



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
American Bronze Corporation, Cleveland, Ohio

FROM: Natalie Schulz, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: American Bronze Corporation

Facility Location: 2941 Broadway Avenue, Cleveland, Ohio

Date of Inspection: April 24, 2024

EPA:

1. Natalie Schulz, Environmental Engineer
2. Emily Szwiec, Life Scientist

Other Attendees:

1. Josh Goldstein, Vice President
2. Steve Chagin, Plant Manager

Contact Email Address: josh@ambroco.com

Purpose of Inspection: Metal HAP provisions of the federally enforceable Permit-to-Install and Operate

Facility Type: Bronze foundry

Regulations Central to Inspection:

Permit-to-Install and Operate P0133249

Facility Name: American Bronze Corporation
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1.b)(2)a. The permittee shall employ reasonable available control measures (RACM) for control of fugitive dust which shall include but not be limited to the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

1.d)(1) The permittee shall maintain monthly records of the following information:

- a. the amount, in pounds, of material processed in this emissions unit; and
- b. the lead content in percent by weight of the material processed in this emissions unit.

1.d)(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 3 to 5 inches of water.

Permit-to-Install and Operate P0129184

1. P001, Wheelabrator 36-42, 5. P011 Wheelabrator #3

c)(1) The pressure drops across the baghouse shall be maintained within the range 3 to 5 inches of water while the emissions unit is in operation.

2. P005, FURNACE #1, 4. P008, FURNACE #3

b)(2)a. The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

d)(1) The permittee shall maintain monthly records of the following information:

- a. the amount, in pounds, of material processed in this emissions unit; and
- b. the lead content in percent by weight of the material processed in this emissions unit.

d)(2) In order to maintain compliance with applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 1 to 7 inches of water.

3. P007, Trav-L-Vent System

(2)a. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, and control fugitive dust from this emissions unit shall meet the following requirements:

i. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

c)(1) The pressure drop across the baghouse shall be maintained within the range 3 to 5 inches of water while the emissions unit is in operation.

Arrival Time: 8:30 am

Departure Time: 9:40 am

Inspection Type:

☒ Unannounced Inspection

Facility Name: American Bronze Corporation
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☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☐ Small Business Resource Information Sheet not provided
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Josh Goldstein and Steve Chagin unless otherwise noted.

Process Description:

The facility receives bronze ingot; the ingots have a range of lead concentrations. Approximately one-third of the ingots the facility processes has 7% lead concentration; the remaining ingots are low lead or lead free. First, the ingots are melted in three electric furnaces. The metal is then poured via ladle into green sand molds made with calcium and bentonite binders. The molds then go through a shakeout to remove the sand from the casting. The casting is then put through one of two steel grit wheelabrators and a tumble blast to remove remaining sand. The sand goes through a screening system before it is reused.

There is no polishing or coating at the facility. Handgrinding is used to remove the flash.

Baghouses are connected to the wheelabrators, furnaces, and sand system. There are daily visual checks and pressure checks.

Staff Interview:

There has been no stack testing or opacity readings conducted at the facility.

Extra bags are onsite in case a change of bags is needed.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

Capture hoods were observed at the furnaces and the shakeout. The pouring of molten metal into from the furnaces to the sand mold was observed; emissions were observed not being captured by the capture hood. The shakeout was in operation during the facility tour; particulate emissions were observed not being captured by the capture hood. The facility's garage doors were seen open.

The baghouse pressure and throughput records were requested for later review.

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Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Previous month of baghouse records
- Previous six months of amount of material being melted
- Past year of deviation reports

DIGITAL SIGNATURES

Report Author: NATALIE SCHULZ  Digitally signed by NATALIE SCHULZ
Date: 2024.06.11 09:45:08 -05'00'

Section Supervisor: BRIAN DICKENS  Digitally signed by BRIAN DICKENS
Date: 2024.06.11 15:07:50 -05'00'

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APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

Facility Name: American Bronze Corporation
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APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Natalie Schulz

Archival Record Location: Electronic Record Center
Enf_American Bronze_OH_24_Inspection

Image Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1	IMG_0695.JPG	9:26 am eastern	Covered portion of shakeout