

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

SEP 14 2007

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CERTIFIED MAIL: 70051820000233106551
RETURN RECEIPT REQUESTED

Mr. Vince Gimeno, General Manager
O'Fallon Castings, L.L.C.
P.O. Box 280
O'Fallon, MO 63366

Re: O'Fallon Castings, L.L.C., 183-0077
Permit Number: **OP 2007-043**

Dear Mr. Gimeno:

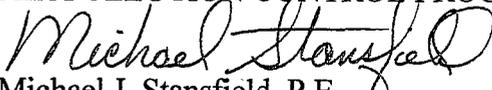
Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations, cited in this document, is necessary for continued compliance. It is very important you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact Berhanu Getahun at (314) 416-2960 or me at (573) 751-4817 or write the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and consideration.

Sincerely,

AIR POLLUTION CONTROL PROGRAM


Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS: bgl

Enclosures

c: Ms. Tamara Freeman, U.S. EPA Region VII
Mr. Tom Sims, St. Louis Regional Office
PAMS File: 2006-12-082



PART 70 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.

Operating Permit Number: OP 2007-043
Expiration Date: SEP 11 2012
Installation ID: 183-0077
Project Number: 2006-12-082

Installation Name and Address

O'Fallon Castings, L.L.C.
600 Cannonball Lane
P.O. Box 280
O'Fallon, MO 63366
St. Charles County

Parent Company's Name and Address

N/A

Installation Description:

O'Fallon Castings, L.L.C. manufactures nonferrous investment castings in St. Charles County.

SEP 12 2007

Effective Date

Steven Juler

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

O'Fallon Castings, L.L.C. manufactures nonferrous investment castings in St. Charles County. Prior to the issuance of the initial Operating Permit (OP2002-049), the installation was considered a major source for VOC emissions. Voluntary emission limitations, taken on by the installation as part of this permit and initial Operating Permit (OP2002-049), limit VOC emissions to less than major source category levels. Additionally, as part of its metal melting and casting processes, the facility is subject to the National Emission Standards for Hazardous Air Pollutants, Subpart C, National Emission Standard for Beryllium.

The installation's primary purpose is to produce nonferrous investment castings. As part of this process, the installation forms ceramic shells from wax patterns with a coated slurry, sand and various flours. As the volatile components (primarily isopropanol) of the slurry evaporate, a ceramic shell is formed. These shells are used to cast molten metal (aluminum alloys and copper alloys) into the casting products.

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 _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2006	0.65	0.03	2.74	54.72	1.72	—	0.07
2005	0.62	0.03	2.76	54.15	1.72	—	0.07
2004	0.77	0.03	4.48	77.48	2.04	—	0.07
2003	0.43	0.14	5.06	69.96	0.97	—	0.07
2002	0.38	0.12	5.04	61.18	0.97	—	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
EU0050	Beryllium-Alloy Processing

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.

Reference #	Description of Emission Unit
EP-02	Wax Assembly Process Heaters, (Stations 1-4) (Natural Gas, 0.0275 MMBtu/hr)
EP-03	Wax Assembly Process Heaters (Stations 5-8) (Natural Gas, 0.0275 MMBtu/hr)
EP-04	Shell Building

EIQ	
Reference #	Description of Emission Unit
EP-05	Autoclave/Boiler (natural gas, 4.62 MMBtu/hr)
EP-06	Wax Burnout Furnace #1 (Natural Gas, 1.75 MMBtu/hr)
EP-07	Wax Burnout Furnace #2 (Natural Gas, 1.75 MMBtu/hr)
EP-08	Wax Burnout Furnace #3 (Natural Gas, 1.75 MMBtu/hr)
EP-09	Pre-Heat Foundry Furnace #1 (Natural Gas, 0.735 MMBtu/hr)
EP-10	Pre-Heat Foundry Furnace #2 (Natural Gas, 0.735 MMBtu/hr)
EP-22	Aluminum Melting Pot #1 (EU0010) - 1500 Pound, 1.50 MMBtu/hr, Natural Gas Melter
EP-11	Aluminum Melting Pot #2 (EU0020) - 1000 Pound, 1.60 MMBtu/hr, Natural Gas Reverberatory Melter
EP-11	Aluminum Melting Pot #3 (EU0030) - 400 Pound, 0.65 MMBtu/hr, Natural Gas Melter
EP-11	Aluminum Melting Pot #4 (EU0040) - 400 Pound, 0.65 MMBtu/hr, Natural Gas Melter
EP-16	Acid Bath Line
EP-14	Copper Alloy Melting
EP-13	Copper Alloy Casting
EP-18	Annealing Furnace (Natural Gas, 1.47 MMBtu/hr)
EP-19	Aging Furnace #1 (Natural Gas, 0.084 MMBtu/hr)
EP-21	Aging Furnace #2 (Natural Gas, 0.350 MMBtu/hr)
	Electric Aging Furnace
EP-17	Hand Sanding
	SSCLA Vacuum Assist Casting Unit
	Citric Acid Cleaner Tanks
	Electric Pre-heat Furnace
	Wax Holding Tank
	Quench Tanks (800-gallon and 2,100-gallon)
	High Water Pressure Shell Removal Cabinets
	Robotic Shell Manipulator
	Rainmaker Sand Applicator

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

Currently no documents have been incorporated by reference into this permit.

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 10-6.065
Operating Permits
Voluntary Permit Condition, 10 CSR 10-6.065(6)(C)2.A

Emission Limitation:

The permittee shall discharge into the atmosphere from this installation less than 100 tons of volatile organic compounds (VOCs) in any consecutive twelve (12) month period.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain the monthly totals and the sum of the most recent consecutive twelve (12) month records of VOC emissions from the installation. Attachment A and B, or equivalent forms shall be used to demonstrate compliance with this condition.
- 2) These records shall be maintained on-site for five (5) years and shall be made available for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

The permittee shall report to the Air Pollution Control 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.

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.

EU0050 - Beryllium-Alloy Processing		
Emission Unit	Description	2006 EIQ Reference #
EU0050	Beryllium-Alloy Processing	EP-14A & EP-15A

Permit Condition EU0050-001
10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants 40 CFR Part 61 Subpart A General Provisions 40 CFR Part 61 Subpart C National Emission Standards for Beryllium

Emission Limitation:

Emissions to the atmosphere from stationary sources subject to the provisions of this subpart shall not exceed 10 grams (0.022 lb) of beryllium over a 24-hour period. [§61.32(a)]

Monitoring/Reporting:

- 1) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any twenty four (24) hour period. Where emission depend upon the relative frequency of operations of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum twenty four (24) hour emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions. No changes in the operation shall be made, which would potentially increase emission above that determined by most recent source test, until a new emission level has been estimated by calculation and the results reported to the Administrator. [§61.33(c)]
- 2) All samples shall be analyzed and beryllium emissions shall be determined within thirty (30) days after the source test. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination. [§61.33(d)]

Recordkeeping:

Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

[§61.33(e)]

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) 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 10-6.050 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(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(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(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 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 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 10-5.040 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 O'Fallon Castings, L.L.C. 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(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(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) October 1st for monitoring which covers the January through June time period, and
 - ii) June 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi 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, this includes deviations or Part 64 exceedances.
- 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.A 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 semiannual 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(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(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G 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 pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None

10 CSR 10-6.065(6)(C)3 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 June 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions 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(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The application requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(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(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify 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, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written
 - b) notice 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, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
 - c) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. 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 subject to any requirements under Title IV of the Act or is a Title I modification;
 - 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 notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. 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.
 - 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; and
 - d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by Vince Gimeno, General 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(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) 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,
- 3) 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,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(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.

STATEMENT OF BASIS

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) Part 70 Operating Permit Application, received December 27, 2006;
- 2) Initial P70 Operating Permit number. OP2002-049, issued August 5, 2002;
- 3) 2006 Emissions Inventory Questionnaire, received March 31, 2007; and
- 4) 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 the following requirements to not be applicable to this installation at this time for the reasons stated.

- 1) 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 reported insignificant emission source(s) (i.e. boilers and process heaters with a total heat capacity of less than 10 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 remaining insignificant emission unit(s) are always expected to be in compliance with the PM limitation, this rule is not included in the applicable requirements section of this operating permit.

- 2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*.

This rule is amended to update emission limits and references to regulations, changes the rule organization, and brings the rule up to date. The amended rule clarifies applicability of sources subject to New Source Performance Standards and this rule. The amended rule also includes an exemption for 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.

All combustion equipment at the installation which uses pipeline grade natural gas, therefore is exempt from the requirements of this rule.

Construction Permit Revisions

There are no Air Pollution Control Program construction permits associated with this installation.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids*, 40 CFR Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids*, or 40 CFR Part 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*, is not applicable to the quench tanks (8,000-gallon and 2,100-gallon). The capacities of the tanks will exempt the tanks from any of these regulations.

Maximum Available Control Technology (MACT) Applicability

40 CFR Part 63, Subpart RRR - *National Emission Standards for Hazardous Air Pollutants Secondary Aluminum Production*, is not applicable to this installation. The requirements of this subpart do not apply to manufacturers of aluminum die castings, aluminum foundries, or aluminum extruders that melt no materials other than clean charge and materials generated within the facility; and that also do not operate a thermal chip dryer, sweat furnace or scrap dryer/delacquering kiln/decoating kiln.
[40 CFR 63.1500(d)]

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

- 1) 40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos, §61.145(a), Standard for demolition and renovation*
This regulation has been included in the operating permit because it applies to any demolition or renovation (as outlined in 40 CFR 61.145) of buildings containing asbestos at the installation.
- 2) 40 CFR Part 61 Subpart C - *National Emission Standards for Beryllium*, applies to the installation because of the processing of beryllium alloys. The standard is included as a unit specific permit condition.
- 3) The installation is not subject to 40 CFR Part 61, Subpart V, *National Emission Standard for Equipment Leaks (Fugitive Emission Sources)*, because the compounds or constituents therein of isopropanol, Actrel, Dynasil, and Synasol are not VHAPs as defined by 40 CFR 61.241.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Other Regulatory Determinations

1) Clarification to General Permit Requirements

Recordkeeping specified in the Title V requires the source to retain all records of all required monitoring data and support information for 5 years. Record retention requirement of 40 CFR Part 61 Subpart C allows for a minimum of 2 years of records. To be in compliance with the 40 CFR Part 61 Subpart C and Title V record retention period, the source will keep the records for 5 years from the date of the monitoring sample, measurement, report, or application.

- 2) The units listed in the "Emission Units Without Limitations" section in the front of this permit either have no applicable regulations associated with them or are considered insignificant activities by the operating permit application. Those units include, but are not limited to, all natural gas/LPG units with a maximum heat input of less than ten (10) MMBtu/hr and those that burn other fuels and have a heat input of less than one (1) MMBtu/hr that emits only products of combustion.

The installation confirmed, in a June 17, 1998 letter from Mr. Joseph Darmody, that the four (4) natural gas aluminum melting pots (EP-11 & EP-22) are the only combustion units that emit more than just products of combustion. EP-11 and EP-22 account for the combustion product emissions for the four (4) natural gas-fired melting pots. EP-12 accounts for the non-combustion emissions from these four (4) natural gas-fired melting pots and the single electric melting pot.

- 3) 10 CSR 10-6.065, Operating Permits, Voluntary Condition, was applied based on an agreement with the installation and the Air Pollution Control Program's Enforcement Section. Plant wide emission limitation PW001 limits the installation to less than one hundred (100) tons per year of VOC and upon issuance of the Initial Operating Permit, OP2002-049, this became a federally enforceable limit that is used to determine potential to emit. After the issuance of the initial operating permit, the installation is no longer be major for VOC and no longer subject to 10 CSR 10-5.520, *Control of Volatile Organic Compound Emissions from Existing Major Sources*, since the condition were incorporated into the modified operating permit by September 1, 2002.

Since the installation has some minor VOC emissions sources in which actual emissions are difficult to derive, they have accepted an option to use maximum potential calculations for these units. This will be inventoried on Attachment A. These total maximum potential emissions and the remaining VOC sources actual emissions will be inventoried on Attachment B. Attachment B is to include all VOC sources at the installation.

When calculating VOC emissions, the installation utilizes a reduction factor of 10.6% for its VOC emissions from the Shell Building (EP-4). Tests conducted by the University of Missouri – Rolla of the shell formation process demonstrated a portion of the alcohol (VOC) remained in the completed shell and was not emitted. Documentation of this emissions reduction was provided to the MDNR – Air Pollution Control Program on April 29, 2005. In a letter dated October 12, 2005, the MDNR stated that using this emissions reduction was justified and allowed the installation to utilize this factor in calculating its VOC emissions from the Shell Building. As a result, the installation uses the 10.6% reduction factor when performing mass balance VOC calculations from the Shell Building.

- 4) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, was not applied to any emission units specifically exempted from 10 CSR 10-6.400 as particulate matter emissions are not of significant quantity to result in opacity issues.

- 5) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter*, was not included as an applicable regulation for the emission units listed below. These units are exempt because potential uncontrolled particulate matter emissions are less than 0.5 pounds per hour per 10 CSR 10-6.400(1)(B)11.

Potential PM Emission Rate = MHDR(tons/hr) * Emission Factor(lb/ton)

Emission Unit	Maximum Hourly Design Rate (tons/hr)	PM Emission Factor (lb/ton)	Emission Factor Reference	Potential Uncontrolled PM Emission Rate (lb/hr)
Aluminum Melting Pot #1 ¹ (EU0010)	0.094	4.3	Fire SCC: 3-04-001-03	0.40
Aluminum Melting Pot #2 ² (EU0020)	0.094	4.3	Fire SCC: 3-04-001-03	0.40
Aluminum Melting Pot #3 ³ (EU0030)	0.050	4.3	Fire SCC: 3-04-001-03	0.22
Aluminum Melting Pot #4 ³ (EU0040)	0.050	4.3	Fire SCC: 3-04-001-03	0.22
Aluminum Melting Pot #5 ⁴ (Electric; included in EP-12)	0.078	4.3	Fire SCC: 3-04-001-03	0.34
Shell Building Area ⁵	0.0256	0.703	OSHA Monitoring (05/18/95)	0.02
Hand Sanding	0.0028	3.6	Fire SCC: 3-04-003-50	0.01
Copper and Beryllium - Alloy Melting	0.0054	20.0	Fire SCC 3-04-002-24	0.11

- 1) This unit is a continuous process in which the maximum hourly design rate was determined by the transfer of the molten aluminum from the unit. This was determined from the maximum pour achieved per shift.
 $MHDR = 1500 \text{ lb of aluminum poured} / 8 \text{ hour shift} = 187.5 \text{ lb/hr} = 0.094 \text{ ton/hr}$
- 2) This unit is a continuous process in which the maximum hourly design rate was determined by the transfer of the molten aluminum from the unit. This unit pours directly into Aluminum Melting Pot #1 and the MHDR would be restricted by that unit.
 $MHDR = 187.5 \text{ lb/hr} = 0.094 \text{ ton/hr}$
- 3) These units are batch processes that begin from a cold start. These units each have a maximum capacity of 400 pounds and a melting time of 4 hours to a complete batch.
 $MHDR = 400 \text{ lb of aluminum} / 4 \text{ hour melt time} = 100.0 \text{ lb/hr} = 0.050 \text{ ton/hr}$
- 4) This unit is a continuous process in which the maximum hourly design rate was determined by the transfer of the molten aluminum from the unit. This was determined from the maximum pour achieved per shift.
 $MHDR = 1250 \text{ lb of aluminum poured} / 8 \text{ hour shift} = 156.3 \text{ lb/hr} = 0.078 \text{ ton/hr}$
- 5) The emission factor was back calculated from flow rate (17,875 ft³/min) and concentration (0.27 mg/m³) data provided from OSHA monitoring completed on May 18, 1995.
 $Emission \text{ Rate} = (17,875 \text{ ft}^3/\text{min}) * (60 \text{ min/hr}) * (0.27 \text{ mg/m}^3) * (2.2 \times 10^{-6} \text{ lb/mg}) * (0.28 \text{ m}^3/\text{ft}^3) = 0.02 \text{ lb/hr}$
 $Emission \text{ Factor} = (0.02 \text{ lb/hr}) / (0.0256 \text{ ton/hr}) = 0.703 \text{ lb/ton}$

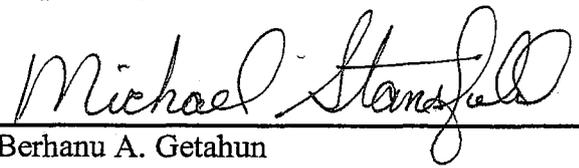
Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

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 APCP'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 APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

for 

Berhanu A. Getahun
Environmental Engineer