	12	30.75	R336.1225, 40 CFR 52.21 (c) & (d)
8. SV-R5-H	12	30.75	R336.1225, 40 CFR 52.21 (c) & (d)
9. SV-R5-I	36.25	40.5	R336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

EU-R7
EMISSION UNIT CONDITIONS

DESCRIPTION

A 13.33 MMBtu/hour natural gas-fired hardening furnace line.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EU-R7. **(R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

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. SV-R7-A	26.5	38.4	R336.1225, 40 CFR 52.21 (c) & (d)
2. SV-R7-B	32.5	38.4	R336.1225, 40 CFR 52.21 (c) & (d)
3. SV-R7-C	26.5	38.4	R336.1225, 40 CFR 52.21 (c) & (d)
4. SV-R7-D	26	39.25	R336.1225, 40 CFR 52.21 (c) & (d)
5. SV-R7-E	32	36	R336.1225, 40 CFR 52.21 (c) & (d)
6. SV-R7-F	34.5	37.5	R336.1225, 40 CFR 52.21 (c) & (d)
7. SV-R7-G	26.5	38.4	R336.1225, 40 CFR 52.21 (c) & (d)
8. SV-R7-H	26.5	39.4	R336.1225, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

EU-R8
EMISSION UNIT CONDITIONS

DESCRIPTION

A 24.55 MMBTU/hr natural gas-fired metal heat treating line. This line consists of a hardening furnace, 6,000-gallon oil quench tank and Drain Table, a "Fast Cool" section used to cool unquenched parts or heat quenched parts, and a tempering furnace.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	7.05 tpy	12-month rolling time period as determined at the end of each calendar month	EU-R8	SC V.1, SC VI.3	R 336.1205(1) & (3), R 336.1702(a)

2. The permittee shall burn only natural gas in EU-R8. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Metal	23,500 tpy	12-month rolling time period as determined at the end of each calendar month	EU-R8	SC VI.3	R 336.1205(1) & (3), R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-R8 during quenching operations unless the air curtain is installed, operated, and maintained in accordance with the manufacturer's specifications. **(R 336.1301, R 336.1225)**

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. Upon request of the AQD District Supervisor, the permittee shall verify VOC emission rates from EU-R8 through the determination of a VOC emission factor (in lbs VOC/ton of metal) by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, 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 60 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 336.1702(a))**

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. **(R 336,1205, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of the quench oil, including the weight percent of each component. The data may consist of Material 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 keep the following information for EU-R8:
   a) The tons of metal processed per calendar month.
   b) The tons of metal processed per 12-month rolling time period as determined at the end of each calendar month.
   c) The VOC emission factor (in lbs VOC/ton metal) for EU-R8 acceptable to the AQD District Supervisor. The emission factor to be used shall be 0.60 lb VOC/ton of metal processed unless a stack test is completed per SC V.1 and an emission-unit specific VOC emission factor has been determined. If the completed stack test and initial emission factors differ, the permittee shall use the emission factor based on the completed stack test to determine compliance.
   d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
   e) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request. **(R 336.1205, R 336.1702(a))**

VII. REPORTING

1. 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 EU-R8. **(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. SV-R8-A	16	41.67	40 CFR 52.21 (c) & (d)
2. SV-R8-B	22	41.67	40 CFR 52.21 (c) & (d)
3. SV-R8-C	22	41.67	40 CFR 52.21 (c) & (d)
4. SV-R8-D	9	41.67	40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
5. SV-R8-E	9	41.67	40 CFR 52.21 (c) & (d)
6. SV-R8-F	9	41.67	40 CFR 52.21 (c) & (d)
7. SV-R8-G	16	41.67	40 CFR 52.21 (c) & (d)
8. SV-R8-H	21	52	R336.1225, 40 CFR 52.21 (c) & (d)
9. SV- R8-I	16	41.67	40 CFR 52.21 (c) & (d)
10. SV- R8-J	16	41.67	40 CFR 52.21 (c) & (d)
11. SV- R8-K	25	52	R336.1225, 40 CFR 52.21 (c) & (d)
12. SV- R8-L	49	41.67	40 CFR 52.21 (c) & (d)
13. SV- R8-M	12	41.67	40 CFR 52.21 (c) & (d)
14. SV- R8-N	12	41.67	40 CFR 52.21 (c) & (d)
15. SV- R8-O	6	41.67	40 CFR 52.21 (c) & (d)
16. SV- R8-P	6	41.67	40 CFR 52.21 (c) & (d)
17. SV- R8-Q	6	41.67	40 CFR 52.21 (c) & (d)
18. SV-R8-R	16	41.67	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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