



Missouri Department of Natural Resources
Air Pollution Control Program

INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Intermediate Operating Permit Number: OP2007-031A
Expiration Date: July 10, 2012
Installation ID: 051-0032
Project Number: 2009-12-053

Installation Name and Address

Modine Manufacturing Company – Jefferson City
1502 South Country Club Drive
Jefferson City, MO 65109
Cole County

Parent Company's Name and Address

Modine Manufacturing Company
1500 DeKoven Ave
Racine, WI 53403

Installation Description:

Modine Manufacturing Company is a manufacturer of copper/brass heat transfer equipment consisting primarily of radiators. The installation has painting operations, annealing and bake ovens, solder/braze booths, tube mills, natural gas combustion equipment, and miscellaneous welding processes.

AUG 19 2010

Effective Date

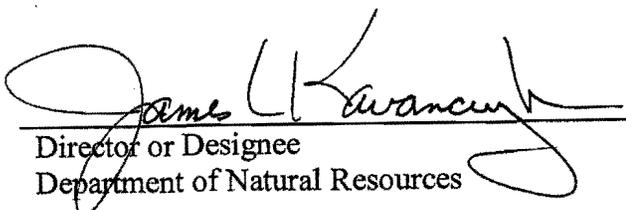

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Modine Manufacturing Company is a manufacturer of copper/brass heat transfer equipment consisting primarily of radiators. The installation has painting operations, annealing and bake ovens, solder/braze booths, tube mills, natural gas combustion equipment, and miscellaneous welding processes.

Reported Air Pollutant Emissions, tons per year						
Year	Particulate Matter ≤ Ten Microns (PM ₁₀)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)
2008	5.51	0.02	2.50	11.58	2.06	0.23
2007	2.46	0.01	2.17	23.74	1.78	0.06
2006	3.07	0.01	2.43	19.09	1.98	0.06
2005	4.00	0.02	2.78	23.53	2.27	0.10
2004	3.37	0.02	3.13	24.64	2.55	0.07

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0020	60" Bake Oven
EU0030	Annealing Machine
EU0040	Weld Around Booths (MIG) #1
EU0050	Weld Around Booths (MIG) #2
EU0060	Weld Around Booths (TIG) #1
EU0070	Weld Around Booths (TIG) #2
EU0090	Welded Tube Mill, #305
EU0130	Automatic Solder Pour Machine
EU0140	Welded Tube Mill #310
EU0150	Subassembly Welding (MIG) #1
EU0160	Subassembly Welding (MIG) #2
EU0170	Subassembly Welding (MIG) #3
EU0180	Subassembly Welding (MIG) #4
EU0190	Subassembly Welding (MIG) #5
EU0200	Subassembly Welding (TIG)
EU0210	Sludge Dryer
EU0220	Electrodeposition Paint (EDP) System & Bake Oven
EU0230	IMRM/AMOCS Stiffener Welding
EU0240	TIG Weld Around
EU0330	Weld Repair Booth (TIG)
EU0340	Laser
EU0350	Beta Weld #1 (M-7252)
EU0360	Beta Weld #2 (M-7958)
EU0370	Beta Weld #3 (M-8115)
EU0380	Beta Weld #4
EU0410	IMRM Backsolder-after-Robot Machine
EU0420	Hand Operated Paint Booth (EP-98)

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Annealing Oven
Vertical Core Bake Oven
Solder/Braze Booth (South) #1 - #2
Maintenance Welding (MIG) #1 - #3
Induction Soldering
Final Assembly Welding #1 - #5
Robot Welding #1
Seaming (Hand, Semi-Automatic, Automatic) #1 - #14
Robot Welding #2
Unit Heaters (10)
Make-Up Air Units – Gas Fired
Tank Removal Station
Square Wave Fin Machine #1
Press Operations
Insta-Pak Operations
Spotwelders (2)
Touch-Up Painting & Spray Marking
(3) Plate Fin – Fin Machines (M3224, M4712 and M4402)
(5) Fin Presses (IMRM/AMOCS) (5413, 5309, 7340, 2464 and 8165)
Square Wave Fin Machine #2 (EP-72)
Voss Fin Machine #1 (EP-75)
Oil Fogging Process (EP-77)
Voss Fin Machine #2 (EP-81)
Final Assembly Solder #1 - #5
Test & Repair Soldering #1 - #25
Weld Repair Booth (MIG)
Subassembly Spotweld #1 - #5
Grinding #1 - #13
Sawing (Vertical Band)
Sawing (Tube)
Sawing (Scrap Band)
Maintenance Welding (TIG)
Maintenance Welding (Grinding & Sawing) #1 & #2
Maintenance Welding (Plasma Arc)
Back Soldering Reflow Stands #1 & #2
Voss Fin Machine #3 (EP-87)
(4) Fin Press Machines (EP-99)
(5) Wire Feed Welders (EP-100)

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Missouri Department of Natural Resources Air Construction Permit #0295-007
- 2) Missouri Department of Natural Resources Air Construction Permit #0396-023
- 3) Missouri Department of Natural Resources Air Construction Permit #0799-024
- 4) Missouri Department of Natural Resources Air Construction Permit #122001-015
- 5) Missouri Department of Natural Resources Air Construction Permit #122008-004

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

PERMIT CONDITION PW001
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 60%.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
 - a) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two (2) weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

- 1) The permittee shall maintain records of all observation results (see Attachment A), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any U.S. EPA Method 9 opacity test performed in accordance with this permit condition.
- 4) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five (5) years.

Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of the opacity limit established by 10 CSR 10-6.220, or any malfunction which could cause an opacity exceedance.

PERMIT CONDITION PW002
10 CSR 10-6.060 Construction Permits Required
Construction Permit #0799-024, Issued July 16, 1999

Emission Limitation:

Modine Manufacturing Company (Modine) shall emit less than 100 tons of volatile organic compounds (VOC) from this entire installation in any consecutive twelve- (12) month period.

Monitoring:

- 1) Modine shall monitor the amount and type of VOC containing materials used at the installation.
- 2) Modine shall monitor the amount of natural gas used at the installation.

Recordkeeping:

- 1) Modine shall record the monthly and the sum of the most recent consecutive twelve (12) month VOC emissions in tons from this installation (See Attachment B).
- 2) These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

PERMIT CONDITION PW003
10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

Emission Limitation:

- 1) The permittee shall emit less than 10 tons of any single hazardous air pollutant (HAP) in any consecutive 12-month period.
- 2) The permittee shall emit less than 25 tons of combined HAPs in any consecutive 12-month period.

Monitoring:

Modine shall monitor the amount and type of Hazardous Air Pollutant (HAP) containing materials used at the installation.

Recordkeeping:

- 1) Modine shall record the monthly total of individual and combined hazardous air pollutants (HAPs) emissions and the sum of the most recent consecutive twelve (12) month totals in tons from this installation (See Attachments C and D).
- 2) These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

<p style="text-align: center;">PERMIT CONDITION PW004 10 CSR 10-6.060 Construction Permits Required Construction Permit #122008-004, Issued December 10, 2008</p>
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Operational Limitation:

Special Condition No. 2: The permittee shall keep solvents and cleaning solutions in sealed containers whenever the materials are not in use. Modine Manufacturing Company shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used at the installation.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0020 – 60” Bake Oven			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0020	60” Bake Oven	Maxon/400 Ovenpak (WI Oven Corp/01787807)	EP-03 Segments 1 & 2

PERMIT CONDITION EU0020 - 001 10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes
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Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 0.66 lbs/hr from emission unit EU0020.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0030 – Annealing Machine			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0030	Annealing Machine	Ind. Combustion Engineering (M-4863)	EP-03 Segments 1 & 2

PERMIT CONDITION EU0030 - 001 10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes
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Emission Limitation:

The permittee shall not emit particulate matter in a concentration in excess of 0.10 grains/scf from emission unit EU0030.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

PERMIT CONDITION EU0030 - 002 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds
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Emission Limitation:

- 1) Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.

- 2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.
- 3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Equipment and Operation Parameters:

The emission unit shall be limited to burning pipeline grade natural gas and propane.

Monitoring/Recordkeeping/Reporting:

- 1) The permittee shall report any change of fuel type to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 within ten (10) days of the switch of fuel types.
- 2) The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0040 – EU0070 Weld Around Booths			
EU0040 – Weld Around Booths (MIG) #1			
EU0050 – Weld Around Booths (MIG) #2			
EU0060 – Weld Around Booths (TIG) #1			
EU0070 – Weld Around Booths (TIG) #2			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0040	Weld Around Booth (MIG) #1	Bancroft/8093 04	EP-09
EU0050	Weld Around Booth (MIG) #2	Bancroft/8093 04	EP-09
EU0060	Weld Around Booth (MIG) #3	Bancroft/350	EP-09
EU0070	Weld Around Booth (MIG) #4	Bancroft/350	EP-09

PERMIT CONDITION (EU0040-EU0070) - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 2.22 lbs/hr from emission unit EU0040 through EU0070.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0090 – Welded Tube Mill, #305			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0090	Welded Tube Mill, #305	Eclipse/104TFB-PLA (Modine/M6836)	EP-21 Segments 1 & 2

PERMIT CONDITION EU0090 - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 0.66 lbs/hr from emission unit EU0090.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0130 – Automatic Solder Pour			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0130	Automatic Solder Pour	Modine/M7959 (Eclipse/65184)	EP-28 Segments 1 & 2

PERMIT CONDITION EU0130-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit #0295-007, Issued February 23, 1995

Emission Limitation:

If in the opinion of the Director, a continuing situation of demonstrated nuisance odors exists for the neighbors of the installation, (s)he may require Modine Manufacturing Company to submit a corrective action plan adequate to timely and significantly mitigate the odors. Modine Manufacturing Company shall implement any such plan immediately upon approval by the Director. Failure to either submit or implement such plan shall be a violation of the permit.

Monitoring:

Modine Manufacturing Company shall monitor the requested information in an approved corrective action plan. No monitoring is required if a corrective action plan is not required.

Recordkeeping:

Modine Manufacturing Company shall keep records of the requested information in an approved corrective action plan. No recordkeeping is required if a correction action plan is not required.

Reporting:

Modine Manufacturing Company shall submit a corrective action plan to the Air Pollution Control Program if required by the Director.

EU0140 – Welded Tube Mill #310			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0140	Welded Tube Mill #310	N/A	EP-29 Segments 1 & 2

PERMIT CONDITION EU0140-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit # 0396-023, Issued March 25, 1996

Emission Limitation:

If in the opinion of the Director, a continuing situation of demonstrated nuisance odors exists for the neighbors of the installation, (s)he may require Modine Manufacturing Company to submit a corrective action plan adequate to timely and significantly mitigate the odors. Modine Manufacturing Company shall implement any such plan immediately upon approval by the Director. Failure to either submit or implement such plan shall be a violation of the permit.

Monitoring:

Modine Manufacturing Company shall monitor the requested information in an approved corrective action plan. No monitoring is required if a corrective action plan is not required.

Recordkeeping:

Modine Manufacturing Company shall keep records of the requested information in an approved corrective action plan. No recordkeeping is required if a correction action plan is not required.

Reporting:

Modine Manufacturing Company shall submit a corrective action plan to the Air Pollution Control Program if required by the Director.

PERMIT CONDITION EU0140 – 002
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 0.66 lbs/hr from emission unit EU0140.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0150 – EU0200 Subassembly Welding EU0150 – Subassembly Welding #1 (MIG) EU0160 – Subassembly Welding #2 (MIG) EU0170 – Subassembly Welding #3 (MIG) EU0180 – Subassembly Welding #4 (MIG) EU0190 – Subassembly Welding #5 (MIG) EU0200 – Subassembly Welding (TIG)			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0150	Subassembly Welding #1 (MIG)	Miller, CP250T5, KMT-300	EP-44
EU0160	Subassembly Welding #2 (MIG)	Miller, CP250T5, KMT-300	EP-44
EU0170	Subassembly Welding #3 (MIG)	Miller, CP250T5, KMT-300	EP-44
EU0180	Subassembly Welding #4 (MIG)	Miller, CP250T5, KMT-300	EP-44
EU0190	Subassembly Welding #5 (MIG)	Miller, CP250T5, KMT-300	EP-44
EU0200	Subassembly Welding (TIG)	Miller, CP250T5, KMT-300	EP-44

PERMIT CONDITION (EU0150 – EU0200) - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 3.75 lbs/hr from emission units EU0150 through EU0190.
- 2) The permittee shall not emit particulate matter in excess of 2.22 lbs/hr from emission unit EU0200.
- 3) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0210 – Sludge Dryer			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0210	Sludge Dryer	SWI/1206	EP-51, CD-9

PERMIT CONDITION EU0210 - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 0.62 lbs/hr from emission unit EU0210.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0220 – Electrodeposition Paint (EDP) System & Bake Oven			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0220	Electrodeposition Paint (EDP) System & Bake Oven	TTX/2248	EP-55 Segments 1 & 2

PERMIT CONDITION EU0220 - 001
10 CSR 10-3.060 Restriction of Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.34 pounds per million BTU of heat input from emission unit EU0220.

Equipment and Operation Parameters:

This emission unit shall be limited to burning pipeline grade natural gas and propane.

Monitoring/Recordkeeping/Reporting:

- 1) The permittee shall report any change of fuel type to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, within ten (10) days of the switch of fuel types.
- 2) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

PERMIT CONDITION EU0220-002
10 CSR 10-6.260
Restriction of Emission of Sulfur Compounds

Emission Limitation:

- 1) No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight (8) pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three (3) hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Equipment and Operation Parameters:

The emission unit shall be limited to burning pipeline grade natural gas and propane.

Monitoring/Recordkeeping/Reporting:

- 1) The permittee shall report any change of fuel type to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, within ten (10) days of the switch of fuel types.

- 2) The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0230 – IMRM / AMOCS Stiffener Welding			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0230	IMRM / AMOCS Stiffener Welding with an Electrostatic Precipitator	Taylor Winfield/Custom Built (Modine/M7249)	EP-58

PERMIT CONDITION EU0230 - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 2.22 lbs/hr from emission unit EU0230.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0240 – TIG Weld Around			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0240	TIG Weld Around	N/A	EP-73

PERMIT CONDITION EU0240 - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 2.22 lbs/hr from emission unit EU0240.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

(EU0330 – EU0380) EU0330 – Weld Repair Booth (TIG) EU0340 - Laser EU0350 – Beta Weld #1 (M-7252) EU0360 – Beta Weld #2 (M-7958) EU0370 – Beta Weld #3 (M-8115) EU0380 – Beta Weld #4			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0330	Weld Repair Booth (TIG)	N/A	EP-35, CD-4
EU0340	Laser	N/A	EP-43, CD-9
EU0350	Beta Weld #1 (M-7252)	N/A	EP-38
EU0360	Beta Weld #2 (M-7958)	N/A	EP-57
EU0370	Beta Weld #3 (M-8115)	N/A	EP-70
EU0380	Beta Weld #4	N/A	N/A

PERMIT CONDITION (EU0330 – EU0380) - 001
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

- 1) The permittee shall not emit particulate matter in excess of 2.22 lbs/hr from emission units EU0330 through EU0380.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic feet of exhaust gases.

Monitoring/Recordkeeping/Reporting:

The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

EU0410 – IMRM Backsolder-after-Robot Machine			
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #
EU0410	IMRM Backsolder-after-Robot Machine	N/A	EP-84

PERMIT CONDITION EU0410-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit # 122001-015, Issued December 28, 2001

Emission Limitation:

Modine Manufacturing Company shall not discharge into the atmosphere lead in excess of 0.01 ton from a backsolder (after robot) machine (EU0410) in any consecutive twelve (12) month period.

Monitoring:

Modine shall monitor the amount of solder and the lead emissions from emission unit EU0410.

Recordkeeping:

- 1) Modine shall record the monthly and the sum of the most recent consecutive twelve (12) month lead emissions in tons from emission unit EU0410 (See Attachment E).

- 2) These records shall be kept on-site for five (5) years and shall be made immediately available for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed.

EU0420 – Hand Operated Paint Booth			
Emission Unit	Description	Construction Date	2008 EIQ Reference #
EU0420	Hand Paint Booth	April 2009	EP-98

PERMIT CONDITION EU0420-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit # 122008-004, Issued December 10, 2008

Operational Limitation:

Special Condition No. 1: The fabric filter in the hand operated paint booth (EP-98) must be in use at all times when the paint booth is in operation. The filter shall be operated and maintained in accordance with the manufacturer's specifications.

Monitoring:

- 1) Coating operations equipped with filters shall not be operated without a filter in place.
- 2) The filters shall be inspected for holes, imperfections, proper installation or other problems that could hinder the effectiveness of the filter.
- 3) The filters shall be inspected each shift before spraying begins and after installation of a new filter.
- 4) The manufacturer's recommendations shall be followed with regard to installation and frequency of replacement of the filters.

Recordkeeping:

- 1) The permittee shall maintain records of the inspections of filters including when they occur. (See Attachment F)
- 2) These records shall be made available immediately for inspection to the Air Pollution Control Program and the Missouri Department of Natural Resources' personnel upon request.
- 3) All records shall be kept for a period of five years.

Reporting:

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A (III)] The permittee shall retain the most current operating permit issued to this installation on-site.

[10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 3) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. Qualified personnel shall perform all tests.
- 2) The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.030 Open Burning Restrictions

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the Director. The request shall include the following:
 - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 - b) The schedule of burning operations;
 - c) The exact location where open burning will be used to dispose of the trade wastes;
 - d) Reasons why no method other than open burning is feasible; and
 - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the Director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Modine Manufacturing Company - Jefferson City from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the Director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

**10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61
Subpart M National Emission Standard for Asbestos**

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
 - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage
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- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "*Operating Permits*", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "*Operating Permits*", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "*Sampling Methods for Air Pollution Sources*";

- ii) 10 CSR 10-6.040, “*Reference Methods*”;
- iii) 10 CSR 10-6.070, “*New Source Performance Standards*”;
- iv) 10 CSR 10-6.080, “*Emission Standards for Hazardous Air Pollutants*”; or
- b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) April 1st for monitoring which covers the January through December time period.
 - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with

40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(5)(C)1.A General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.

- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(5)(C)5 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Mr. David Lidester, Regional Operations and Facility Director. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants

made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;
or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

ATTACHMENT A

This attachment may be used to help meet the recordkeeping requirements of Permit Condition PW002.

Method 22 (Outdoor) Observation Log		
Emission Unit		
Observer	Date	
Sky Conditions		
Precipitation		
Wind Direction	Wind Speed	
<p>Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.</p> 		
Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		

ATTACHMENT B
Monthly and Rolling 12-Month VOC Tracking Record

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Column A Process	Column B Amount of Material Processed	Column C⁵ VOC Emission Factor	Column D Emission Factor Units	Column E⁶ Process VOC Emissions (Tons)
Natural Gas Consumption ¹			pounds/million cubic feet	
Natural Gas Consumption ²			pounds/million cubic feet	
Painting System (EP-14)			pounds VOC/ pound coating	
Boiler ³ (EP-20)			pounds/1000 gallons	
Boiler ⁴ (EP-22)			pounds/million cubic feet	
Fin Machine (EP-48)			pounds/gallon	
Fin Machine (EP-49)			pounds/gallon	
Fin Machine (EP-52)			pounds/gallon	
Fin Machine (EP-53)			pounds/gallon	
Painting System (EP-55)			pounds/ton	
Fin Machine (EP-65)			pounds/gallon	
Touch-Up Painting (EP-68)			pounds/ton	
Fin Machine (EP-75)			pounds/gallon	
Oil Fogging (EP-77)			pounds/gallon	
Fin Machine (EP-81)			pounds/gallon	
Fin Machine (EP-87)			pounds/gallon	
4 Fin Machines (EP-99)			pounds/gallon	
Paint Booth (EP-98)			pounds/gallon	
Total VOC Emissions Calculated for this Month (Tons)				
12-Month VOC Emissions Total from Previous Month's Worksheet				
Monthly VOC Emissions Total from Previous Year's Worksheet				
Current 12-Month Total VOC Emissions ⁷				

¹ Total consumption of natural gas from emission points: 2, 3, 7, 15, 17, 19, 21, 28, 29, 40, 41 and 55; Note: the emission factor used by these units in 1997 was 5.3 lbs VOC/MMCF.
² Total consumption of natural gas from emission points: 5, 6, 10, 11, 25, 26, 27, 32, 33, 37, 47, 50 and 51; Note: the emission factor used by these units in 1997 was 7.3 lbs VOC/MMCF.
³ The emission factor used by this unit in 1997 was 0.2 lbs/1000 gallons.
⁴ The emission factor used by this unit in 1997 was 2.8 lbs/MMCF.
⁵ Emission Factors not previously mentioned shall be obtained by mass balance of material used
⁶ Column B x Column C x 0.0005
⁷ Current months emissions + last 12 months emissions – emissions from the same month last year. Total of less than 250 tons indicates compliance.

