MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

March 20, 2018

PERMIT TO INSTALL
135-11D

ISSUED TO
Ford Motor Company – Sterling Axle Plant

LOCATED AT
39000 Mound Road
Sterling Heights, Michigan

IN THE COUNTY OF
Macomb

STATE REGISTRATION NUMBER
A3567

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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: **February 12, 2018**	
DATE PERMIT TO INSTALL APPROVED: **March 20, 2018**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 conditions 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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

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 (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUWTP-669	Waste Oil Treatment Process with two 20,000 gallon treatment tanks and 2,500 cfm Heil fume scrubber.	06-01-1991 / 07-01-1991	FGFACILITY
EUDEPT21PAINT	Two Binks Electrostatic Spray Booths for the E-6 Axle Coating System (West Booth - BT 803286, East Booth - BT 803287) in Dept. 21 with fabric filter for particulate control.	12-01-1991 / 01-31-1992 / 01-24-2012	FGFACILITY
EUDEPT6-HT16-18	A heat treat system consisting of three natural gas-fired pusher furnaces (Nos. 16, 17, 18) with oil quench, two shared natural gas-fired post-washers, and two shared natural gas-fired tempering furnaces in Dept. 6.	08-30-2011 / 01-24-2012	FGQUENCH, FGFACILITY
EUDEPT7-HT6-8-HT15	A heat treat system consisting of four natural gas-fired carburizing furnaces (Nos. 6, 7, 8, 15), twenty-three hydraulic quench presses, two post-washers, two endothermic gas generators, and three natural gas-fired draw furnaces in Dept. 7.	06-1956 / 05-1966 / 04-1992 / 04-01-1994 / 06-01-1994 / 12-2009 / 01-24-2012	FGQUENCH, FGFACILITY
EUDEPT8-HT10-12	A heat treat system consisting of one pre-wash station, three carburizing furnaces (Nos. 10, 11, 12), three quenching stations, one post-wash station, and one tempering furnace in Dept. 8.	01-25-1996 / 09-03-1996	FGHEATTREAT, FGQUENCH, FGFACILITY
EUDEPT8-HT13-15	A heat treat system consisting of one pre-wash station, three carburizing furnaces (Nos. 13, 14, 15), three quenching stations, one post-wash station, and one tempering furnace in Dept. 8.	10-14-1996 / 01-20-1997	FGHEATTREAT, FGQUENCH, FGFACILITY
EUDEPT10-HT40A-D	A heat treat system consisting of four tempering furnaces, four carburizing furnaces with quench stations, two post-wash stations, two cooling stations and two endothermic gas generators.	12-01-2016	FGQUENCH, FGFACILITY
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 336.1290.			

The following conditions apply to:
EUWTP-669

DESCRIPTION: Waste Oil Treatment Process with two 20,000-gallon treatment tanks and 2,500 cfm Heil fume scrubber.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Fume Scrubber

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the fume scrubber unless a water flow indicator and a pH monitor are installed and operating properly. **(R 336.1910)**

2. The permittee shall implement and maintain a preventative maintenance program for the fume scrubber as recommended by the scrubber's manufacturer and establish an acceptable range of pH and water flow rate in the preventative maintenance program. **(R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the oil separation (cooking) portion of EUWTP-669 unless the fume scrubber is installed, operating continuously, and operating properly. **(R 336.1910)**

V. TESTING/SAMPLING

NA

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 records in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1910)**

2. The permittee shall keep records of the water flow rate and the pH once per shift whenever the fume scrubber is operating. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1910)**

3. The permittee shall keep records of dates and descriptions of preventative maintenance conducted on the fume scrubber. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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. SVWTP-669	NA	39	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
EUDEPT21PAINT

DESCRIPTION: Spray coating operations in Dept. 21 which consists of two Binks electrostatic spray booths for the E-6 Axle Coating System.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Fabric filter for particulate control

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	7.8 TPY	12-month rolling time period as determined at the end of each calendar month	EUDEPT21PAINT	SC VI.2, VI.3	R 336.1702(a)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall capture all waste coatings and shall store them in closed containers. The permittee shall dispose of all waste coatings in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1702(a))**

2. The permittee shall handle all VOC containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1225, R 336.1702(a))**

3. The permittee shall not operate EUDEPT21PAINT unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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 30 days after such an event occurs. The permittee shall also amend the MAP within 30 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 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the spray booth portions of EUDEPT21PAINT unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910)**

2. The permittee shall equip and maintain each spray booth within EUDEPT21PAINT with electrostatic paint application equipment. **(R 336.1702(a))**

V. TESTING/SAMPLING

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

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

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 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702(a))**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating used in EUDEPT21PAINT, 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 on a monthly basis for EUDEPT21PAINT:
   a. Gallons (with water) of each coating used.
   b. VOC content (minus water and with water) of each coating as applied.
   c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
   d. 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 permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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. SV26A-654	36	49	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV26A-655	36	49	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

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 heat treat systems each with one pre-wash station, three carburizing furnaces, three quenching stations, one post-wash station, and one tempering furnace all in Dept. 8.	EUDEPT8-HT10-12, EUDEPT8-HT13-15
FGQUENCH	Heat treat systems throughout the facility with associated quench oil processes.	EUDEPT6-HT16-18, EUDEPT7-HT6-8-HT15, EUDEPT8-HT10-12, EUDEPT8-HT13-15, EUDEPT10-HT40A-D
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to:
FGHEATTREAT

DESCRIPTION: Two heat treat systems each with one pre-wash station, three carburizing furnaces, three quenching stations, one post-wash station, and one tempering furnace all in Dept. 8.

