



## 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:** OP2007-003  
**Expiration Date:** JAN 21 2012  
**Installation ID:** 099-0114  
**Project Number:** 2003-11-021

**Installation Name and Address**

AERO Metal Finishing  
2150 North Lark Industrial Drive  
Fenton, MO 63026  
Jefferson County

**Parent Company's Name and Address**

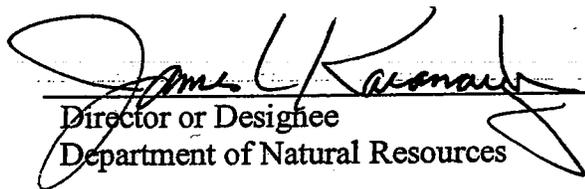
N/A

**Installation Description:**

AERO Metal Finishing operates an aerospace parts finishing operation in Fenton, Missouri.

JAN 22 2007

Effective Date

  
Director or Designee  
Department of Natural Resources

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# I. Installation Description and Equipment Listing

## INSTALLATION DESCRIPTION

AERO Metal Finishing operates an aerospace parts finishing operation in Fenton, Missouri. Aerospace parts are cleaned, dried and then painted. AERO Metal Finishing also performs other metal finishing operations, such as cadmium plating, zinc plating, chromic anodizing and chromate conversion at this installation.

The reported actual emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2005	0.03	0.30	1.16	1.79	0.00	0.00	0.00
2004	0.04	0.27	1.20	1.34	0.00	0.00	0.00
2003	0.10	0.29	1.39	1.30	0.04	0.00	0.00
2002	0.00	0.00	3.00	2.00	0.00	0.00	0.00
2001	0.13	0.50	2.04	2.20	0.04	0.00	0.20

## 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 #	EIQ Reference #	Description of Emission Unit
EU0010	EP-04	Painting OS Miscellaneous Metal Parts
EU0020	EP-09	Chrome Anodizing Process/Conversion Coating

## 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.

EIQ Reference #	Description of Emission Unit
EP-01	Aerospace Parts Painting
EP-02	Spray Wash Aerospace Parts/Miscellaneous Metal Parts Spray Wash
EP-03	Equipment Clean-up/Aerospace Painting
EP-05	Alcohol Spray Wash/Miscellaneous Metal Parts Coating
EP-06	Equipment Clean-up/Miscellaneous Parts Painting
EP-07	Zinc Plating Process
EP-08	Cadmium Plating Process
EP-10	Natural Gas Fired Space Heater, 2.5 MMBtu/hr
EP-11	Natural Gas Furnace for Bake Oven, 0.25 MMBtu/hr

EIQ

Reference #	Description of Emission Unit
EP-13A	Acid Cleaning of Metal
EP-13B	Acid Cleaning of Metal
EP-14	Natural Gas Fired Boiler, 2.06 MMBtu/hr
EP-15	Natural Gas Fired Water Evaporator, 0.15 MMBtu/hr
EP-16	Aluminum Oxide/Glass Bead Cleaner (Fugitive)

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Construction Permit, Permit No. 122003-003, Issued November 14, 2003.

## 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 10-6.060, Construction Permits Required**  
**Construction Permit No. 122003-003, Issued November 14, 2003**

**10 CSR 10-6.065, Operating Permits**  
**10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)**

#### **Emission Limitation:**

AERO Metal Finishing shall limit discharge into the atmosphere, from the entire installation, volatile organic compounds (VOC) to less than 25 tons, any single hazardous air pollutant (HAP) to less than 10 tons, and combined HAPs to less than 25 tons in any consecutive 12-month period.

#### **Monitoring/Recordkeeping:**

AERO Metal Finishing shall maintain an accurate record of VOC, single HAPs, and combined HAPs emitted into the atmosphere from this installation. AERO Metal Finishing shall record the monthly and running 12-month totals of VOC, any single HAP and combined HAPs emissions from this installation. AERO Metal Finishing shall use Attachments A-1, A-2 and B, or equivalent forms, for this purpose. AERO Metal Finishing shall maintain records on-site for the most recent 60 months of all records required by this permit condition and shall immediately make such records available to any Missouri Department of Natural Resources personnel upon request.

#### **Reporting:**

AERO Metal Finishing shall report to the Air Pollution Control's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the records show that the installation exceeded the emission limitations (25 tons of VOC, 10 tons of any single HAP, and 25 tons of combined HAPs in any consecutive 12-month period).

**Permit Condition PW002**

**10 CSR 10-6.220**

**Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source in St. Louis metropolitan area any visible emissions with an opacity greater than 20%.
- 2) Exception:
  - a) Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) pounds per hour (lbs/hr) of particulate matter shall be limited to 40% opacity.
  - b) 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 60 minutes air contaminants with an opacity up to 40%.

**Monitorin**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) 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) Monthly observations shall be conducted for a minimum of six consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly 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 C-1), 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 Method 9 test performed in accordance with this permit condition. (see Attachment C-2)
- 4) Attachments C-1 and C-2 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

### 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.

<b>EU0010 – Painting OS Miscellaneous Metal Parts</b>			
Emission Unit	Description	Manufacturer/Model #	2005 EIQ Reference #
EU0010	Painting OS Miscellaneous Metal Parts	Not Available	EP-04

<p><b>Permit Condition EU0010-001</b></p> <p><b>10 CSR 10-5.330</b></p> <p><b>Control of Emissions From Industrial Surface Coating Operations</b></p>
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**Emission Limitation:**

The permittee shall not emit or discharge into the atmosphere any VOC from Painting OS Miscellaneous Metal Parts coating operation (surface coating process) in excess of 3.5 lbs. VOC per gallon of coating (minus water and non-VOC organic compounds)<sup>1</sup>

**Monitoring:**

The permittee shall use the following procedures for determining the daily volume-weighted average (DAVG<sub>VW</sub>) pounds of VOC emitted per gallon of coating (minus water and non-VOC organic compounds):

- 1) Calculate the DAVG<sub>VW</sub> of all coatings used as delivered to the coating applicator(s) using the following formula:

$$DAVG_{VW} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

- A = daily gallons each coating used (minus water and exempt solvents)
- B = lbs. VOC/gal. coating (minus water and exempt solvents)
- C = total daily gallon coatings used (minus water and exempt solvents)
- n = number of all coatings used

- a) The permittee shall determine on a daily basis the volume of coatings consumed, as delivered to the coating applicator(s).
  - b) The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24. MDNR may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by EPA Reference Method 24 or an equivalent or alternative method.
- 2) If the volume-weighted average mass of VOC per volume of coating (minus water and non-VOC organic compounds), calculated on a daily basis, is less than 3.5 lbs VOC per gallon coating (minus water and non-

<sup>1</sup> VOC Emission Limitation from 10 CSR 10-5-330(5)(B) Table B – VOC Emission Limit Based on Weight of VOC per Gallon of Coating (minus water and non-VOC organic compounds)

VOC organic compounds), the source is in compliance. Each daily calculation is a performance test for the purpose of determining compliance with 10 CSR 10-5.330(5)(B).

**Recordkeeping:**

- 1) The owner or operator of a coating line shall keep records detailing specific VOC sources, as necessary to determine compliance (see Attachment D-1 and D-2). These may include:
  - a) The type and the quantity of coatings used daily;
  - b) The coatings manufacturer’s formulation data for each coating;
  - c) The type and quantity of solvents for coating, thinning, purging and equipment cleaning used daily;
  - d) All test results to determine capture and control efficiencies, transfer efficiencies and coating makeup;
  - e) The type and quantity of waste solvents reclaimed or discarded daily;
  - f) The quantity of pieces of materials coated daily; and
  - g) Any additional information pertinent to determine compliance.
- 2) Records such as daily production rates may be substituted for actual daily coating use measurement provided the owner submits a demonstration approvable by the director that such records are adequate for the purpose of this rule. This will apply until EPA issues national daily emissions recordkeeping protocols for specific industrial classifications.

**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 days after any deviation from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation.

<b>EU0020 – Chrome Anodizing Process/Conversion Coating</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/Model #</b>	<b>2005 EIQ Reference #</b>
EU0020	Chrome Anodizing Process/Conversion Coating	Not Available	EP-09

**Permit Condition EU0020-001**  
**10 CSR 10-6.075**  
**Maximum Achievable Control Technology Regulations**  
**40 CFR Part 63 Subpart N**  
**National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks**

*The following conditions apply to decorative chromium electroplating tanks using a chromic acid bath and chromium anodizing tanks located at a minor source of HAPs that uses a chemical fume suppressant containing a wetting agent.*

**Emission Limitation:**

- (1) The emission limitations in this section apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by paragraph §63.342(f) must be followed during malfunctions. [§63.342(b)(1)]
- (2) Each owner or operator of an existing, new, or reconstructed affected source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the surface tension of the electroplating or anodizing bath contained within the affected source to exceed 45 dynes/cm

- ( $3.1 \times 10^{-3}$  lbf/ft) as measured by a stalagmometer or 35 dynes/cm ( $2.4 \times 10^{-3}$  lbf/ft) as measured by a tensiometer at any time during operation of the tank. [§63.342(d)(2)]
- (3) The standards in this section that apply to chromic acid baths shall not be met by using a reducing agent to change the form of chromium from hexavalent to trivalent. [§63.342(g)]

**Work Practice Standards:**

- (a) The permittee shall comply with the following work practice standards [§63.342(f)]
- (1) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by §63.342(f)(3). [§63.342(f)(1)(i)]
  - (2) Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by §63.342(f)(3). [§63.342(f)(1)(ii)]
  - (3) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards. [§63.342(f)(1)(iii)]
- (b) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source. [§63.342(f)(2)(i)]
- (c) Based on the results of a determination made under §63.342(f)(2)(i), the Administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan required by §63.342(f)(3) for that source. Revisions may be required if the Administrator finds that the plan: [§63.342(f)(2)(ii)]
- (1) Does not address a malfunction that has occurred; [§63.342(f)(2)(ii)(A)]
  - (2) Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or [§63.342(f)(2)(ii)(B)]
  - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable. [§63.342(f)(2)(ii)(C)]
- (d) *Operation and maintenance plan.* The owner or operator of an affected source subject to the work practices of paragraph §63.342(f) of this section shall prepare an operation and maintenance plan to be implemented no later than the compliance date. The plan shall include the following elements: [§63.342(f)(3)(i)]
- (1) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment; [§63.342(f)(3)(i)(A)]
  - (2) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and [§63.342(f)(3)(i)(D)]
  - (3) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions. [§63.342(f)(3)(i)(E)]
- (e) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The

revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. [§63.342(f)(3)(ii)]

- (f) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan required by paragraph §63.342(f)(3)(i), the owner or operator shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator. [§63.342(f)(3)(iv)]
- (g) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Administrator for a period of 5 years after each revision to the plan. [§63.342(f)(3)(v)]
- (h) To satisfy the requirements of §63.342(f)(3), the owner or operator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section. [§63.342(f)(3)(vi)]

**Monitoring and Testing Requirements:**

*Monitoring to demonstrate continuous compliance:* The owner or operator of an affected source subject to the emission limitations of this subpart shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation. The monitoring required to demonstrate continuous compliance with the emission limitations is identified in this section for the air pollution control techniques expected to be used by the owners or operators of affected sources.

