

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 herein.

Operating Permit Number: OP2018-037
Expiration Date: MAY 07 2023
Installation ID: 007-0047
Project Number: 2017-10-030

Installation Name and Address

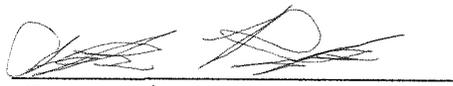
Cerro Flow Products LLC
1500 Industrial Drive
Mexico, MO 65265
Audrain County

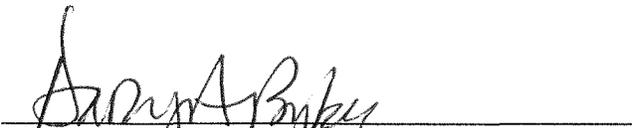
Parent Company's Name and Address

Cerro Flow Products LLC
1500 Industrial Drive
Mexico, MO 65265

Installation Description:

Cerro Flow Products, LLC is a copper casting installation located in Mexico, Missouri. The installation manufactures copper billets from copper cathodes, billet sizing cuttings and scrap copper tubing from installations making tubing from the copper billets. The main sources of pollutants at the installation are the vertical copper melt furnace, the electric holding furnace charcoal cover and billet sawing. Other smaller emission sources are small fuel tanks, space and water heaters and the burning bar used to clear solidified metal from the vertical furnace drain port. The installation is a major source of carbon monoxide (CO), particulate matter of 10 micrometers in diameter or less (PM₁₀), and particulate matter of 2.5 micrometers in diameter or less (PM_{2.5}) under the operating permit program. CO is a synthetic minor source under the PSD program and the installation is an area source of hazardous air pollutants (HAPs). The installation operates an emergency diesel generator that is subject to the area source provisions of 40 CFR Part 63 Subpart ZZZZ, *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.


Prepared by
Adam Brooks EIT
Operating Permit Unit


Director or Designee
Department of Natural Resources

MAY 07 2018
Effective Date

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I. Installation Equipment Listing

EMISSION UNITS WITH LIMITATIONS

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

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>
EP01	Vertical Copper Melt Furnace
EP04	Emergency Electric Generator
EP05	Natural Gas Space Heaters
EP11	Portable Pressure Washers
EP13	Hot Water Heater

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

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

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>
EP02	Covered Launder/Slag Vessel
EP03	Electric Holding Furnace with Charcoal Float Cover
EP06	Cold Solvent Cleaner
EP07	Diesel Oil Storage Tank
EP10	Basement Billet Saw
EP14	Sand Handling Operations
EP15	Copper Handling Operations
EP16	Slag Handling Operations
EP17	Hand Grinding/Deburring
EP19	Burning Bar/Lancing Rod Operations
EP20	Cast Block Lubrication
EP21	Supplemental/Recut Billet Saw
EP22	Abrasive Blasting Cabinet

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. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

PERMIT CONDITION PW1

10 CSR 10-6.060, Construction Permits Required
Construction Permit 012006-014, Issued January 25, 2006

Emission Limitation

The permittee shall emit less than 250 tons of carbon monoxide (CO) in any consecutive 12-month period from the entire installation. [Special Condition 2A]

Monitoring/Recordkeeping

- 1) The permittee shall maintain the monthly and the sum of the most recent consecutive twelve (12) month records of CO emissions emitted into the atmosphere from the entire installation. Attachment A or equivalent forms approved by the Air Pollution Control Program shall be used for recordkeeping. [Special Condition 2B]
- 2) The permittee shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 2B]

Reporting

- 1) The permittee shall report to the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, no later than ten (10) days after the end of the month during which the records such as Attachment A indicate that the source exceeds 250 tons of carbon monoxide (CO) emitted in any consecutive 12-month period. [Special Condition 2C]
- 2) The permittee shall report any deviations from the standards, monitoring, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification 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.

PERMIT CONDITION 1 10 CSR 10-6.060, Construction Permits Required Construction Permit 0298-010, Issued February 11, 1998

Vertical Copper Melt Furnace	
Emission Unit	Description
EP01	Vertical Copper Melt Furnace, Southwire Mfg 1995, Pipeline Natural Gas/Propane, 30 MMBtu/hr, 32 ton/hr maximum charge rate, average cast rate is 18.75 tph. The cast rate is averaged over a 24 hour period and is limited by process.

Emission Limitation

- 1) The permittee shall not exceed a carbon monoxide concentration set point of 0.75 percent at the furnace burner tips while casting 12 3/8 inch or 13 5/8 inch billets. [Special Condition 2A]
- 2) The permittee shall not exceed a carbon monoxide concentration set point of 1.3 percent at the furnace burner tips while casting 8 1/2 inch billets. [Special Condition 2B]
- 3) No more than 35 percent of the total copper melted in any consecutive 12-month period shall be scrap copper¹. [Special Condition 2C]
- 4) The permittee shall not charge material containing pooled or puddled oils into the vertical copper-melting furnace. [Modified Special Condition 2D]
- 5) During any startup or shutdown, the burners will be operated in diffusion mode² no longer than one (1) hour. The recordkeeping requirements below shall not apply during this period of time. [Special Condition 9]
- 6) In any emergency shutdown or breakdown, the permittee shall immediately take practical steps to modify operations to reduce the emission of air contaminants. The Director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of air contaminants. [Special Condition 10]
- 7) The permittee is prohibited from sustained operation of the vertical copper melting furnace at burner tip CO concentrations greater than 0.75 percent, except during startup, shutdown and while casting 8.5 inch billets. When casting 8.5-inch billets, Emission Limitation (2) applies. [Special Condition 11]

¹ Scrap copper is reject copper tubing and other reject shapes from other installations and copper chips recovered from the cutting, sizing and finishing operations for the copper billets at this installation.

² Diffusion Mode is the operating mode for the burner that will not use standard operating conditions and may cause deviations to occur in the set point condition of 0.75% CO at the burner tip.

Monitoring

The permittee shall obtain air samples from the burner tip via a hard-piped system. The permittee shall analyze the air sample to mechanically adjust the burner tip if needed to keep CO concentration within the range demonstrated during the stack test.

Recordkeeping

- 1) The permittee shall maintain daily records of the carbon monoxide set point at the burner tips. The permittee shall record any upset conditions that result in the resetting of the carbon monoxide concentration set point above the levels allowed in Emission Limitations (1) and (2). These records shall include, but are not limited to, the amount of deviation from the set point, time, duration and cause of upset and action taken to return the system to the set point. [Special Condition 4]
- 2) The permittee shall maintain an accurate record of the scrap and total copper charged to the vertical copper melt furnace. The permittee shall record monthly and running 12-month totals on Attachment B or an equivalent form. [Special Condition 5]
- 3) The permittee shall record the number and amounts of each shipment returned because of violations of material containing pooled or puddled oils. [Modified Special Condition 6]
- 4) All records shall be maintained on site for a minimum of five (5) years and shall be made available to Missouri Department of Natural Resources personnel upon verbal request. [Special Condition 7]

Reporting

- 1) The permittee shall report to the Air Pollution Control Program's Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, no later than ten days after any exceedance of any limitation established by this permit condition.
- 2) The permittee shall report any deviations from the standards, monitoring/testing, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 2

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations
 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for
 Stationary Reciprocating Internal Combustion Engines

Emergency Electric Generator		
Emission Unit	Description	Manufacturer/Model #
EP04	2.826 MMBtu/hr Spark Ignition Emergency Stationary Reciprocating Internal Combustion Engine, Natural Gas Fired. Installed 1996.	Cummings/GTA 855A

Limitations:

The permittee must comply with the requirements in Table 2d of 40 CFR Part 63, Subpart ZZZZ: [§63.6603(a)]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

For each . . .	The permittee must meet the following requirements, except during periods of startup...
5. Emergency stationary SI RICE ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹ b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

¹The permittee has the option to utilize an oil analysis program as described in §63.6625(j) in order to extend the specified oil change requirement.

²If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. The permittee must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

Monitoring:

- 1) The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]
- 2) The permittee must install a non-resettable hour meter if one is not already installed. [§63.6625(f)]
- 3) The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times. [§63.6625(h)]

4) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d of Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§63.6625(j)]

Compliance:

1) The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d of Subpart ZZZZ that apply according to applicable methods specified in Table 6 of Subpart ZZZZ. [§63.6640(a)]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

For each . . .	Complying with the requirement to . . .	The permittee must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE located at an area source of HAP	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- 2) The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation in Table 2d of Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in §63.6650.
- 3) The permittee must also report each instance in which the permittee did not meet the requirements in Table 8 of Subpart ZZZZ that apply. [§63.6640(e)]
- 4) The permittee must operate the emergency stationary RICE according to the requirements in §63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in §63.6640(f)(1) through (4), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§63.6640(f)]

- a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)]
- b) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §63.6640(f)(2). Except as provided in §63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a installation to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§63.6640(f)(4)]
 - i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§63.6640(f)(4)(ii)]
 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [§63.6640(f)(4)(ii)(A)]
 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§63.6640(f)(4)(ii)(B)]
 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§63.6640(f)(4)(ii)(C)]
 4. The power is provided only to the installation itself or to support the local transmission and distribution system. [§63.6640(f)(4)(ii)(D)]
 5. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§63.6640(f)(4)(ii)(E)]

Recordkeeping:

- 1) The permittee must keep the records described in §63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c). [§63.6655(a)]
 - a) A copy of each notification and report that the permittee submits to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submits, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
 - b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
 - c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
 - d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
 - e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(5)]
- 2) The permittee must keep the records required in Table 6 of Subpart ZZZZ to show continuous compliance with each emission or operating limitation that apply. [§63.6655(d)]

- 3) The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operates and maintains the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan. [§63.6655(e)]
- 4) The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(iii) or §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [§63.6655(f)]
- 5) Records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
- 6) As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
- 7) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the 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. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

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) 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 to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity 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, notice shall be given as soon as practicable prior to the activity.
- 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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

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

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.

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 10-6.110 Reporting of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) 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.

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 10-6.165 Restriction of Emission of Odors

This requirement is a State Only permit requirement.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

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

This is a State Only permit requirement.

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.

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 at an installation:
- 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.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

- 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 40 CFR §82.106.

- b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §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 of 40 CFR Part 82:
- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §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 40 CFR §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 contained 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.
- 5) 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.*

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 **10 CSR 10-6.065(6)(E)3.C Extension of Expired Permits**

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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - 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, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
 - 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) April 1st for monitoring which covers the July through December time period.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. 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

- 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.
- 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)

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

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 April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov. 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 applicable 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, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, 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), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, 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.
 - b) 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 permit, 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 contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. 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)34 Responsible Official

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

This permit shall be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MoDNR) 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) MoDNR 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) MoDNR 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.

Attachment A
 Monthly Carbon Monoxide Worksheet

This worksheet covers the month of _____ (month, year)

Column A	Column B	Column C	Column D	Column E	Column F	Column G
Emission Unit or Process ID	Activity	Monthly Amount	Monthly Amount Units	CO Emission Factor	Emission Factor Units	Monthly CO Emissions (tons) ¹
EP01 – Vertical Copper Melt Furnace	Charging Copper Billets: 8-1/2 inch		Tons charged to furnace	5.153 ²	lbs/ton copper charged	
	Charging Copper Billets: 12-3/8 inch		Tons charged to furnace	4.943 ³	lbs/ton copper charged	
	Charging Copper Billets: 13-5/8 inch		Tons charged to furnace	0.92 ⁴	lbs/ton copper charged	
EP03 – Electric Holding Furnace	Charcoal Used on Float Cover		Tons charcoal burned	140	lbs/ton copper charged	
Natural Gas Combustion – Furnaces (EP01, EP02, EP03, EP13)	Natural Gas Burned		MMSCF	84 ⁵	lbs/MMSCF	
Natural Gas - Emergency Generator (EP04)	Natural Gas Burned		MMSCF	399 ⁶	lbs/MMSCF	
Natural Gas – Space Heaters (EP05)	Natural Gas Burned		MMSCF	20 ⁷	lbs/MMSCF	
Propane (EP01, EP02, EP03)	Propane Burned		1000 Gal	7.5 ⁸	lbs/1000 Gal	
Kerosene – Portable Pressure Washer (EP11)	Kerosene Burned		1000 Gal	5 ⁹	lbs/1000 Gal	
Diesel – Portable Pressure Washer (EP11)	Diesel Burned		MMBTU	0.95 ¹⁰	lbs/MMBTU	
Monthly Start-Up, Shutdown, and Malfunction CO Emissions (ton/month)¹¹						
Monthly CO Emissions (tons CO)¹²						
Rolling 12-month CO Emissions (tons CO)¹³						

¹ Column G = (Column C) X (Column E) X (0.0005 tons/lb)

² 8.5 inch billet emission factors were derived from Source Tests conducted on September 5 and 6, 1996, and on September 18, 1997.

³ 12-3/8 inch billet emission factor is the average emission factor from the Source test conducted on Sept. 18, 1997.

⁴ 13-5/8 inch billet emission factor from Source Test conducted June 11, 1998.

⁵ EF obtained from AP-42 Table 1.4-1.

⁶ EF obtained from SCC 20200202 (Internal Combustion Engines > Industrial > Natural Gas > Reciprocating).

⁷ EF obtained from SCC 10500106 (External Combustion Boilers > Space Heaters > Industrial > Natural Gas).

⁸ EF obtained from AP-42 Table 1.5-1.

⁹ EF obtained from AP-42 Table 1.3-1.

¹⁰ EF obtained from AP-42 Table 3.3-1.

¹¹ As reported to the Air Pollution Control Program’s Compliance/Enforcement section for compliance with 10 CSR 10-6.050.

¹² Sum of Column G

¹³ Running total of CO emissions from most recent consecutive 12-month period. **Total CO Emissions not to exceed 250 tons in any consecutive 12-month period.**

Attachment C
 10 CSR 10-6.405 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.405 *Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used for Indirect Heating*. Installation's Total Heat Input (Q) in MMBtu/hr:

Emission Unit	Description	MHDR (MMBtu/hr)
EP05	Natural Gas Space Heaters	0.35
EP11	Portable Pressure Washers	0.45
EP13	Hot Water Heater	0.076
Total Q		0.876

The maximum allowable PM emission limitation for new indirect heating sources having an intermediate total heat input below 10 MMBtu/hr is 0.60 lb/MMBtu. [10 CSR 10-6.405(3)(E)]

Emission Unit	Description	Emission Factor (lbs/1000 gal)	Emission Factor (lbs/MMBtu)	Emission Limit (lbs/MMBtu)
EP11	Portable Pressure Washers	3.3	0.024	0.60

The emission factor for PM (PM condensable: 1.3 lb/1000 gal + PM filterable: 2 lb/1000 gal) was taken from AP-42 Table 1.3-1 (Process SCC 10200501) for kerosene and diesel. The average heating value of 135 MMBtu/1000 gal for kerosene used to convert the emission factor from lb/1000 gal to lb/MMBtu was taken from AP-42 Appendix A (diesel has a heating value of 139.2 MMBtu/1000 gal which is less conservative). The calculations demonstrate that the emission units have worst-case emissions far below the applicable emission limit while being properly maintained and operated; therefore, no monitoring or recordkeeping other than maintenance records are required while combusting kerosene. The emission unit is in compliance with the emission limit without the aid of a control device; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

STATEMENT OF BASIS

Installation Description

Cerro Flow Products LLC is a copper foundry (SIC 3366) that produces solid copper billets from high purity copper scrap materials consisting mostly of copper cathodes, scrap copper tubing from other installations and copper chips from the billet sizing operation at this installation. Since the materials being charged to the furnace do not require any smelting or refining prior to being cast into billets, this installation is not a secondary copper smelting installation and is therefore not a Named Installation as designated by 10 CSR 10- 6.020(3)(B), Table 2. The raw material copper is usually of purity greater than 99.9 percent. The other impurities in the stock charged to the furnace originate from residual drawing oils and dirt on the tubing.

The installation uses a natural gas or propane fired vertical melting furnace to melt the high purity copper cathodes and tubing. The copper is batch charged into the top of the furnace and is melted as it proceeds downward. The furnace operates in an oxygen lean atmosphere, as excess oxygen will oxidize the copper and reduce the purity of the final product. To achieve an oxygen lean atmosphere, carbon monoxide (CO) is added to the inlet gas stream. For this installation, the inlet CO was originally set at 1.75 percent. Residual oxygen in the copper must be removed by adding phosphorus to the molten copper downstream from the furnace. The copper exits through a tap hole in the bottom of the furnace and flows through an enclosed launder to an electric holding furnace. The metal is then transferred, within the holding furnace, to water-cooled molds. After leaving the molds, the copper is then cut, tested, marked, and shipped to copper tube producing mills.

The installation normally operates 24 hours a day, five days a week for 50 weeks annually. Normal operations commence around midnight on Monday morning and are continuous until the furnace is shut down Friday evening. The copper not frozen to the sides of the vertical melting furnace upon shutdown is retained in a molten state in the electrical holding furnace. The two days of down time at the end of the week are used to check the system and perform routine maintenance. The final two weeks during the regular calendar year are used to conduct maintenance on the furnace and copper molds.

The Vertical Copper Melting Furnace (EP01) was stack tested for carbon monoxide in the late 1990s. 12-3/8 inch billets were tested on Sept. 18, 1997. 8.5 inch billet tested on September 5 and 6, 1996, and on September 18, 1997. 13-5/8 inch billets were tested on June 11, 1998. The installation uses an inline device where CO concentration data is inputted into the furnace's programmable logic control (PLC) system. Along with the digitally stored CO percentage readings, a physical readout is also provided for operators to view. These CO percentage readings are continuously read out. The PLC system mechanically adjusts the burner tip if needed to keep the CO concentration within the range demonstrated during the stack tests.

The table on the following page details in-depth descriptions of each unit at the installation as well as those that have been dismantled and removed.

EP-No. #	Unit Description
EP-01	Vertical Copper Melt Furnace, Southwire Mfg 1995, Pipeline Natural Gas/Propane, 30 MMBtu/hr, 32 ton/hr maximum charge rate, limited by process to 18.75 tph.
EP-02	Covered Launder/Slag Vessel, Southwire Mfg 1995, Pipeline Natural Gas/Propane 3.465 MMBtu/hr
EP-03	Electric Holding Furnace with Charcoal Float Cover, Southwire Mfg 1995, Pipeline Natural Gas for start-up, 1.0 MMBtu/hr <i>Electric Holding Furnace with a consumable charcoal cover. The charcoal is used as an antioxidation cover for the molten copper flowing into the holding furnace and then into the casting block. Charcoal is added at a rate of 15 lbs/hr providing a layer of ash minimizing the oxidation of the molten copper.</i>
EP-04	Emergency Electric Generator, Cummings model GTA 855A, In Service 1996, 2.826 MMBtu/hr, Pipeline Natural Gas
EP-05	Natural Space Heaters, 0.35 MMBtu/hr, Pipeline Natural Gas
EP-06	Cold Solvent Cleaner. Capacity of the unit is 138 gallons.
EP-07	Diesel Oil Storage Tank, 500 gallon capacity
EP-08	Kerosene Storage Tank, 75 gallon capacity - - - DISMANTLED
EP-09	Gasoline Storage Tank, 75 gallon capacity - - - DISMANTLED
EP-10	Basement Billet Saw
EP-11	Portable Pressure Washers, 0.02 MMBtu/hr, Kerosene/Diesel
EP-12	Portable Heaters, 0.45 MMBtu/hr, Kerosene - <i>Propane fueled portable heating units each with a heat input of less than 1 MMBtu/hr. (combined heat input of 0.45 MMBtu / hour)</i> - - - DISMANTLED
EP-13	Hot Water Heater, 0.076 MMBtu/hr, Natural Gas
EP-14	Sand Handling Material Handling Operations – <i>Annual throughput of less than 5,000 tons of Sand. Sand handling operations occur inside the installation. Therefore, particulate matter generated by handling operations is subject to settlement prior to fugitive emission off site (estimated 50% capture and control).</i>
EP-15	Copper Handling Material Handling Operations - Copper scrap and billets <i>Handling of copper occurs indoors and emissions will settle out. All copper charged to the furnace is free of dirt and debris because these contaminants cause quality problems. Scrap coming into the installation can have an oil film which further reduces particulates. PM generated is greater than 10 microns.</i>
EP-16	Slag Handling Material Handling Operations - <i>Slag with an annual throughput of less than 1,000 tons. Slag handling operations occur inside the installation. Therefore, particulate matter generated by handling operations is subject to settlement prior to emission off site (estimated at 50 % capture and control).</i>
EP-17	Hand Grinding/Deburring Billets - <i>Hand grinding of finished billets to remove imperfections inside building. Therefore, particulate matter generated by handling operations is subject to settlement prior to emission off site (estimated at 50 % capture and control). An average of 0.5 oz. of copper is removed from each billet. Maximum billet production is 342,187 billet/year.</i>
EP-18	Propane Vaporizer, 750 Btu/hr, Propane - - - DISMANTLED
EP-19	Burning Bar/Lancing Rod Operations - <i>Iron burning bars added to launder to clear out blockages at taphole. Building acts as PM capture and control.</i>
EP-20	Cast Block Lubrication – <i>Carbon black application to casting block. Carbon black is added to the casting block as a lubricant material. Maximum carbon black application is 10 tons/year.</i>
EP-21	Supplemental/Recut Saw - <i>Horizontal Billet Saw. Maximum capacity is 164,250 tpy billet processed. Process Rate constrained by other process limitations.</i>
EP-22	Abrasive Blasting Cabinet with Integrated Fabric Filter, 50 lb/hr of abrasive media

The Potential to Emit (PTE) calculations for this installation relied on an assortment of Emission Factor (EF) sources for the criteria pollutants. These sources along with their corresponding emission points and notes of interest are outlined in the following table:

Emission Point #	Description	Sub-Description	Emission Factor Source	Control Device*	Notes
EP01	Vertical Copper Melting Furnace	Natural Gas Fueled	AP42 1.4-1 for CO and NO _x ; 1.4-3 for HAPs; 1.4-2 for remaining pollutants	-	Maximum PTE values applied for corresponding pollutants
EP01	Vertical Copper Melting Furnace	Propane Fueled	AP42 1.5-1	-	
EP01	Vertical Copper Melting Furnace	Billets (8.5,12,14)"	Stack Test	-	Maximum PTE values applied for corresponding pollutants
EP02	Covered Launder/Slag Vessel	Natural Gas Fueled	AP42 1.4-1 for CO and NO _x ; 1.4-3 for HAPs; 1.4-2 for remaining pollutants	-	Maximum PTE values applied for corresponding pollutants
EP02	Covered Launder/Slag Vessel	Propane Fueled	AP42 1.5-1	-	
EP03	Electric Holding Furnace	Natural Gas Fueled	AP42 1.4-1 for CO and NO _x ; 1.4-3 for HAPs; 1.4-2 for remaining pollutants	-	Maximum PTE values applied for corresponding pollutants
EP03	Electric Holding Furnace	Propane Fueled	AP42 1.5-1	-	
EP03	Electric Holding Furnace	Charcoal Float Cover	FIRE	-	-
EP04	Emergency Electric Generator	Natural Gas Fueled	FIRE	-	-
EP05	Natural Gas Space Heaters	Natural Gas Fueled	FIRE	-	-
EP06	Cold Solvent Cleaner	-	AP42 4.6-2	-	0.33 tons/yr/unit. Maximum Annual Throughput: 4000 gal.
EP07	Diesel Oil Storage Tank	500 Gallons	FIRE	-	-
EP10	Basement Billet Saw	Sawing copper billets	MoEIS	Cyclone & Fabric Filter	-
EP10	Basement Billet Saw	Lubrication	MoEIS	Cyclone & Fabric Filter	-
EP11	Portable Pressure Washers	Kerosene/Diesel Fueled	AP-42 1.3-6 for PM; 1.3-3 for VOC; 1.3-9 for HAPs; 1.3-1 for remaining pollutants	-	VOC EF based on Total non-methane Organic Compounds

Emission Point #	Description	Sub-Description	Emission Factor Source	Control Device*	Notes
EP13	Hot Water Heater	Natural Gas Fueled	AP42 1.4-1 for CO and NO _x ; 1.4-3 for HAPs; 1.4-2 for remaining pollutants	-	-
EP14	Sand Handling Operations	-	AP42 12.10-7	Building	Maximum Annual Throughput: 5,000 Tons of product stored
EP15	Copper Handling Operations	-	MoEIS	Building	Maximum Annual Throughput: 164,250 Tons of product stored
EP16	Slag Handling Operations	-	MoEIS	Building	Maximum Annual Throughput: 1,000 Tons of product stored
EP17	Hand Grinding/Deburring	-	MoEIS	Building	Assumes that 0.5 oz of copper is removed from each billet
EP19	Burning Bar/Lancing Rod Operations	-	MoEIS	Building	Assumes 0.43 lbs of PM ₁₀ emitted per burn bar used.
EP20	Cast Block Lubrication	-	FIRE	-	-
EP21	Supplemental/Recut Saw	Sawing Copper Billets	MoEIS	Integrated Enclosure/Building	-
EP21	Supplemental/Recut Saw	Lubrication	MoEIS	Integrated Enclosure/Building	-
EP22	Abrasive Blasting	-	AP 42 13.2.6-1	-	EF is Controlled (fabric filter); however, no other EF is applicable or Abrasive Blasting of misc. metal

*None of the control devices are practically enforceable and are thus not factored into PTE calculations.

Each criteria pollutant's PTE is listed out in the following table on the next page along with their actual emissions for each year from the last five years.

Emissions Summary, tons per year

Pollutants	2016	2015	2014	2013	2012	Potential to Emit¹
Particulate Matter (PM ₁₀)	17.65	17.73	17.32	17.80	16.77	133.52 ²
Particulate Matter (PM _{2.5})	17.60	17.68	17.22	17.70	16.68	128.38 ²
Sulfur Oxides (SO _x)	1.38	1.38	1.36	1.39	1.31	3.13
Nitrogen Oxides (NO _x)	2.71	2.73	2.54	2.60	2.46	29.15
Volatile Organic Compounds (VOC)	4.73	4.85	4.67	4.75	4.53	11.19
Carbon Monoxide (CO)	140.65	139.33	128.49	132.41	115.19	250.00 ³
Lead (Pb)	0.02	0.02	0.02	0.02	0.02	0.04
Hazardous Air Pollutants (HAP)	0.02	0.02	0.00	0.02	0.02	1.63

¹Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation except for the Emergency Generator (EP04), which was evaluated at 500 hours of uncontrolled annual operation. Some values may differ significantly (mainly PM_{2.5} and PM₁₀) from the previous operating permit (OP2013-023A) because control device efficiencies are not factored into calculations (due to no practical enforceability).

²Values are above 100; thus, PM₁₀ & PM_{2.5} are major sources under the operating permit program. No state or federal regulations are triggered.

³Permit Condition PW1 limits carbon monoxide emissions to less than 250.00 tons per year.

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 October 16, 2017;
- 2) 2016 Emissions Inventory Questionnaire, received May 21, 2017
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 4) U.S. EPA's Factor Information Retrieval (FIRE) Date System 6.25;
- 5) Construction Permit 0894-027, Issued August 4, 1994;
- 6) Construction Permit 0298-010, Issued December 9, 1997;
- 7) No Construction Permit Required Determination Project #2000-09-083; and
- 8) Construction Permit 012006-014, Issued January 25, 2006.

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.

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

This rule does not apply to the saws (EP10 & EP21) or the melt furnace (EP01) because the visible emissions are confined within a building and are unable to escape into the ambient air.

[10 CSR 10-6.220(1)(O)]

This rule does not apply to the generator (EP04) because it is an internal combustion engine.

[10 CSR 10-6.220(1)(A)]

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

This rule does not apply to combustion equipment that uses exclusively pipeline grade natural gas and therefore does not apply to the natural gas fired emergency generator engine (EP04).

[10 CSR 10-6.260(1)(A)2.]

Subsection (3)(A) of this rule does not apply to indirect heating sources. [10 CSR 10-6.260(1)(B)1.]

Subsection (3)(B) of this rule does not apply to indirect heating sources greater than three hundred fifty thousand British thermal units (350,000 Btus) per hour actual heat input. [10 CSR 10-6.260(1)(C)]

The portable pressure washers (EP-11) are indirect heating sources that are fueled by kerosene and diesel but they have an aggregate MHDR of 20,000 Btus per hour; therefore, this rule does not apply to EP-11.

10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

This rule does not apply to combustion equipment that uses exclusively pipeline grade natural gas and therefore does not apply to the natural gas fired emergency generator engine (EP04).

[10 CSR 10-6.261(1)(A)]

This rule does not apply to the portable pressure washers (EP-11) because they have an aggregate MHDR less than 350,000 Btus per hour. [10 CSR 10-6.261(1)(B)]

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*
 This rule does not apply to any of the processes at this installation because they all have a potential to emit particulate matter below allowable emissions based on process weight. [10 CSR 10-6.400(1)(B)16]
 Calculations demonstrating compliance follow:

PM Emission limit:

$$E = 4.1(P)^{0.67} \quad (P \leq 30)$$

$$E = 55(P)^{0.11} - 40 \quad (P > 30)$$

P is process weight rate in tons/hour and E is emission rate limit in lb/hour

Potential PM Emission Rate:

$$\text{Emission Rate (lb/hr)} = \text{Process Weight Rate (ton/hr)} * \text{PM Emission Factor (lb/ton)}$$

Emission Unit ID #	Unit Description	Process Weight Rate (tons/hr)	Emission Factor (lbs/ton)	Calculated Emission Rate (lbs/hr)	Emission Limit (lbs/hr)	Is EU in compliance?
EP01	Vertical Copper Melt Furnace	18.75	0.430*	8.06	29.22	YES
EP10	Basement Billet Saw	18.75	0.2	3.75	29.22	YES
EP17	Hand Grinding/Deburring	39	0.0313	1.22	42.30	YES
EP21	Supplemental/Recut Saw	18.75	0.2	3.75	29.22	YES

*This Emission Factor is $0.395 * 0.92^{-1}$ lbs/ton. 0.395 lbs/ton is the emission factor for PM₁₀ obtained from stack test results. Based on AP-42 Table B.2.2 Category 8 (Melting, Smelting, Refining), PM₁₀ accounts for 92% of PM.

Construction Permit History

- 1) Construction Permit 0894-027, Issued August 4, 1994
 This permit was issued to authorize construction of a vertical copper melting furnace (EP01), enclosed launder (EP02), and electric holding furnace (EP03). This permit has special conditions which are not included because they were superseded by Construction Permit 012006-014.
- 2) Construction Permit 0298-010, Issued December 9, 1997
 This permit was issued as a revision to Construction Permit 0894-027. This permit contains special conditions which appear in this operating permit as Permit Condition 1. Special Conditions 2D and 6 have been modified to ensure practical enforceability. The permittee has provided the following description for the process of selecting charged copper chips:
“During sawing operations, fine copper chips are pulled via vacuum into a cyclone. These collected chips are gathered and visually inspected. If there are no pooled oils in the collection container or on the chips, the material is placed back into the melt process. Larger copper chips that are not captured by the cyclone fall to the floor where they are collected and packaged for sale and removed from the facility. Chips that fall to the floor where they may come in contact with liquids that have dripped onto the floor do not re-enter the process.”
 Special Conditions 1 and 3 are superseded by Construction Permit 012006-014. As a result, the reporting requirements associated with those conditions contained in Special Condition 8 are also not included.
- 3) No Construction Permit Required Project #2000-09-083, Completed September 25, 2000
 This determination was made for the removal of 1000 gallons of propane.

4) Construction Permit 012006-014, Issued January 25, 2006

This permit was issued for the installation of one billet saw (EP10) which de-bottlenecked the hold furnace (EP03) and vertical melt furnace (EP01). The replacement of a 150 gallon diesel tank with a 500 gallon diesel tank (EP07) was also permitted. This permit contains special conditions which appear in this operating permit as Permit Condition PW1.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subpart M, *Standards Of Performance For Secondary Brass And Bronze Production Plants*

This rule applies to brass and bronze production plants. Brass and bronze are alloys of copper; however, the billets produced at the installation are typically greater than 99.9 percent pure copper and are not considered brass or bronze. Therefore, this rule does not apply.

40 CFR Part 60, Subpart P, *Standards of Performance for Primary Copper Smelters*

This regulation applies to the production of copper from copper ores. As this source only melts pure copper, the regulation is not applicable. [§60.160 and §60.161(a)]

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63 Subpart QQQ, *National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting*

This rule does not apply because the installation does not operate a primary copper smelter nor is it located at a major source of HAPs. [§63.1441 and §63.1459]

40 CFR Part 63 Subpart ZZZZ, *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

The spark ignition emergency generator engine (EP04) is subject to the requirements of this rule for existing engines located at an area source of HAPs. An engine at an area source for HAPs is existing if it commences construction or reconstruction before June 12, 2006. [§63.6590(a)(1)(iii)]

This rule is applied in Permit Condition 2. This permit condition has been restructured from the previous operating permit (OP2013-023) due to significant amendments published on January 30, 2013.

40 CFR Part 63 Subpart EEEEE, *National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting Area Sources*

This regulation applies to the production of copper from copper ores. As this source only melts pure copper, the regulation is not applicable. [§63.11151]

40 CFR Part 63 Subpart FFFFFFF, *National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources*

This rule applies to installations that process copper scrap in blast furnace and converter or that use another pyrometallurgical purification process to produce anode copper from copper scrap, including low-grade copper scrap. The installation processes high-grade copper cathodes, scrap tubing, saw chips, and billets in the vertical melting furnace. Molten copper is transferred from the vertical melting furnace through an enclosed launder to an electric holding furnace. The copper is then transferred within the furnace to water-cooled molds. This process does not contain a converter or other pyrometallurgical process to purify the copper. Since the installation does not produce anode copper, the installation is not considered a secondary copper smelter and thus this rule does not apply. [§63.11158]

40 CFR Part 63 Subpart TTTTTT, *National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources*

This rule applies to secondary nonferrous metals processing installations that are defined in this rule as a brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plant that uses furnace-melting operations to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders. The installation melts high purity copper and casts solid copper billets; therefore, this rule does not apply. [§63.11472]

40 CFR Part 63 Subpart XXXXXX, *National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories*

This rule does not apply because this area source installation is not primarily engaged in any of the nine source categories listed in §63.11514(a)(1) through (9): [§63.11514(a)]

- | | |
|---|--|
| 1. Electrical and Electronic Equipment Finishing Operations | 5. Heating Equipment, except Electric |
| 2. Fabricated Metal Products | 6. Industrial Machinery and Equipment Finishing Operations |
| 3. Fabricated Plate Work (Boiler Shops) | 7. Iron and Steel Forging |
| 4. Fabricated Structural Metal Manufacturing | 8. Primary Metal Products Manufacturing |
| | 9. Valves and Pipe Fittings. |

40 CFR Part 63 Subpart ZZZZZZ, *National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries*

The installation melts copper to cast copper billets. The copper foundry definition in this rule excludes primary or secondary metal producers that cast molten copper to produce billets. Therefore, this rule does not apply. [§63.11556]

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M, *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

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

10 CSR 10-6.405 *Restriction of Particulate Matter Emissions from Fuel Burning Equipment Used for Indirect Heating*

This installation is exempt from this rule because EP05 and EP13 are fueled by natural gas and propane and EP11 is fueled by distillate oils. [10 CSR 10-6.405(1)(E)].

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).

Response to Public Comments

The draft Part 70 Operating Permit for Cerro Flow Products LLC (007-0047) was placed on public notice as of February 16, 2018 for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://dnr.mo.gov/env/apcp/permit-public-notice.htm>.

The Air Pollution Control Program received comments from Mr. Mark A. Smith from EPA Region 7. The comments are addressed below in the order in which they appear within the letter(s).

Comment #: 1

Permit Condition 1 establishes an emission limitation where the permittee shall not exceed a carbon monoxide concentration set point of 0.75 percent at the vertical copper melt furnace burner tips while casting 12 3/8 inch billets or 13 5/8 inch billets. Permit Condition 1 also established an emission limitation where the permittee shall not exceed a carbon monoxide concentration set point of 1.3 percent at the furnace burner tips while casting 8 1/2 inch billets. Additionally, the monitoring and record keeping in Permit Condition 1 requires the permittee to maintain daily records of the carbon monoxide set point at the burner tips. However, Permit Condition 1 does not identify or specify the process or method the permittee shall use in their determination of the burner tip carbon concentrations. 10 CSR 10-6.065(6)(C)1.C.(I)(a) requires the operating permit to "contain air emissions monitoring and analysis procedures or test methods required under the applicable requirements including any procedures and methods promulgated by the administrator pursuant to sections 114(a)(3) or 504(b) of the Act." Therefore, EPA recommends MoDNR consider including the furnace burner tip carbon concentration monitoring and analysis procedures used by Cerro-Mexico in Permit Condition 1.

Response to Comment:

Permit Condition 1 now includes monitoring and analysis procedures used by Cerro Flow Products for EP01. See Response to Comment #3 for further details.

Comment #: 2

Permit Condition 1 includes an emission limitation where the permittee shall not charge *excessively oily material* (emphasis added) into the vertical copper-melting furnace. The limitation of *excessively oily material* (emphasis added) is too vague to be enforceable as a practical matter. What might be considered excessively oily material by one individual may or may not be considered excessively oily material by another individual. Part 70 operating permits must be sufficiently clear and specific to ensure the applicable requirements are enforceable as a practical matter. A permit condition is enforceable as a practical matter when the conditions establish a clear legal obligation and allow compliance to be verified. Permit conditions should contain sufficient detail to ensure the facility and the public clearly understand how compliance will be evaluated. Therefore, EPA recommends MoDNR and Cerro-Mexico fully describe the actions and measures to be recorded to verify compliance with excessively oily material.

Response to Comment:

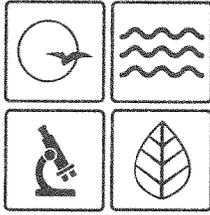
Permit Condition 1, Emission Limitation 4 has been reworded to ensure practical enforceability. This modification to the special condition cited from Construction Permit 0298-010 has been detailed in the Statement of Basis under the Construction Permit History sub-section.

Comment #: 3

Permit Condition PW1 establishes a carbon monoxide (CO) emission limit of less than 250 tons in any consecutive 12-month period from the entire installation. Permit Condition PW1 also requires the permittee to maintain the monthly and the sum of the most recent twelve (12) month record of CO emission and provides Attachment A or equivalent MoDNR approved form to be used for compliance verification. The permit record appears to indicate that the Vertical Copper Melt Furnace (EP01) is the major source of CO from the Cerro-Mexico installation. The Attachment A worksheet, for CO compliance verification, relies on CO emission factors derived from source tests conducted September 5 and 6, 1996; September 18, 1997; and June 11, 1998. EPA is concerned that MoDNR and Cerro-Mexico are relying on 20+ year old emission factors to verify the installation is not a major source. EPA recommends MoDNR consider requiring Cerro-Mexico to conduct a series of performance tests to confirm the furnace burner tip carbon concentrations continue to satisfy the operating permit limits and affirm the installation remains a minor source.

Response to Comment:

Cerro Flow Products – Mexico uses an inline device where CO concentration data is inputted into the furnace's programmable logic control (PLC) system. Along with the digitally stored CO percentage readings, a physical readout is also provided for operators to view. These CO percentage readings are continuously read out. Based upon this monitoring and analysis method, MoDNR believes that emission factors from the source tests are still adequate for compliance verification in Attachment A.



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

MAY 07 2018

Mr. Jason Shaw
Cerro Flow Products LLC
1500 Industrial Drive
Mexico, MO 65265

Re: Cerro Flow Products LLC, 007-0047
Permit Number: OP2018-037

Dear Mr. Shaw:

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 that you read and understand the requirements contained in your permit.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 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 the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:abj

Enclosures

c: PAMS File: 2017-10-030



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