Emission Units: EUDEPT8-HT10-12, EUDEPT8-HT13-15

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	15.3 pph	Hourly	FGHEATTREAT	GC 13	40 CFR 52.21(c) & (d)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Natural gas	340.834 MMcf per year	12-month rolling time period as determined at the end of each calendar month	FGHEATTREAT	SC VI.2	R 336.1205(1)(a) & (1)(b)

2. The permittee shall only combust pipeline quality natural gas in FGHEATTREAT. **(R 336.1205(1)(a))**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

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 records in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, 40 CFR 52.21(c) & (d))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period natural gas usage records for FGHEATTREAT. 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))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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. SV9M-697	NA	28	40 CFR 52.21(c) & (d)
2. SV9M-697V	NA	28	40 CFR 52.21(c) & (d)
3. SV10M-698	NA	28	40 CFR 52.21(c) & (d)
4. SV10M-699	NA	28	40 CFR 52.21(c) & (d)
5. SV10M-700	NA	28	40 CFR 52.21(c) & (d)
6. SV9N-701	NA	28	40 CFR 52.21(c) & (d)
7. SV10N-702	NA	28	40 CFR 52.21(c) & (d)
8. SV10N-703	NA	28	40 CFR 52.21(c) & (d)
9. SV10P-704	NA	28	40 CFR 52.21(c) & (d)
10. SV10P-704V	NA	28	40 CFR 52.21(c) & (d)
11. SV11M-705	NA	28	40 CFR 52.21(c) & (d)
12. SV11M-705V	NA	28	40 CFR 52.21(c) & (d)
13. SV11M-706	NA	28	40 CFR 52.21(c) & (d)
14. SV11M-707	NA	28	40 CFR 52.21(c) & (d)
15. SV12M-708	NA	28	40 CFR 52.21(c) & (d)
16. SV11N-709	NA	28	40 CFR 52.21(c) & (d)
17. SV11N-710	NA	28	40 CFR 52.21(c) & (d)
18. SV12N-711	NA	28	40 CFR 52.21(c) & (d)
19. SV11P-712	NA	28	40 CFR 52.21(c) & (d)
20. SV11P-712V	NA	28	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to:
FGQUENCH

DESCRIPTION: Heat treat systems throughout the facility with associated quench oil processes.

Emission Units: EUDEPT6-HT16-18, EUDEPT7-HT6-8-HT15, EUDEPT8-HT10-12, EUDEPT8-HT13-15, EUDEPT10-HT40A-D

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	23.6 tpy	12-month rolling time period as determined at the end of each calendar month	FGQUENCH	SC VI.2	R 336.1702(a)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Metal	92,500 tpy	12-month rolling time period as determined at the end of each calendar month	FGQUENCH	SC VI.2	R 336.1205(1)(a) & (1)(b)

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

NA

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 records in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1702(a))**

2. The permittee shall keep the following information on a monthly basis for FGQUENCH:
   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 each heat treating process. (Using an emission factor of 0.51 lb VOC/ton metal for oil quench, or an emission factor acceptable to the AQD District Supervisor.)
   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 permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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. SV7P-053	NA	NA	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV8N060	32	31	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVDEPT6-F18	38	55	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVDEPT10-HT40A	40	55	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVDEPT10-HT40B	40	55	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVDEPT10-HT40C	40	55	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVDEPT10-HT40D	24	55	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply Source-Wide to:
FGFACILITY

DESCRIPTION: All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 10.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(1)
2. Aggregate HAPs	Less than 25.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.3	R 336.1205(1)
3. NOx	98.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1205(1)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Natural gas	1,400 MMcf per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)(a) & (1)(b)

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(1))**

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 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period natural gas usage records for FGFACILITY. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1))**

3. The permittee shall keep the following information on a monthly basis for FGFACILITY:
   a. Gallons or pounds of each HAP containing material used.
   b. Where applicable, gallons or pounds of each HAP containing material reclaimed.
   c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
   d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
   e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1))**

4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx emission calculation records for FGFACILITY, as required by SC I.3 using the following methods or a method acceptable to the AQD District Supervisor.
   a. Calculate NOx emissions from the combustion of natural gas based on fuel usage, and the following emission factors or emission factors acceptable to the AQD District Supervisor:
      NOx Emission Factor for Heat Treat Carburizing Furnaces = 445 lb/MMcf of natural gas
      NOx Emission Factor for Space Heaters, Tempering Furnaces, and Misc. Combustion Units = 100 lb/MMcf of natural gas

   The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA