

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number: 072009-016 Project Number: 2009-05-002

Parent Company: Cerro Flow Products, Inc.

Parent Company Address: 101 S. Douglas St., Shelbina, MO 63468

Installation Name: Cerro Flow Products, Inc.

Installation Address: 101 S. Douglas St., Shelbina, MO 63468

Location Information: Shelby County, S31, T57N, R10W

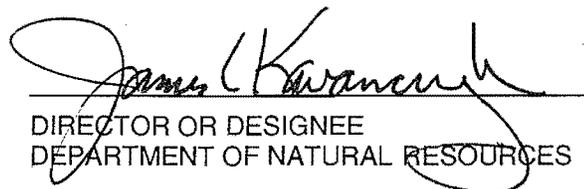
Application for Authority to Construct was made for:

The permitting of lubricating and degreasing operations. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required.*

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- Standard Conditions (on reverse) are applicable to this permit.
 - Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JUL 24 2009

EFFECTIVE DATE


 DIRECTOR OR DESIGNEE
 DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 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 choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2009-05-002

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Cerro Flow Products, Inc.
Shelby County, S31, T57N, R10W

1. Cerro Flow Products, Inc. shall keep all lubricants and solvents used in the lubricating and degreasing process in sealed containers whenever the materials are not in use. Cerro Flow Products, Inc. shall provide and maintain suitable, easily read, permanent markings on all lubricants and solvents used in the lubricating and degreasing process.
2. Use of lubricants and solvents containing Hazardous Air Pollutants (HAPs) in the lubricating and degreasing operations.
 - A. When considering using lubricants and solvents containing HAPs in the lubricating and degreasing operations, Cerro Flow Products must calculate the potential emissions of the combined HAPs and each individual HAPs in the materials.
 - B. Cerro Flow Products, Inc. must seek approval from the Air Pollution Control Program before the use of the HAPs containing solvents and lubricants in the following cases:
 1. If the combined potential emissions of all HAPs in the solvents and lubricants are equal to or greater than 25.0 tons per year, or
 2. 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.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2009-05-002
Installation ID Number: 205-0010
Permit Number:

Cerro Flow Products, Inc.
101 S. Douglas St.
Shelbina, MO 63468

Complete: May 1, 2009

Parent Company:
Cerro Flow Products, Inc.
101 S. Douglas St.
Shelbina, MO 63468

Shelby County, S31, T57N, R10W

REVIEW SUMMARY

- Cerro Flow Products, Inc. has applied to permit existing lubricating and degreasing operations.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of Volatile Organic Compounds (VOCs) are above its de minimis level.
- This installation is located in Shelby County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed for this review. No model is currently available which can accurately predict ambient ozone concentrations

caused by this installation's VOC emissions.

- Emissions testing is not required for the equipment
- A Part 70 Operating Permit application was submitted along with the construction permit application for this project. Therefore, no other operating permit modification or amendment request is needed as a result of this project.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Cerro Flow Products, Inc. operates an installation in Shelby County (S31. T57N, R10W) for the production of copper tubing. The tubes are produced by heating copper billets (large cylindrical casts of copper) and then shaping the billets through a series of mechanical processes including extrusion and drawing. To aid in the mechanical processes, a hydrocarbon-based lubricating oil is applied to the metal. The metal is then passed through an organic degreasing solvent to remove the lubricant. Once cleaned, the tubing is either bent into coils or straightened and cut. Then the product is passed through annealing furnaces which, through heating and cooling, certain physical characteristics are imparted to the metal product.

This installation is a minor source for construction permitting. The facility had, in its last construction permit (No. 112003-005) accepted a limit of 250.0 tons per year of carbon monoxide (CO) to keep this installation a minor source. The facility had a Basic Operating Permit issued on February 13, 2002, but in permit 112003-005 issued in 2003, the installation was required to submit a Part 70 Operating Permit application. The Part 70 Operating Permit Application was received by the Air Pollution Control Program on May 4, 2009. This installation is now considered a major source for operating permits.

