

1

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

### **GENERAL PERMIT CONDITIONS**

#### **TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

#### **NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

#### **CONSTRUCTION OF NEW SOURCES**

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as

2

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

### **PUBLIC DISCLOSURE**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

### **BEST AVAILABLE TECHNOLOGY**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

### **PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement

3

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

of operation.

### **SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

4

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

5

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
---	---	------------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Copperweld Shelby Division** located in **Richland** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

3745-18-06  
3745-17-11

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>
P034	Plant 2 North Pickle Tub w/scrubber	Compliance with the terms and conditions of this permit and use of scrubber.	3745-31-05

3745-17-07 (A)

Facility Name: **Copperweld Shelby Division**  
 Application Number: **03-1400**  
 Date: **August 12, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				ton SO <sub>2</sub> /yr;
Permit Allowable Emissions	0.014 lb PE/hr;			
0.06 ton PE/yr;				
ns				
and/or Control/Usage Requirements	20%, as a 6 minute average			
	*			
	*			
<u>Stack</u>				
0.0001 lbs				
NO <sub>x</sub> /hr;				
0.0004 tons				
NO <sub>x</sub> /hr;				
3.98 lb SO <sub>2</sub> /hr;				
17.43 ton SO <sub>2</sub> /yr;				
2.8 lb PE/hr;				
12.3 ton PE/yr;				
<b><u>Fugitive</u></b>				
<b><u>e</u></b>				
4.02 lbs				
SO <sub>2</sub> /hr;				
17.6				

Facility Name: **Copperweld Shelby Division**  
Application Number: **03-1400**  
Date: **August 12, 1998**

\* The emission limit based on this applicable rule is less stringent than the limit established pursuant to OAC 3745-31-05.

SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
NO <sub>x</sub>	0.0004
SO <sub>2</sub>	35.0
PM	12.4

**REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402** .

**WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

8

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

**MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

**MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

**CONSTRUCTION COMPLIANCE CERTIFICATION**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**INTRODUCTION:**

This permit-to-install (PTI) is for a Steel Tubing Pickle Tub at Copperweld Shelby Division (herein referred to as "permittee"), located in Mansfield, Ohio.

**A. APPLICABLE EMISSION LIMITATIONS AND/OR CONTROL REQUIREMENTS**

1. Best Available Technology (BAT) has been determined to be the use of the following controls:
  - a. chemical inhibitors will be added to the acid

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

pickling tubs resulting in 50% reduction of uncontrolled SO<sub>x</sub> emissions; and,

- b. packed bed scrubber and collection system which is designed to capture 98% of the Nitrogen Dioxide (NO<sub>x</sub>) emissions, 99% of the Sulfur Dioxide (SO<sub>x</sub>) emissions and 99.99% of the Particulate Emissions (PE). The scrubber will control 98% of the NO<sub>x</sub>, 98% of the PE and 99% of the SO<sub>x</sub> emissions vented to it.

**B. OPERATIONAL RESTRICTIONS**

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 1.5 inches of water at all times while the emissions unit is in operation.

The scrubber water flow rate shall be continuously maintained at a value of not less than 120 gallons per minute at all times while the emissions unit is in operation.

**C. MONITORING AND/OR RECORDKEEPING REQUIREMENTS**

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on an hourly basis;
- b. the scrubber water flow rate, in gallons per minute, on an hourly basis; and,

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

- c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

**D. REPORTING REQUIREMENTS**

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
  - a. the static pressure drop across the scrubber; and,
  - b. the scrubber water flow rate.
2. The permittee shall submit a quarterly report documenting any exceedance of the emissions limitations of this permit to the Ohio EPA Northwest District Office. For each exceedance, the permittee shall also provide the following additional information:
  - a. the cause of the excursion; and,
  - b. the action that has been taken and/or will be taken to correct the violation and prevent further occurrences.

The reports required in 1 and 2 above, shall be submitted by January 15, April 15, July 15, and October 15 and shall cover the previous 3 month period. If no exceedances occurred, a report stating that fact is still required. All reports are to be submitted to the Ohio EPA, Northwest District Office, 347 North Dunbridge Road, Bowling Green, Ohio, 43402.

**E. TESTING REQUIREMENTS/COMPLIANCE DETERMINATION METHODS**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. the emission testing shall be conducted within 3 months of initial operation of the emission unit;
  - b. the emission testing shall be conducted to demonstrate compliance with the control efficiency limitation and allowable mass emission rate(s) for SO<sub>2</sub> and Particulate;
  - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

emission rate(s):

Particulate      Method 5, 40 CFR Part 60, Appendix  
A

SO<sub>2</sub>              Method 6, 40 CFR Part 60, Appendix A

The test method(s) which must be employed to demonstrate compliance with the control efficiency limitation for particulate and SO<sub>2</sub> if applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; and,

- d. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northwest District

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northwest District Office.

2. Compliance with the emission limitation(s) in the Air Emission Summary shall be determined in accordance with the following method(s);

- a. Emission Limitation: Stack 0.0001 lb NO<sub>x</sub>/hr and 0.0004 TPY

Applicable Compliance Method: Emission estimate is based on air emissions testing of a similar emissions unit. Actual uncontrolled NO<sub>x</sub> emissions are estimated 0.0000107 lb/hr. The control equipment achieves 98% capture and 98% control resulting in actual NO<sub>x</sub> emissions of 0.00000021 lb/hr.

- b. Emission Limitation: Stack 3.98 lb SO<sub>x</sub>/hr and 17.43 TPY

Applicable Compliance Method:  
Compliance with the emission limit will be determined through required emissions testing.

- c. Emission Limitation: Stack 2.8 lb PE/hr and 12.3 TPY

Applicable Compliance Method:  
Compliance with the emission limit will be determined through required emissions testing.

- d. Emission Limitation: Fugitive 4.02 lb SO<sub>x</sub>/hr and 17.6 TPY

Applicable Compliance Method: Emission estimate is based on actual lab inhibitor test data which demonstrate uncontrolled sulfur oxide emissions are 804 lbs/hr. The use of a chemical inhibitor reduces emissions by fifty percent. Two percent of these emissions are not captured and are emitted as fugitive emissions.

- e. Emission Limitation: Fugitive 0.014 lb PE/hr and 0.06 TPY

Applicable Compliance Method: Emission estimate is based on air emissions testing of a similar

13

Facility Name: **Copperweld Shelby Division**

Application Number: **03-1400**

Date: **August 12, 1998**

emissions unit. Uncontrolled PE emissions are 140.0 lbs/hr. The control equipment achieves 99.99% capture. Actual PE emissions emitted as fugitive are 0.01% of 140.0 lbs/hr.

**F. MISCELLANEOUS REQUIREMENTS**

1. None.