[§63.342(c)]

*Wetting agent-type or combination wetting agent-type/foam blanket fume suppressants.*

- (a) During the initial performance test, the owner or operator of an affected source complying with the emission limitations in §63.342 through the use of a wetting agent in the electroplating or anodizing bath shall determine the outlet chromium concentration using the procedures in §63.344(c). The owner or operator shall establish as the site-specific operating parameter the surface tension of the bath using Method 306B, appendix A of 40 CFR Part 63, setting the maximum value that corresponds to compliance with the applicable emission limitation. In lieu of establishing the maximum surface tension during the performance test, the owner or operator may accept 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer as the maximum surface tension value that corresponds to compliance with the applicable emission limitation. However, the owner or operator is exempt from conducting a performance test only if the criteria of §63.342(b)(2) are met. [§63.343(c)(5)(i)]
- (b) On and after the date on which the initial performance test is required to be completed under §63.7, the owner or operator of an affected source shall monitor the surface tension of the electroplating or anodizing bath. Operation of the affected source at a surface tension greater than the value established during the performance test, or greater than 45 dynes/cm as measured by a stalagmometer or 35 dynes/cm as measured by a tensiometer if the owner or operator is using this value in accordance with §63.342(c)(5)(i), shall constitute noncompliance with the standards. The surface tension shall be monitored according to the following schedule.

- (1) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, appendix A of 40 CFR Part 63. [§63.343(c)(5)(ii)(A)]
  - (2) The time between monitoring can be increased if there have been no exceedances. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 40 hours of tank operation. [§63.343(c)(5)(ii)(B)]
  - (3) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (c)(5)(ii)(B) of §63.343. For example, if an owner or operator had been monitoring an affected source once every 40 hours and an exceedance occurs, subsequent monitoring would take place once every 4 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 8 hours of tank operation. Once an exceedance does not occur for 40 hours of tank operation on this schedule, monitoring can occur once every 40 hours of tank operation. [§63.343(c)(5)(ii)(C)]
- (c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraphs (c)(5)(ii) (B) and (C) of §63.343. [§63.343(c)(5)(iii)]

**Recordkeeping:**

- (a) All records shall be maintained for a period of 5 years in accordance with §63.10(b)(1). [§63.346(c)]
- (b) The owner or operator of an affected source subject to the provisions of this subpart shall maintain the following records for such source: [§63.346(b)]
  - (1) Inspection records for the monitoring equipment, to document that the inspection and maintenance required by the work practice standards of §63.342(f) and Table 1 of §63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection. [§63.346(b)(1)]
  - (2) Records of all maintenance performed on the affected source and monitoring equipment; [§63.346(b)(2)]
  - (3) Records of the occurrence, duration, and cause (if known) of each malfunction of process and monitoring equipment; [§63.346(b)(3)]
  - (4) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan; [§63.346(b)(4)]
  - (5) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by §63.342(f)(3); [§63.346(b)(5)]
  - (6) Records of monitoring data required by §63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected; [§63.346(b)(8)]

- (7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, or monitoring equipment; [§63.346(b)(9)]
- (8) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, or monitoring equipment; [§63.346(b)(10)]
- (9) The total process operating time of the affected source during the reporting period; [§63.346(b)(11)]
- (10) For sources using fume suppressants to comply with the standards, records of the date and time that fume suppressants are added to the electroplating or anodizing bath. [§63.346(b)(13)]

**Reporting:**

- (a) The owner or operator of each affected source subject to these standards shall fulfill all reporting requirements outlined in this section and in the General Provisions to 40 CFR part 63, according to the applicability of subpart A as identified in Table 1 of this subpart. These reports shall be made to the Administrator at the appropriate address as identified in §63.13 or to the delegated State authority. [§63.347(a)]
  - (1) Reports required by subpart A of this part and this section may be sent by U.S. mail, fax, or by another courier. [§63.347(a)(1)]
    - (i) Submittals sent by U.S. mail shall be postmarked on or before the specified date. [§63.347(a)(1)(i)]
    - (ii) Submittals sent by other methods shall be received by the Administrator on or before the specified date. [§63.347(a)(1)(ii)]
  - (2) If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media. [§63.347(a)(2)]
- (b) *Notification of compliance status.* A notification of compliance status is required each time that an affected source becomes subject to the requirements of this subpart. [§63.347(e)(1)]
- (c) *Ongoing compliance status reports for area sources.* The requirements of this paragraph do not alleviate affected area sources from complying with the requirements of State or Federal operating permit programs under 40 CFR part 71. [§63.347(h)]
  - (1) The owner or operator of an affected source that is located at an area source site shall prepare a summary report to document the ongoing compliance status of the affected source. The report shall contain the information identified in §63.347(g)(3), shall be completed annually and retained on site, and made available to the Administrator upon request. The report shall be completed annually except as provided in paragraph (h)(2) of §63.347. [§63.347(h)(1)]
  - (2) Reports of exceedances. If both of the following conditions are met, semiannual reports shall be prepared and submitted to the Administrator: [§63.347(h)(2)(i)]
    - (i) The total duration of excess emissions (as indicated by the monitoring data collected by the owner or operator of the affected source in accordance with §63.343(c) is 1 percent or greater of the total operating time for the reporting period; and [§63.347(h)(2)(i)(A)]
    - (ii) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is 5 percent or greater of the total operating time. [§63.347(h)(2)(i)(B)]
  - (3) Once an owner or operator of an affected source reports an exceedance as defined in paragraph (h)(2)(i) of §63.347, ongoing compliance status reports shall be submitted semiannually until a request to reduce reporting frequency under paragraph (h)(3) of §63.347 is approved. [§63.347(h)(2)(ii)]

- (4) The Administrator may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source. [§63.347(h)(2)(iii)]
- (d) *Request to reduce frequency of ongoing compliance status reports for area sources.* An owner or operator who is required to submit ongoing compliance status reports on a semiannual (or more frequent) basis, or is required to submit its annual report instead of retaining it on site, may reduce the frequency of reporting to annual and/or be allowed to maintain the annual report onsite if all of the following conditions are met: [§63.347(h)(3)(i)]
- (1) For 1 full year (e.g., 2 semiannual or 4 quarterly reporting periods), the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit; [§63.347(h)(3)(i)(A)]
  - (2) The owner or operator continues to comply with all applicable recordkeeping and monitoring requirements of subpart A of this part and this subpart; and [§63.347(h)(3)(i)(B)]
  - (3) The Administrator does not object to a reduced reporting frequency for the affected source, as provided in paragraphs (h)(3) (ii) and (iii) of §63.347. [§63.347(h)(3)(i)(C)]
- (e) The frequency of submitting ongoing compliance status reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change, and the Administrator does not object to the intended change. In deciding whether to approve a reduced reporting frequency, the Administrator may review information concerning the source's previous performance history during the 5-year recordkeeping period prior to the intended change, or the recordkeeping period since the source's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of an owner or operator's conformance with emission limitations and work practice standards. Such information may be used by the Administrator to make a judgement about the sources potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce reporting frequency, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted. [§63.347(h)(3)(ii)]
- (f) As soon as the monitoring data required by §63.343(c) show that the source is not in compliance with the relevant emission limit, the frequency of reporting shall revert to semiannual, and the owner shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limit for another full year, the owner or operator may again request approval from the Administrator to reduce the reporting frequency as allowed by paragraph (h)(3) of §63.347. [§63.347(h)(3)(iii)]

## 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. All tests shall be performed by qualified personnel.
- 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 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited**

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, or to fires used for recreational purpose, or to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

#### **10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

#### **10 CSR 10-5.070 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 AERO Metal Finishing 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 10-5.160 Control of Odors in the Ambient Air**

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

- 1) Residential, recreational, institutional, retail sales, hotel or educational premises.
- 2) Industrial premises when air containing odorous matter is diluted with 20 or more volumes of odor-free air; or
- 3) Premises other than those in 1. and 2 above when air containing odorous matter is diluted with four or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when 30% or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least 20 people or 75% of those exposed if fewer than 20 people are exposed. **This requirement is not federally enforceable.**

#### **10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area**

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- 1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

#### **10 CSR 10-6.100 Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

#### **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**

- 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, 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, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 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 Jon Lakin, Assistant Plant Manager. 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 (MDNR) 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) MDNR 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 draft 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 C-2**

**10 CSR 10-6.220 Compliance Demonstration  
 Method 9 Visual Determination of Opacity**

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

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation?

YES NO

\_\_\_\_\_  
 Signature of Observer





# 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 Renewal Application, received November 12, 2003;
- 2) 2005 EIQ Emissions Inventory Questionnaire, received March 15, 2006;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 4) Construction Permit No. 0897-028, issued November 13, 1997; and
- 5) Construction Permit No. 0897-028A (Amendment to Permit No. 0897-028).

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

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 10-5.030, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating.*

The significant emission source(s) at this installation do not meet the definition of "indirect heating" as specified in 10 CSR 10-6.020, "...for the primary purposes of producing steam, hot water or hot air or other indirect heating of liquids, gases or solids where, in the course of doing so, the products of combustion do not come into direct contact with process materials..."

The installation has space heaters, gas furnaces, a boiler and water evaporator with a total heat capacity of 4.96 MMBtu/hr which are subject to the requirements of this rule. However, the APCP does not consider these sources to be capable of exceeding the particulate matter (PM) emission limitation of 0.60 pounds of particulate matter per million Btu's of heat input of this rule.

Therefore, as the significant emission source(s) were not considered to meet the indirect heating definition and the indirect heating units listed as emission units without limitations are always

expected to be in compliance with the PM limitation, this rule is not included in the operating permit.

10 CSR 105.295, *Control of Emission From Aerospace Manufacture and Rework Facilities*

The requirements of this rule apply to all aerospace manufacture and/or rework facilities located in St. Louis City and Jefferson, St. Charles, Franklin, and St. Louis Counties with potential emissions of volatile organic compounds exceeding twenty-five (25) tons per year.

This permit and Construction Permit 122003-003 (issued November 14, 2003) impose plantwide conditions that limit VOC emissions to less than 25 tons per year.

AERO Metal Finishing voluntarily applied for a plantwide restriction on VOC emissions to less than 25 tons per year in the initial intermediate operating permit application submitted on May 13, 1997 (amended on November 4, 1999), and subsequently in the renewal application, submitted on November 11, 2003 and has been operating according to all conditions, and requirements stated in their application. Therefore the provisions of this rule which became effective as of February 29, 2000 will not be applicable to this installation.

10 CSR 10-5.455, *Control of Emissions from Solvent Cleanup Operations*

This rule applies to installation in the St. Louis City and the Counties of Jefferson, St. Charles, Franklin, and St. Louis with any cleaning operation involving the use of a volatile organic compound (VOC) solvent or solvent solution. The provisions of this rule shall not apply to any stationary source at which cleaning solvent VOCs are emitted at less than five hundred (500) pounds per day.

VOC emissions from the cleaning operation are less than the applicability threshold of 500 lbs/day. Therefore, this regulation does not apply to this installation.

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

All combustion equipment at the installation uses pipeline grade natural gas. Combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2 or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels is exempt from the requirements of this rule.

The installation also operates an existing SO<sub>x</sub> emissions unit, EP-13B, which is subject to 2000 parts per million by volume (ppmv) emission limitation of this rule. EP-13B (Acid Cleaning of Metals) conservatively emits about 0.00043 ppmv of SO<sub>x</sub>. The APCP does not consider EP-13B capable of exceeding the emission limitation of this rule.

Therefore, this rule is not cited as applicable in the operating permit.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Process*

The installation indicated in the intermediate operating permit application that EP-07 (Zinc Plating Process), EP-09 (Chrome Anodizing Process), EP-16 (Aluminum Oxide/Glass Bead Shot Blast Cleaner) and EP-01 (Aerospace Parts Painting), EP-04 (Painting OS Miscellaneous Metal Parts) are subject to this rule. Upon further review (see emission calculations below), the potential to emit (PTE) from each unit is less than 0.5 pounds per hour of particulate matter. Per 10 CSR 10-6.400(1)(B)11. emission units with potential to emit less than 0.5 pounds per hour of particulate

matter are exempt from the requirements of this rule. Therefore, these units are not subject to the requirements of this rule.

Process information and data used in these calculations are from the Intermediate Operating Permit Application and 2005 EIQ.

Aerospace Parts Painting (EP-01)

Maximum Hourly Design Rate = 4 gallons

Solids content = 31.3% by volume solid

Specific gravity = 1.294

Water density = 8.34 lbs/gal

Transfer efficiency = 80%

Paint dry filter efficiency  $\approx$  90% for PM

PM emission =  $(8.34 \text{ lbs/gal} \times 1.294) \times (31.3\% \text{ solids}) \times (4 \text{ gal/hr}) \times (1-0.8) \times (1-0.9) = 0.27 \text{ lb/hr}$

Painting OS Miscellaneous Metal Parts (EP-04)

Maximum Hourly Design Rate = 4 gallons

Solids content = 37.11% by volume solid

Specific gravity = 1.0481

Water density = 8.34 lbs/gal

Transfer efficiency = 80%

Paint dry filter efficiency  $\approx$  90% for PM

PM emission =  $(8.34 \text{ lbs/gal} \times 1.0489) \times (37.11\% \text{ solids}) \times (4 \text{ gal/hr}) \times (1-0.8) \times (1-0.9) = 0.26 \text{ lb/hr}$

Zinc Plating Process (EP-07)

Maximum Hourly Design Rate = 10,678 m<sup>3</sup> (volume of air released per hour)

PM-10 emission factor = 8.98E-07 lbs/m<sup>3</sup>

PM-10 emission =  $(10,678 \text{ m}^3/\text{hr}) \times (8.98\text{E-}07 \text{ lbs/m}^3) = 0.01 \text{ lb/hr}$

PM Emission = 0.02 lbs/hr (assuming PM is twice PM-10)

Chrome Anodizing Process (EP-09)

Maximum Hourly Design Rate = 8,008 m<sup>3</sup> (volume of air released per hour)

PM-10 emission factor = 8.98E-07 lbs/m<sup>3</sup>

PM emission =  $(8,008 \text{ m}^3/\text{hr}) \times (8.98\text{E-}07 \text{ lbs/m}^3) \times 2 = 0.01 \text{ lb/hr}$

Aluminum Oxide/Glass Bead Shot Blast Cleaner (EP-16)

Maximum Hourly Design Rate = 0.006 ton

PM emission factor = 27 lbs/1000 lbs abrasive used [Fire 30900202]

PM emission =  $(0.006 \text{ ton/hr} \times 2000\text{lbs/ton}) \times (27 \text{ lb/1000 lbs}) = 0.32 \text{ lb/hr}$

**Construction Permit Revisions**

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

None

**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 GG, *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

The installation was issued a construction permit # 0897-028 on July 21, 1997 (before the applicability date of subpart GG) that imposes a plantwide condition for limiting the plantwide HAP emission to less than 10 tons per year of individual HAPs and 25 tons per year of combined HAPs. Therefore, AERO Metal Finishing is not a major source of HAP emissions and is not subject to 40 CFR Part 63, Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

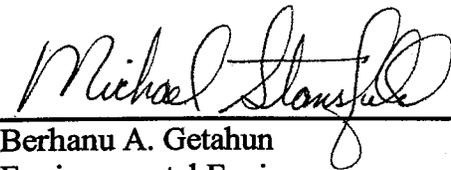
**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

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 ACP a schedule for achieving compliance for that regulation(s).

Prepared by:

for 

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