STATEMENT OF BASIS

Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received February 14, 2005;
- 2) 2005 Emissions Inventory Questionnaire, received March 20, 2006; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

- 1) Construction Permit Number: 122008-004
EP-97 Large Dry-off Oven and EP-101 Paint Cure Oven were not installed. Only 5 of the 8 proposed Wire Welder were installed under EP-100. Only 4 of the 5 proposed Fin Machines were installed under EP-99.
- 2) Construction Permit Number: 122006-010
None of the equipment within this permit was ever installed.

3) Construction Permit Number: 0199-019

The emission limitations for particulate matter for the Robot Welding (EP-36, EP-56 and EP-80) in the construction permit are 4.10 lbs/hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, the emission limitations should be 0.051 lbs/hr (EP-36 and EP-56) and 0.076 lbs/hr (EP-80).

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, "This condition is intended to replace all existing VOC limits set by construction permits at this installation." Therefore, the special conditions of Construction Permit Number: 0199-019 were not included in the operating permit.

4) Construction Permit Number: 1298-001

The emission limitations for particulate matter were placed under 10 CSR 10-5.050, *Restriction of Emission of Particulate Matter from Industrial Processes*, in the construction permit. The installation is not located in the St. Louis Metropolitan area, the particulate matter rule applicable to the installation is 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*.

The emission limitations for particulate matter for the TIG Welders and MIG Welders (EP-78 and EP-79) in the construction permit are 4.10 lbs/hr. The TIG Welders were never installed. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, the emission limitations for the MIG Welders should be 0.018 lbs/hr.

5) Construction Permit Number: 1198-001

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, "This condition is intended to replace all existing VOC limits set by construction permits at this installation." Therefore, the special conditions of Construction Permit Number: 1198-001 were not included in the operating permit.

Special Condition #3 for HAPs was rewritten since EP-19 (Koch EDP Painting & Bake Oven) was removed from the installation. The condition is as follows: "Modine shall emit less than 203.9 tons of hazardous air pollutants (HAPs) from the painting systems (EP-14 and EP-55) in any consecutive 12 month period."

6) Construction Permit Number: 1098-010

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, "This condition is intended to replace all existing VOC limits set by construction permits at this installation." Therefore, the special conditions of Construction Permit Number: 1098-010 were not included in the operating permit.

7) Construction Permit Number: 0598-011

Special Conditions #1 - #3 for PM₁₀ were deemed no longer necessary according to Construction Permit Number 1198-001, "Since the installation is no longer considered a major source of criteria air pollutants, the PM₁₀ emission limits imposed by previous permit are no longer necessary.

Unconditioned potential PM₁₀ emissions are below the major source threshold.” Therefore, the special conditions of 0598-011 were not included in the operating permit.

The emission limitations for particulate matter were placed under 10 CSR 10-5.050, *Restriction of Emission of Particulate Matter from Industrial Processes*, in the construction permit. The installation is not located in the St. Louis Metropolitan area, the particulate matter rule applicable to the installation is 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*.

The emission limitations for particulate matter for the TIG Weld Around and Back Soldering Stands (EP-66 and EP-67) in the construction permit are 4.10 lbs/hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, the emission limitations should be 2.22 lb/hr (EP-66) and 0.076 lb/hr (EP-67).

8) Construction Permit Number: 0598-004

Special Conditions #1 - #3 for PM₁₀ were deemed no longer necessary according to Construction Permit Number 1198-001, “Since the installation is no longer considered a major source of criteria air pollutants, the PM₁₀ emission limits imposed by previous permit are no longer necessary. Unconditioned potential PM₁₀ emissions are below the major source threshold.” Therefore, the special conditions of 0598-004 were not included in the operating permit.

The emission limitations for particulate matter were placed under 10 CSR 10-5.050, *Restriction of Emission of Particulate Matter from Industrial Processes*, in the construction permit. The installation is not located in the St. Louis Metropolitan area, the particulate matter rule applicable to the installation is 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*.

The emission limitations for particulate matter for the Beta Welder (EP-64) in the construction permit are 4.10 lbs/hr. Based upon the set-up of the Beta Welder for EP-64, the emission unit does not have a stack for the emissions to be vented out and is therefore a fugitive emission source. Since the emissions are not vented through a stack, 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes* does not apply to the emission unit.

9) Construction Permit Number: 0398-021

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, “This condition is intended to replace all existing VOC limits set by construction permits at this installation.” Therefore, the special conditions of Construction Permit Number: 0398-021 were not included in the operating permit.

10) Construction Permit Number: 0997-042

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, “This condition is intended to replace all existing VOC limits set by construction permits at this installation.” Therefore, the special conditions of Construction Permit Number: 0997-042 were not included in the operating permit.

Special Conditions #1 - #3 for PM₁₀ were deemed no longer necessary according to Construction Permit Number 1198-001, “Since the installation is no longer considered a major source of criteria air pollutants, the PM₁₀ emission limits imposed by previous permit are no longer necessary. Unconditioned potential PM₁₀ emissions are below the major source threshold.” Therefore, the special conditions of 0997-042 were not included in the operating permit.

The emission limitations for particulate matter for the welding, soldering and brazing booths, seaming, laser, sawing, grinding and press operations (EP-9, EP-10, EP-11, EP-23, EP-30, EP-36, EP-37, EP-38, EP-43, EP-45 and EP-59) in the construction permit are 4.10 lbs/hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, and the maximum hourly design rate and emission factors provided in the construction permit, the emission limitations should be as follows:

Emission Point	Limitation (lb of PM/hr)
EP-09	2.220
EP-10	0.040
EP-11	0.040
EP-23	0.064
EP-30	0.093
EP-36	0.051
EP-37	0.200
EP-43	2.220
EP-45	2.220
EP-59	2.220
EP-100	0.990

Based upon the set-up for EP-38, the emission unit does not have a stack for the emissions to be vented out and is therefore a fugitive emission source. Since the emissions are not vented through a stack, 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes* does not apply to the emission unit.

11) Construction Permit Number: 0697-026

Special Conditions #1 - #3 for VOC were deemed no longer applicable according to Construction Permit Number: 0799-024. Special Condition #1 of Construction Permit Number: 0799-024 states, “This condition is intended to replace all existing VOC limits set by construction permits at this installation.” Therefore, special conditions #1 - #3 of Construction Permit Number: 0697-026 were not included in the operating permit.

Special Condition #4 states as follows:

Modine Manufacturing Company shall cease operations and render inoperable the existing surface coating operations (EP-14 & EP-19) within 90 days of the startup of production of the new EDP system. Any VOC emissions from the existing surface coating operations (EP-14 & EP-19) emitted during the above 90 day period shall be counted toward the VOC emission limitation established in Condition #1. After this initial 90 day period, Modine Manufacturing Company would be required to obtain an air permit before beginning the operation of these surface coating operations (EP-14 & EP-19) being replaced by the new EDP system (EP-55).

Special Condition #4 was not included in the operating permit since the installation obtained Construction Permit Number: 1198-001 for the re-installation of the old spray paint system (EP-14).

12) Construction Permit Number: 1096-004

The emission limitation for particulate matter from the sludge dryer (EP-51) in the construction permit is 4.10 lbs/hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, and the maximum hourly design rate and emission factors provided in the construction permit, the emission limitation should be 0.62 lb/hr.

13) Construction Permit Number: 0396-023

The construction permit did not list 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, as an applicable requirement for the installation of Welded Tube Mill #310. Based upon the equation in 10 CSR 10-6.400, and the maximum hourly design rate and emission factors supplied in the operating permit application, the emission limitation should be 0.66 lb/hr (EP-29).

14) Construction Permit Number: 0295-007

Special Condition #1 was not included in the operating permit, since the installation has already conducted the required performance test.

The emission limitation for particulate matter for the automatic solder pour machine in the construction permit is 4.10 lbs/hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Process*, and the maximum hourly design rate and emission factors supplied in the operating permit application, the emission limitation should be 0.30 lb/hr (EP-28).

15) Construction Permit Number: 0193-006

The emission unit for this construction permit has been removed from the installation.

16) Construction Permit Number: 0692-010

The construction permit states that 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*, is an applicable requirement. The construction permit did not place an emission limit for particulate matter in the permit. Based upon the equation in 10 CSR 10-6.400, and the maximum hourly design rate and emission factors supplied in the operating permit application, the emission limitation for particulate matter should be 0.018 lb/hr. (EP-34)

17) Construction Permit Number: 1289-001

The ED Paint System listed in this construction permit is a modification of an existing system. The System was removed with construction permit 0697-026 and re-installed with construction permit 1198-001. Therefore, this permit and conditions were not included in the operating permit.

18) Construction Permit Number: 0189-008A

The emission limitation for particulate matter for the addition of #305 Welded Tube Mill in the construction permit is 2.44 lbs/hr (EP-31&32). This limitation was based upon stack test data from another Modine installation. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission*

of Particulate Matter from Industrial Process, and the maximum hourly design rate and emission factors supplied in the operating permit application the emission limitations should be 0.0054 lb/hr (EP-31) and 0.064 lb/hr (EP-32).

19) Construction Permit Number: 0189-003A

The emission limitation for particulate matter for the addition of a set of dip pots to the solder dip line in the construction permit is 0.09 lbs/hr. This limitation was based upon a maximum solder usage of 7 lbs/hr for EP-11. The maximum hourly design rate supplied in the operating permit application for the solder dip pots is 0.001 Tons/Hr. Based upon the equation in 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Process*, and the maximum hourly design rate and stack test emission factor supplied in the operating permit application, the emission limitation should be 0.04 lbs/hr.

20) Construction Permit Number: 0587-002.

This construction permit is for the installation of an ED Paint System. The Paint System was modified in Construction permit 1289-001 and therefore this construction permit was not included in the operating permit.

21) Construction Permit Number: 0986-011A

A hard tube mill was permitted in this construction permit. The following statement regarding the hard tube mill is stated in construction permit 1096-004, “According to Chuck Miklich, Engineering Manager, Jefferson City facility, the hard tube mill approved in permit 0986-011A has been removed. This has been verified by Missouri Department of Natural Resources-Jefferson City Regional Office, their records indicated the mill was removed in 04/95”. Since the hard tube mill contained in this construction permit was removed in 1995, the construction permit is no longer valid.

New Source Performance Standards (NSPS) Applicability

None.

Maximum Available Control Technology (MACT) Applicability

10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*

40 CFR Part 63, Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*

The installation does have a cleaning line, but the solvents used in the process are sulfuric acid and an alkaline based solvent with sodium hydroxide as the major component. These solvents are not covered by Subpart T, therefore the MACT was not included in the operating permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

None.

Other Regulatory Determinations

1) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*

EU0020

At the maximum hourly design rate (0.066 Tons/Hr), the emission rate (0.19 lb/hr) based on the stack test data (2.93 lb/ton) is approximately 3.5 times less than the allowable emission rate (0.66 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0030

At the maximum hourly design rate (0.001 MMCF/Hr), the concentration of particulate matter in the exit stream (0.0028 grain/ft³) based on the stack parameters (volumetric flow =1200 actual ft³/min) and the AP-42 emission factor (12.0 lb/MMCF) is approximately thirty-five (35) times less than the allowable emission rate (0.100 grain/ft³). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0040 – EU0070

At the maximum core rate (6.33 Core/Hr , the maximum weight of the core is 126 lb/core), the emission rate (0.012 lb/hr) based on the stack test data (0.00182 lb PM/core processed) is approximately one hundred ninety (190) times less than the allowable emission rate (2.22 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0090

At the maximum hourly design rate (0.066 Tons/Hr), the emission rate (0.36 lb/hr) based on the stack test data (5.487 lb/ton) is approximately 50% of the allowable emission rate (0.66 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0140

At the maximum hourly design rate (0.066 Tons/Hr), the emission rate (0.36 lb/hr) based on the stack test data (5.487 lb/ton) is approximately 50% of the allowable emission rate (0.66 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0150 – EU0190

Based on the calculations from construction permit number: 0799-024, the allowable emission rate is 3.75 lbs/hr. At the maximum hourly design rate (0.00125 ton/hr), the emission rate (0.025 lbs/hr) based on the supporting documentation emission factor (20.17 lb/1000 lb welding rod) is approximately one hundred fifty (150) times less than the allowable emission rate. It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0200

At the maximum core rate (6.33 Core/Hr , the maximum weight of the core is 126 lb/core), the emission rate (0.012 lb/hr) based on the stack test data (0.00182 lb PM/core processed) is approximately one hundred ninety (190) times less than the allowable emission rate (2.22 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0210

At the maximum hourly design rate (0.06 Tons/Hr), the emission rate (0.012 lb/hr) based on the stack test data (0.201 lb/ton) is approximately fifty-two (52) times less than the allowable emission rate (0.62 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0230 – EU0240

At the maximum core rate (6.33 Core/Hr , the maximum weight of the core is 126 lb/core), the emission rate (0.012 lb/hr) based on the stack test data (0.00182 lb PM/core processed) is approximately one hundred ninety (190) times less than the allowable emission rate (2.22 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0330 – EU0360

At the maximum core rate (6.33 Core/Hr, the maximum weigh of the core is 126 lb/core), the emission rate (0.012 lb/hr) based on the stack test data (0.00182 lb PM/core processed) is approximately 190 times less than the allowable emission rate (2.22 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0370 – EU0400

At the maximum core rate (6.33 Core/Hr, the maximum weight of the core is 126 lb/core), the emission rate (0.00608 lb/hr) based on the stack test data is approximately three hundred sixty (360) times less than the allowable emission rate (2.22 lb/hr). It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements.

EU0420

This emission unit is exempted from the regulation per 10 CSR 10-6.400(1)(B)(14) because it is equipped with a fabric filter with 95% control efficiency.

EP-100

This emission unit is exempted from the regulation per 10 CSR 10-6.400(1)(B)(12) because it has the potential to emit less than 0.5 lbs PM/hr.

2) 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

The allowable emission rate for all of the indirect heating sources is determined by the following equation for new equipment:

$$E = 1.31(Q)^{-0.338} = 1.31(54.5027)^{-0.338} = 0.34 \frac{lb}{MMBTU}$$

The majority of the equipment subject to this regulation is below the 10 MMBTU/hr cutoff of the operating permit rule. At the maximum hourly design rate, the emission rates were calculated based on the AP-42 emission factors, the following table is a listing of the results that are included in the operating permit:

Equipment	Heat Content (MMBTU/Hr)	MHDR (MMCF/Hr)	Emission Factor (lb/MMCF)	Emission Rate (lb/MMBTU)
EU0220 - EDP Painting/Bake Oven	8.80	0.0084	12.0	0.011

These emission rates are twenty-four (24) and twenty-nine (29) times less than the allowable emission rate. It is highly unlikely that the allowable emission rate will be exceeded, therefore there are no recordkeeping or monitoring requirements. The installation needs to notify us prior to switching fuel types.

3) 10 CSR 10-6.060, *Construction Permits*

Exempt Emission Units: Proposed construction or modification located less than five hundred (500) feet from the property boundary, at maximum design capacity the proposed construction or modification shall emit each criteria pollutant at a rate of no more than one-half (0.5) pounds per hour.

The following equipment was not placed in the emission units with limitations section of the operating permit since the emission limit for particulate matter from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, was less than one-half (0.5) pounds per hour.

Equipment	MHDR (ton/hr)	Emission Rate (lb/hr)
Dip Pot (M4849)	0.00200	0.064
Solder/Braze Booth (North) #1 - #2	0.01000	0.190
Solder/Braze Booth (South) #1 - #2	0.01000	0.190
Maintenance Welding (MIG) #1 - #3	0.00200	0.064
Induction Soldering	0.00350	0.093
Final Assembly Welding #1 - #5	0.00050	0.025
Robot Welding #1	0.00145	0.051
Seaming (Hand, Semi-Automatic, Automatic) #1 - #14	0.01100	0.200
Robot Welding #2	0.00145	0.051
Back Soldering (IMRM)	0.00350	0.093
Weld Repair Booth (MIG)	0.00030	0.018

4) 10 CSR 10-6.065, *Operating Permits*

Exempt Emission Units: Combustion equipment that has a capacity of less than ten (10) MMBTU/hr heat input by using exclusively natural or liquefied petroleum gas, or any combination of these; or less than one (1) MMBTU/hr heat input. The following emission units are exempt from the requirements of this rule.

Equipment	MHDR (MMBTU/hr)	Fuel
60" Bake Oven	1.1500	Natural Gas
Dip Pot	0.2250	Natural Gas
Dip Pot	0.1200	Natural Gas
(2) Solder/Braze Booths	0.0142	Natural Gas
Annealing Oven	0.3500	Natural Gas
Vertical Core Bake Oven	1.6000	Natural Gas
EDP Painting & Bake Oven	0.5000	Natural Gas
Welded Tube Mill	0.5000	Natural Gas
Double Dip Pot	0.1200	Natural Gas
Automatic Solder Pour	2.3000	Natural Gas
Welded Tube Mill	0.6000	Natural Gas
Unit Heaters	2.2800	Natural Gas
(7) Make-Up Air Units	13.1200	Natural Gas
Tank Removal Station	0.0123	Natural Gas
Sludge Dryer	0.1250	Natural Gas

The Exemption does not apply to the following Direct-Fired Equipment:

Equipment	MHDR (MMBTU/hr)	Fuel
Annealing Machine	1.05	Natural Gas
Final Assembly Solder (10 torches)	0.12	Natural Gas
Test & Repair Soldering (28 torches)	0.12	Natural Gas
Seaming (24 burners) (18) torches)	0.87	Natural Gas
Back Soldering (14 torches)	0.12	Natural Gas

The following equipment was in the original operating permit application, but has been dismantled and removed from the installation and was therefore not included in the operating permit: Dip Pot (M4848) and Argco Fin Press.

5) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

At the maximum hourly design rate, the emission rate based upon the AP-42 emission factors for sulfur oxide emissions from the combustion of pipeline grade natural gas and distillate fuel oil #2 is much less than the allowable emission rate. Screen 3 models were run for the sulfur oxide emissions at the maximum hourly design rate for the fuel burning stacks. The maximum concentration of the stacks together is more than one hundred (100) times less than the annual ambient air level for sulfur dioxide (80 ug/m³). It is highly unlikely that the units will exceed the emission limitation or the ambient air level. Therefore, no recordkeeping or monitoring is required. 10 CSR 10-6.065, *Operating Permits, Significant Modification*

The intent of the Significant Modification Application, Project #2002-05-184, was to incorporate a 10/25 HAP limitation on the entire installation. The regulation reference of 10 CSR 10-3.050, which has been rescinded, has been revised throughout the entire permit to 10 CSR 10-6.400. The annual method 9 requirement from Condition PW002 (10 CSR 10-6.220) was removed, since it is no longer considered standard monitoring by the Air Pollution Control Program.

The following units have been removed from the Operating Permit during the modification since they were never installed or they have been completely shut down and removed from the installation.

EU0250 through EU0280 (TIG Beta Weld Repair #1 - #4)
EU0290 through EU0320 (Back Soldering Reflow Stand #3 - #6)
Dip Pot (m4849)
Solder/Braze Booth (North) #1 and #2
Three (3) Pressurized Propane Storage Tanks
Back Soldering (EP-50)

- 6) The Administrative Amendment Application, Project #2001-08-077, requested the removal of the hand spray painting (EP-14) equipment which had been removed from the installation. This was determined to be a significant modification and combined with Project #2002-05-184. This removed emission unit EU0080 and all conditions and attachments associated with this unit.

The Administrative Amendment Application, Project #2002-01-138, requested the addition of equipment permitted in Construction Permit #122001-015. Since Construction Permit #122001-015 was not a unified review, this was determined to be a significant modification and combined with Project #2002-05-184. The Operating Permit was updated to reflect Construction Permit #122001-015. This added emission unit EU0410 IMRM Backsolder-after-Robot Machine to the Operating permit.
10 CSR 10-6.400, *Restriction of Emission of Particulate Matter*, was not included as an applicable regulation for this emission unit because potential uncontrolled particulate matter emissions are less than 0.5 pounds per hour. [10 CSR 10-6.400(1)(B)11]

In addition to the changes listed above, the Core Permit Requirements and General Permit Requirements were updated to reflect the current standard wording reflecting the changes agreed to with EPA and the Sierra Club. The Documents Incorporated by Reference Section was also updated to include all of the Construction Permits for the installation to reflect changes agreed to with EPA and the Sierra Club.

- 7) In an email from Edward Besaw, dated April 30, 2007, the Air program was notified that the following emission units have been removed from the installation and also removed from the permit:
- EU0010 – 40” Core Bake Oven
 - EU0100 – 500 Hp Boiler
 - EU0110 – Hard Tube Mill
 - EU0120 – Hard Tube Mill

- Radix Welder #1
- Radix Welder #2
- Double Dip Pot (M4645) #1 - #2
- Water Dry-Off Oven
- Paint Mixing and Storage Room
- Double Dip Pot (M2832) #1 - #2

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

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