

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

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: OP2016-029
Expiration Date: OCT 25 2021
Installation ID: 205-0010
Project Number: 2014-06-046

Installation Name and Address

Cerro Flow Products LLC
101 S. Douglas St.
Shelbina, MO 63468
Shelby County

Parent Company's Name and Address

Berkshire Hathaway
3555 Farnam St., Suite 1440
Omaha, NE 68131

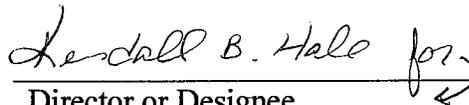
Installation Description:

Cerro Flow Products, LLC (formerly Cerro Flow Product, Inc. and Cerro Copper Tube Co.) in Shelbina, Missouri manufactures copper tubing for a wide variety of uses, including plumbing pipe. The tubing products vary in both diameter and length, depending on customer requirements.

The installation is not a named source, and is a major source for Carbon Monoxide (CO).



Prepared by
Jacob Robinett
Operating Permit Unit



Director or Designee
Department of Natural Resources

OCT 25 2016

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	Atmosphere Generator #1
EP02	Annealing Furnace #1
EP03	Atmosphere Generator #3
EP04	Annealing Furnace #3
EP05	Billet Furnace #1
EP06	Billet Furnace #2
EP07	Tooling Furnace
EP14	Atmosphere Generator #4
EP15	Annealing Furnace #4 Wooden Box Shop Space heaters (N.G.)

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>Description of Emission Source</u>	
EP09	Drawing Blocks/Lubricant Application
EP10	Degreasing/Parts Washers
EP11	Haul Roads

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 PW001
10 CSR 10-6.060 Construction Permits Required,
Permit Number: 112003-005A

Emission Limitation:

The permittee shall emit less than 250.0 tons of carbon monoxide (CO) in any consecutive 12 month period from the entire installation. [Special Condition 2.A.]

Table 1: Entire Installation of Construction Permit 112003-005

Emission Unit #	Description of Emission Unit
EP01	Atmosphere Generator #1
EP02	Annealing Furnace #1
EP03	Atmosphere Generator #3
EP04	Annealing Furnace #3
EP05	Billet Furnace #1
EP06	Billet Furnace #2
EP07	Tooling Furnace
EP11	Haul Roads
EP14	Atmosphere Generator #4
EP15	Annealing Furnace #4
	Wooden Box Shop
	Space Heaters (N.G.)

Monitoring/Recordkeeping:

1. The permittee shall maintain an accurate record of CO emitted into the atmosphere from the entire facility. [Special Condition 2.B.]
2. The permittee will base calculation demonstrating compliance with the emission limitation on natural gas usage using meter readings at two separate meters (north and south meters) and the atmosphere generators' gas usage meters. [Special Condition 2.B.]
 - a) The south meter shall measure and record natural gas usage from the two billet furnaces and some of the other natural gas fired equipment (space heaters) located throughout the plant.
 - b) The north meter shall measure and record natural gas usage from all of the atmosphere generators, all of the annealing furnaces and some of the other natural gas fired equipment (space heaters) located throughout the plant.
 - c) Gas usage meters shall be installed on the three atmosphere generators, EP01, EP03, and EP14 in order to measure the throughput of natural gas to these generators. The remaining balance of the north meter will reflect usage of the annealing furnaces and other gas-fired equipment.

3. The permittee shall perform CO emission calculations on a monthly basis and maintain a 12-month consecutive total. [Special Condition 2.C.]
4. The permittee shall maintain all records required by 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 2.D.]
5. The permittee will use Attachment A, or its equivalent, to demonstrate compliance with this emission limit.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitations(s). [Special Condition 2.E.]
2. The permittee shall report any deviations from the limitations, standards, test methods and procedures, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION PW002

10 CSR 10-6.060 Construction Permit Required

Permit Number: 072009-016

Operational Limitation/ Equipment Specification:

1. The permittee shall keep all lubricants and solvents used in the lubricating and degreasing process in sealed containers whenever the materials are not in use. The permittee shall provide and maintain suitable easily read, permanent markings on all lubricants and solvents used in the lubricating and degreasing process. [Special Condition 1]
2. When considering using lubricants and solvents containing Hazardous Air Pollutants (HAPs) in the lubricating and degreasing operations, the permittee must calculate the potential emissions of the combined HAPs and each individual HAPs in the materials. [Special Condition 2.A.]
3. The permittee must seek approval from the Air Pollution Control Program before the use of the HAPs containing solvents and lubricants in the following cases [Special Condition 2.B.]:
 - a) If the combined potential emissions of all HAPs in the solvents and lubricants are equal to or greater than 25.0 tons per year; [Special Condition 2.B.1.] or,
 - b) If the potential emissions of each individual HAPs for the solvents and lubricants are equal to or greater than its respective Screening Modeling Action Level (SMAL) or 10.0 tons per year, whichever is less. A list of current SMAL values can be obtained by contacting the Air Pollution Control Program. [Special Condition 2.B.2.]

Record Keeping:

The permittee will keep the MSDS for the current lubricants and degreasers available for immediate inspection.

Reporting:

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitations(s).

2. The permittee shall report any deviations from the limitations, standards, test methods and procedures, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and 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 001 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants
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Emission Point	Description	Manufacturer/Model #	Installation Date
EP01	Atmosphere Generator #1 -burns natural gas (rated at less than 10 MMBtu/hr) under sub-stoichiometric conditions to generate an oxygen deficient atmosphere, MHDR = 0.0018 mmcf NG burned/hr	The Electric Furnace Co. 4402G/S4986-GX	1981
EP02	Annealing Furnace #1 – Natural gas fired furnace, MHDR 1.0 MMBtu/hr	The Electric Furnace Co. 4402-F	1981
EP03	Atmosphere Generator #3 -burns natural gas (rated at less than 10 MMBtu/hr) under sub-stoichiometric conditions to generate an oxygen deficient atmosphere, MHDR = 0.002 mmcf NG burned/hr	The Electric Furnace Co. 4986-GX	1988
EP04	Annealing Furnace #3 – Natural gas fired furnace, MHDR 1.0 MMBtu/hr	The Electric Furnace Co. 4986-F1	1988
EP05	Billet Furnace #1 – Direct fired natural gas furnace, MHDR 12.5 MMBtu/hr	Granco Clark 10709	1991
EP06	Billet Furnace #2 – Direct fired natural gas furnace, MHDR 12.5 MMBtu/hr	Granco Clark 10709	1991
EP07	Tooling Furnace – Direct fired natural gas furnace, MHDR 1.5 MMBtu/hr	Unitherm GB-4244266	1991
EP14	Atmosphere Generator #4 -burns natural gas (rated at less than 10 MMBtu/hr) under sub-stoichiometric conditions to generate an oxygen deficient atmosphere, MHDR = 0.0016 mmcf NG burned/hr	Gas Atmospheres XH1310-NH-HE	1999
EP15	Annealing Furnace #4 – Natural gas fired furnace, MHDR 5.7 MMBtu/hr	Salem 4075	1999

Emission Limitation:

1. The permittee shall not cause emissions to be discharged into the atmosphere from any source built after February 24, 1971 any visible emissions with an opacity greater than 20%. [10 CSR 10-6.220 (3)(A)]
2. Exception: the permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 60%. [10 CSR 10-6.220 (3)(B)]

Monitoring/Recordkeeping:

The permittee shall not have to monitor for opacity. It is not practical to require Method 9 or Method 22 monitoring for the Wood Box shop since it vents inside the building. The atmosphere generators (EP01,

EP03, and EP14), annealing furnaces (EP02, EP04, and EP15), billet furnaces (EP05 and EP06), tooling furnace (EP07), and space heaters all burn natural gas and have a PM PTE less than 0.5 lb/hr making them exempt.

Reporting:

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

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 is only an excerpt from the regulation or code, and is 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) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other

pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

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

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

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

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

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

- 1) The permittee shall submit 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) The permittee may be required by the director to file additional reports.
- 3) 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.
- 4) 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.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.

- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

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 not federally enforceable.

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.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether equipment malfunctions contributed to an exceedance.
- 3) Any violations and any corrective actions undertaken to correct the violation.

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

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to

allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

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

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

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

10 CSR 10-6.065(6)(C)1.C General 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.
 - 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.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, 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 must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

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

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

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

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

10 CSR 10-6.065(6)(C)1.F Severability Clause

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

10 CSR 10-6.065(6)(C)1.G General Requirements

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

permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

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

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

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

None.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by 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. 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, 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, 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 application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, 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 Harold A. Liller, General Manager Industrial Products. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

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

VI. Attachments

Attachments follow.

Attachment A
 Monthly CO Emission Tracking Record

This sheet covers _____ (Copy this sheet as needed.)
 (month, year)

(a)	(b)	(c)	(d)
Location	Amount of Natural Gas Used (MMcf)	Emission Factor (lb/MMcf)	Total Emissions (Tons CO)
North (EP01, 03, & 14)		5460	
North (Remaining)		84	
South		84	
(e) Total CO Emissions Calculated for this Month in Tons			
(f) 12-month CO Emissions Total (h) from Previous month's Worksheet in Tons			
(g) Monthly CO Emissions Total (e) from Previous Year's Worksheet in Tons			
(h) Current 12-month Total of CO Emissions in Tons: (h) = [(e) + (f) - (g)]			

- (a) Calculation for the CO emissions will be based on the meter readings at the two separate meter locations (north and south).
- (b) Record the amount of natural gas used this month based on the north and south meters and the atmosphere generators' meters.
- (c) CO emission factors for natural gas combustion taken from Construction Permit 112003-005A Special Condition 2C.
- (d) Calculate CO emissions from natural gas combustion: (d) = [(b) x (c)] / 2000
- (e) Sum each individual CO emissions for this month: (e) = [sum of all CO emissions in (d)]
- (f) Record the 12-month total CO emissions (h) from last month's Attachment A.
- (g) Record the monthly CO emissions total (e) from previous year's Attachment A.
- (h) Calculate the current 12-month total CO emissions. **A value less than 250.0 tons of CO indicates compliance.**

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Cerro Flow Products, LLC (formerly Cerro Flow Product, Inc. and Cerro Copper Tube Co.) in Shelbina, Missouri manufactures copper tubing for a wide variety of uses, including plumbing pipe. The tubing products vary in both diameter and length, depending on customer requirements. The process involves the following basic steps:

1. Copper is received at the plant in the form of billets and stored until ready for production;
2. The billets are heated in either of two billet furnaces to raise the temperature of the metal in preparation for placement through the plant's extrusion press and cold pilger mills;
3. After the cold pilger mills, the copper is delivered to one of eight drawing blocks where a hydrocarbon-based lubricating grease is first applied to the metal to aid in the drawing process;
4. The lubricated metal is cold drawn or "stretched" into a tube shape of a desired diameter and wall thickness as dictated by the specific draw tooling used in this step;
5. After being drawn to the desired dimensions, the lubricating oil is removed from the tubing using an organic degreasing solvent;
6. Once cleaned, the tubing is either bent into coils or straightened and cut, and then most of the product is passed through any one of the three annealing furnaces where, through a process of heating and cooling, certain physical characteristics are imparted into the metal product (softness, ductility, malleability, etc.);

To prevent the copper tubing surfaces from corroding (oxidizing) while in the annealing furnace (due to the presence of any available oxygen), each annealing furnace is equipped with an associated atmosphere generator. The atmosphere generator is a combustion device that burns natural gas under sub-stoichiometric conditions, thereby generating an oxygen-deficient atmosphere (hence the term, "atmosphere generator").

This oxygen deficient atmosphere is used to completely fill the interior volume of the annealing furnace and create a positive pressure to prevent any oxygen from entering the furnace interior. This atmosphere, which comes into direct contact with the copper tubing surfaces, protects the tubing surfaces from oxidizing under the elevated temperatures (~900°F-~1100°F) within the annealing furnace by removing all available oxygen from the furnace interior (including the cool-down zone).

Heat to the annealing furnaces is provided via indirect natural gas firing (i.e., products of combustion do not come into contact with the copper tubing). That is, heat is transferred to the furnace interior via a series of natural gas burners located in heat exchange tubes along the length of the "hot" section of the furnace. These burners are operated at optimum air-to-fuel ratios (stoichiometric air plus excess air).

A by-product of generating the oxygen deficient atmosphere is the formation of a certain amount of "combustibles" – actually products of incomplete combustion that consist of two primary compounds, carbon monoxide (CO) and hydrogen (H₂). The amount of these "combustibles" present in the generated atmosphere is used by the furnace operator as a controlling factor to ensure that no oxygen is delivered to the annealing furnaces. The amount of CO contained in the generated atmosphere is typically 2-2.5% by volume (20,000 to 25,000 ppmv). However, when the atmosphere is vented out of the furnace, since it has a relatively high temperature (not far below the annealing furnace temperature range) and then

comes into contact with room air that is mixed as the atmosphere is piped to a final exhaust fan and roof mounted stack where it is exhausted to the outside ambient air, most of the CO is converted to CO₂ before entering the exhaust stack. Results from an Air Pollution Control Program-approved and observed emissions testing performed on the gas stream in the exhaust stack have proven this conversion. Consequently, the test results were used to develop an emission factor that forms the basis for demonstrating compliance with the plant-wide special condition.

Until late in 2002, the Shelbina facility was equipped with four (4) annealing furnaces and accompanying atmosphere generators. However, since then, the #2 annealing furnace and accompany atmosphere generator (EU 12 and EU 13) were removed from service and transferred to another facility.

The facility accepted a limit of 250.0 tons per year of carbon monoxide (CO) to keep the installation a minor source as part of Construction Permit No. 112003-005. There have been no other CO sources permitted after Construction Permit No. 112003-005.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
PM ₁₀	5.26
PM _{2.5}	0.45
Sulfur Oxides (SO _x)	0.12
Nitrogen Oxides (NO _x)	17.37
Volatile Organic Compounds	56.44
Carbon Monoxide (CO)	< 250.0

¹HAPs evaluated at 8,760 hours per year for combustion units. There should be no HAP emissions from the lubricating and degreasing operations based on the MSDS and Construction Permit 072009-016. Potential to emit from EP11 Haul Roads was not included in calculation.

Reported Air Pollutant Emissions, tons per year

Pollutants	2015	2014	2013	2012	2011
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.25	0.27	0.24	0.23	0.21
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.22	0.23	0.24	-	-
Sulfur Oxides (SO _x)	0.02	0.02	0.02	0.02	0.03
Nitrogen Oxides (NO _x)	4.56	4.63	3.91	3.91	3.82
Volatile Organic Compounds (VOC)	10.48	14.71	16.46	18.32	20.36
Carbon Monoxide (CO)	101.51	111.57	108.9	93.28	97.15

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 June 16, 2014;
- 2) 2015 Emissions Inventory Questionnaire, received April 15, 2016;
- 3) Construction Permit No. 0781-002A, issued July 1, 1981;
- 4) Construction Permit No. 0798-034, issued July 23, 1998;
- 5) Construction Permit No. 012003-001, issued December 8, 2002;
- 6) Construction Permit No. 112003-005, issued October 14, 2003;
- 7) Construction Permit No. 072009-016, issued July 24, 2009;
- 8) Operating Permit No. OP2009-043, issued December 18, 2009;
- 9) Construction Permit No. 112003-005A, issued May 22, 2015; and
- 10) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

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

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

None.

Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-6.100, *Alternate Emission Limits*

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

Construction Permit History

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

Construction Permit 0781-002A

This permit was issued on July 1, 1981; for the construction of a gas fired radiant tube annealing furnace and an exothermic generator (atmosphere generator). There are no special conditions associated with this permit. The units associated with this permit are EP01 and EP02.

Construction Permit 0798-034

This permit was issued on July 23, 1998, for the replacement of two (2) annealing furnaces with a new annealing furnace and atmosphere generator with greater capacities. There are no special conditions associated with the permit. The units associated with this permit are EP03 and EP04.

Construction Permit 012003-001

This permit was issued on December 8, 2002, but was superseded in its entirety by Construction Permit 112003-005 to incorporate stack testing.

Construction Permit 112003-005

This permit was issued October 14, 2003 to supersede Construction Permit No. 012003-001 in its entirety.

The special conditions of this permit supersede all special conditions found in Construction Permit No. 012003-001. The installation shall emit less than 250 tons of CO in any consecutive 12 month period from the entire installation. The installation shall maintain an accurate record of CO emitted into the atmosphere from the entire facility. The installation will perform calculations on a monthly basis and maintain a 12-month rolling total to demonstrate compliance of the CO limit.

Special Condition #3 has not been included in this permit. The installation had to render inoperable equipment and discontinue the usage of operations of a non-contact boiler, atmosphere generator #2, and annealing furnace #2 and has done that since being issued the permit.

Construction Permit 112003-005A

This permit was issued May 22, 2015 to supersede Special Condition 2 of Construction Permit 112003-005.

The permit was amended to reflect the correct CO potential emission factors as determined through stack testing. The facility installed gas usage meters on the three atmosphere generators, EP01, EP03, EP14, in order to measure the throughput of natural gas to these generators. These generators potential emission of CO will be calculated using an emission factor of 5460 lbs/MMCF that was established during stack testing in 2003. The remaining emission points located on the north meter, EP02 (annealing furnace #1), EP04 (annealing furnace #3), EP15 (annealing furnace #4), and remaining natural gas fired equipment (space heaters) shall use the emission factor of 84 lbs/MMCF, based upon US EPA document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition Section 1.4 Natural Gas Combustion (July 1998).

Construction Permit 072009-016

This permit was issued on July 24, 2009 to permit the various degreasing and lubricating operations at the installations. During a review of the facility as part of an updated operating permit application, it was discovered that none of the lubricating and degreasing operations, that have been added at various times since the issuance of the construction permit 0781-002A, have ever been permitted. There is currently ten (10) lubricating and thirteen (13) degreasing machines at the installation.

There are a few special conditions associated with this permit. The installation shall keep all lubricants and solvents used in the lubricating and degreasing process in sealed contains whenever the materials are not in use.

When considering using lubricants and solvents containing HAPs in the lubricating and degreasing operations, the permittee must calculate the potential emissions of the HAPs. The permittee must seek approval from APCP before use of HAPs containing solvents and lubricants if the combined PTE of all HAPs are equal to or greater than 25 tons per year, or if individual HAPs are equal to or greater than its respective Screening Modeling Action Level or 10 tons per year, whichever is less.

New Source Performance Standards (NSPS) Applicability

None.

Maximum Achievable Control Technology (MACT) Applicability

None.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

None.

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 10-6.220, *Restriction of Emission of Visible Air Contaminants*

This rule applies to all sources of visible emissions throughout the state of Missouri. Existing sources according to 10 CSR 10-6.020(2)(E)44.B. is defined as equipment constructed before February 24, 1971. The equipment located at the installation is considered new since it was built after February 24, 1971. The majority of equipment at the installation is a source of particulate matter. The parts washers, lubricating and degreasing machines are only sources of VOCs. It is not practical to require Method 9 or Method 22 monitoring for the Wood Box Shop since it vents inside the building. The atmosphere generators (EP01, EP03 and EP14), annealing furnaces (EP02, EP04, and EP15), billet furnaces (EP05 and EP06), tooling furnace (EP07), and space heaters all burn natural gas and have PM PTE less than 0.5 lb/hr. Therefore, no opacity monitoring and record keeping requirements are included in this permit.

EP Number	MHDR	EF (lb/mmcf)	PTE (lb/hr)
EP01	0.0018 mmcf	7.6	0.01
EP02	1.0 MMBtu	3	0.03
EP03	0.002 mmcf	7.6	0.02
EP04	1.0 MMBtu	3	0.003
EP05	12.5 MMBtu	3	0.04
EP06	12.5 MMBtu	3	0.04
EP07	1.5 MMBtu	7.6	0.01
EP14	0.0016 mmcf	7.6	0.01
EP15	5.7 MMBtu	3	0.02

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

The permittee is exempt from this regulation since the emission units use exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A)2.

10 CSR 10-6.261, *Control of Sulfur Dioxide Emissions*

The permittee is exempt from this regulation since the emission units are fueled exclusively with natural gas per 10 CSR 10-6.261(1)(A).

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*

This regulation does not apply to the installation by the definition of process weight. All of the units at the installation use pipeline grade natural gas for combustion purposes.

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

The installation is exempt from this rule since the applicable units are fueled by natural gas per 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

A letter was received from the Mark A. Smith, Air Permitting and Compliance Branch Chief, of the United States Environmental Protection Agency Region 7 on January 30, 2015. Several comments were received and are listed below. The comments are addressed in the order in which they appear within the letter(s). In the review process, changes were made to the draft that went onto public notice, when Attachment B is mentioned in the comments, it is now Attachment A in the permit.

Comment #1: Plant wide Emission limitation in Permit Condition PW001 limits Cerro Flow-Shelbina to less than 250.0 tons of carbon monoxide from the “entire installation” (emphasis added). However, Permit condition PW001 does not define “entire installation” nor does Permit Condition PW001 include the list of emission units that comprise the “entire installation.” Permit Condition PW001 is incorporated into the operating permit as a result of a special condition of construction permit #112003-005. Therefore, the “entire installation” would include all (emphasis added) emission units (including the insignificant sources) that contribute to the total carbon monoxide emissions. EPA recommends MDNR include a list of all the emission units which were in the Cerro Flow-Shelbina facility at the time of the issuance of construction permit #112003-005.

Response to Comment: A table has been included to list all sources of VOCs present at the facility at the time the construction permit was issued.

Comment #2: Requirement #5 under the monitoring / record keeping section of Permit Condition PW001 requires Cerro Flow-Shelbina to perform calculations on a monthly basis and maintain a 12-month consecutive average. The requirement, as stated in Construction Permit #112003-005, is to maintain a 12-month consecutive total and therefore, EPA recommends MDNR replace “average” with “total.”

Response to Comment: Permit has been corrected and “average” has been replaced with “total”

Comment #3: Requirement #7 included in the monitoring / record keeping section of Permit Condition PW001 requires Cerro Flow-Shelbina to use Attachment B or equivalent, to demonstrate compliance with the less than 250.0 ton per 12-month rolling total emission limit. Attachment B tracks carbon monoxide (CO) emissions, based upon emission factors established in accordance with construction permit #012003-001 issued December 8, 2002. Therefore, Cerro Flow-Shelbina is using CO emission factors developed over 10 years ago to verify compliance. EPA is concerned that the facility operation(s) may have changed and these emission factors are not accurate. 10 CSR 10-6.065(6)(C)1.C provides MDNR with the authority to include periodic monitoring in an operating permit when the underlying applicable requirement is silent regarding monitoring. Therefore, EPA recommends that MDNR include a monitoring requirement in Permit Condition PW001 which requires Cerro Flow-Shelbina to verify their emission factors no less than once during the term of the operating permit.

Response to Comment: There is no need to have the atmosphere generators retested to determine emission factors for these units. The reported actual emissions from the facility have been a maximum of 111.57 tons, which is 44.7% of the 250.0 allowable emissions. There is not a

need for the facility to retest when they are not close to reaching the emissions limitation and it is a straightforward process. The facility operations of generating CO have not changed since the test was done, so the emissions should be the same.

Comment #4: Attachment B highlights the locations of natural gas being metered for use in calculating the monthly CO. On Attachment B, the locations are identified as “North Atmospheric Generators;” “North Annealing Furnaces;” and “South.” Permit Condition PW001 indicates the north meter tracks usage from the atmospheric generators, annealing furnaces and some of the other natural gas fired equipment (space heaters) located throughout the plant; and says the “permittee will use reading from the north meter to compute CO emissions from the annealing furnaces, atmospheric generators and all other space heaters at the facility.” Permit Condition PW001 also requires the permittee to use the readings from the south meter to compute CO emissions from the two billet furnaces and from some of the spaces heaters located in the plant. The description of what is being metered in Permit Condition PW001 is not repeated on Attachment B, which leads to confusion as to what meter to use with what gas-fired equipment. Also, the lack of specificity of which space heaters are monitored by which meter is also confusing. Finally, Attachment B does not include an emission factor to be used for the billet furnaces, tooling furnace and space heaters. Therefore, EPA recommends MDNR expand Attachment B to show all the different natural gas-fired equipment types; their emission factor; and the source of the emission factor. EPA also recommends MDNR us a common description in Attachment B and Permit Condition PW001 for consistency and clarity.

Response to Comment: The only emission units located at Cerro Flow-Shelbina’s facility that have CO emissions are all natural gas fired. The emission factors for the South meter and the North (Remaining) were originally taken from EPA’s document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 1.4, Natural Gas Combustion (7/98). After checking the most recent version of that document, the emission factor has not changed. In review of this permit, Construction Permit 112003-005 was amended to install flow meters on the atmosphere generators (EP01, EP03, & EP14) which are powered through the north meter. The facility has two gas lines that come into the facility, a north line and a south line, that they record their amount of natural gas used per month based on the bill received from the electric company.

Comment #5: The emission limitation in Permit Condition 001 says “no owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%.” This is a permit condition in an operating permit issued to Cerro Flow-Shelbina and Cerro Flow-Shelbina is responsible for compliance and should be shown in lieu of the “owner or other person.” Also, MDNR should identify what is meant by the term “new.”

Response to Comment: Changes have been made, and the definition of “new” has been included.

Comment #6: The monitoring / record keeping requirements under Permit Condition 001 direct the permittee to “See Statement of Basis-Other Regulatory Determination.” The Statement of Basis is not an enforceable part of an operating permit and therefore the monitoring / record keeping in Permit condition 001 is not practically enforceable. Therefore, EPA recommend MDNR indicate in Permit Condition 001 that the permittee (Cerro Flow-Shelbina) is not required to conduct

visible air emission monitoring and record keeping. Additionally, EPA recommends MDNR add the details to the Statement of Basis explaining why emission points EP01 through EP07; and Emission Points EP14 and EP15 are not required to conduct monitoring and recordkeeping.

Response to Comment: Permit Condition 001 has been modified to indicate that the permittee is not required to conduct visible air emission monitoring and record keeping. A table has been added to the Statement of Basis to show that the emission points have a PM PTE less than 0.5 lb/hr.

Comment #7: Attachment A is included in the operating permit for recording inspection / maintenance / repair / malfunction information. However, the use of Attachment A is not referenced in any of the operating permit conditions. EPA recommends MDNR either reference Attachment A in appropriate permit condition(s) or remove Attachment A from the operating permit.

Response to Comment: Attachment A has been removed from the operating permit.

Comment #8: The Greenhouse Gas (GHG) emissions statement in the Statement of Basis states that the public may obtain CO₂ emissions data for this installation by visiting EPA's Clean Air Markets website. EPA's Clean Air Markets website provides emission information for coal-fired electric generating utilities and Cerro Flow-Shelbina does not fit that category of sources. However, if Cerro Flow-Shelbina is subject to the GHG reporting requirements of 40 CFR Part 98, then the public may obtain CO_{2e} emission data by visiting <http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html>. EPA recommends MDNR modify the Statement of Basis to reflect the appropriate website for obtaining GHG emission information.

Response to Comment: GHG emission statement has been removed from the permit to reflect the type of facility that Cerro Flow-Shelbina is.



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

OCT 25 2016

Mr. Harold A. Liller
Cerro Flow Products LLC
101 S. Douglas St.
Shelbina, MO 63468

Re: Cerro Flow Products LLC, 205-0010
Permit Number: OP2016-029

Dear Mr. Liller:

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:jrj

Enclosures

c: PAMS File: 2014-06-046