The following permits have been issued to Cerro Flow Products, Inc. from the Air Pollution Control Program.

Permit Number	Description
0781-002	Construction of new copper annealing plant.
0798-034	Replacement of annealing furnace.
012003-001	Installation of new equipment (generators, furnaces, boilers, etc.)
112003-005	To incorporate stack testing results.

PROJECT DESCRIPTION

Cerro Flow Products, Inc. had installed various degreasing and lubricating operations at the installation at various times after the issuance of its first construction permit in 1981. During a review of the facility conducted as part of an updated operating permit application, it was discovered that none of the lubricating and degreasing operation has

ever been permitted. As a result, the installation is now submitting an application for these operations. It is not known when these equipment were installed. They could have been installed individually or as part of bigger projects. Emissions evaluation performed on the degreasing and lubricating operations shows that the only pollutants expected from the process are volatile organic compounds (VOC) and that the potential VOC emissions of the installation, after taking into account the degreasing and lubricating operations, will be less than major source levels. Therefore, even if these equipment were installed as part of other projects, these projects would not be major. There also would be no modeling requirements for these projects since no model is currently available which can accurately predict ambient ozone concentration caused by the VOCs. Therefore, it is not necessary to go back and permit these equipment as part of other projects.

There are currently ten (10) machines at the facility that include the lubricating operations and thirteen (13) process lines that have degreasing operations.

EMISSIONS/CONTROLS EVALUATION

The solvent is pumped at a rate of 5 gallons per minute and the lubricant is pumped at a rate of 2.4 gallons per minute. Normally, to calculate the potential emissions from the equipment, it would be assumed that the equipment operates continuously throughout the year (8760 hours) and that all of the VOCs in the solvent and lubricant are emitted. However, doing so in this case would lead to an unusually large amount of potential VOC emissions. The VOC emissions from the solvent would be 8,804 tons per year and the VOC emissions from the lubricant would be 4,737 tons per year from the solvent. The total VOC emissions would be 13,541 tons per year. Many of the lubricants and solvents are recirculated for multiple uses in the production machines. The equipment also only activates the pumps on an intermittent, as-needed basis. For example, the lubricants and solvents are not pumped while the machine is being set up, during stock changes or between loadings of new products. Therefore, calculating the potential emissions based on pump rate may not accurately represent the operations of the lubricating and degreasing machines.

Cerro Flow Products submitted historical data showing the amount of solvents and lubricants used and the amount of solvents and lubricants left over at the end of the process. Therefore, the potential emissions were calculated by using historical data of lubricants and solvents lost, scaling it up to 8760 hours per year, and adding a 10% safety factor to ensure that the calculated VOC emissions will never be exceeded. The Material Safety Data Sheets (MSDS) of the lubricant and degreaser submitted by the company with the application does not list any HAP as a component. Therefore, there should be no HAP emissions from the lubricating and degreasing operations.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2008EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	3.25	0.24	N/A	N/A
SO _x	40.0	0.10	0.03	N/A	N/A
NO _x	40.0	17.34	4.14	N/A	N/A
VOC	40.0	55.99	23.78	56.12	N/A
CO	100.0	<250.00	83.557	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs are above de minimis levels.

APPLICABLE REQUIREMENTS

Cerro Flow Products, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Chia-Wei Young
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 5/1/2009, received 5/4/2009, designating Cerro Flow Products, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey, dated 5/7/2009.

Mr., Vernon Cash
Safety and Environmental Coordinator
Cerro Flow Products, Inc.
101 S. Douglas Street
Shelbina, MO 63468

RE: New Source Review Permit - Project Number: 2009-05-002

Dear Mr. Cash:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:cwyl

Enclosures

c: Northeast Regional Office
PAMS File: 2009-05-002
Permit Number: