



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604**

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Federal Cartridge Co – Anoka, Anoka, Minnesota

FROM: Dakota Prentice, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Federal Cartridge Co - Anoka

Facility Location: 900 Bob Ehlen Drive, Anoka Minnesota

Date of Inspection: July 12, 2022

EPA Inspector(s):

1. Dakota Prentice, Environmental Engineer
2. Meghan Pashen, Environmental Engineer

Other Attendees:

1. Adam Bauer, Federal Cartridge – Environmental Tech
2. Mark Bender, Federal Cartridge – Manager EHS
3. Chris Kaminski, Federal Cartridge – Environmental Engineer
4. Tom Lyon, Federal Cartridge – Waste Coordinator
5. Erik Carlson, Federal Cartridge – Senior Director of Operations

Contact Email Address: Chris Kaminski - chris.kaminski@vistaoutdoor.com

Purpose of Inspection: Determine compliance with the facility's operating permit issued by the Minnesota Pollution Control Agency

Facility Type: Ammunition Manufacturing

Arrival Time: 12:45PM
Departure Time: 3:15PM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ 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. Reason: Not a small business
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Federal Cartridge representatives unless otherwise noted.

Process Description:

The facility manufactures rim fire, center fire, and shotshell ammunition. Ammunition manufacturing starts with the creation of the lead bullet or lead shot. Lead is received in billet form and melted in various lead melt pots. Lead for bullets is poured into cylinders, which are then placed into an extruder that creates lead wire. The bullet is then formed from the lead wire using a swagger process that cuts the wire and creates the shape. Lead shot is created by pouring liquid lead droplets into a liquid bath at bleimeister machines.

The different ammunition types require different final case configurations, including a plastic case for shotshell. In general, the bullet case is manufactured from brass strip that is pressed and stretched into the needed shape, based on ammunition type. Additional modifications may be performed, including copper plating of the lead bullet and nickel plating of the brass case. The facility also produces primer which may at times include lead in the mixture. Primer mix manufacturing operations are conducted at an adjacent property and are identified as a chemical manufacturing process.

Final assembly of the ammunition occurs in enclosed machines with flash detection equipment that triggers a water quench system should any explosive events occur. The assembled ammunition is then packaged for shipment.

Staff Interview: In response to performance testing in 2019 that identified elevated lead emissions at the facility, MPCA will be installing a lead ambient air monitor at the northeast corner of the facility. The installation date is unknown at this time. The facility is currently expanding the facility as a part of a rifle loader expansion project, which is expected to be operational in the spring of 2023.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

EPA walked through the facility following production observing lead melting and extruding for bullet production, bleimeister operation for shotshell shot production and various other emission units. EPA was also transported to an east adjacent property where primer mix operations are performed. At the lead melting and extruding portion of the facility, EPA observed open overhead doors in close proximity to these lead emission units.

Photos and/or Videos: were taken during the inspection.
See Attachment A

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- Performance test report(s) for testing conducted in 2019 at the facility's lead processing units;
- Fugitive emission factors used for lead processing units;
- Lead modeling report submitted to MPCA showing offsite lead concentrations; and
- Notice of Compliance Status report for NESHAP VVVVVV and any other NESHAP VVVVVV applicability documentation.

Compliance Assistance: EPA recommended closing up those portions of the building with lead melting operations to prevent uncaptured lead emissions from escaping the facility.

Concerns: EPA noted that some lead melting and processing operations were located adjacent to overhead doors that were open to the exterior of the facility during the plant tour.

DIGITAL SIGNATURES

Report Author: DAKOTA PRENTICE Digitally signed by
DAKOTA PRENTICE
Date: 2022.07.28
13:52:41 -05'00'

Section Supervisor: Frank, Nathan Digitally signed by Frank,
Nathan
Date: 2022.08.02
10:47:31 -05'00'

Facility Name: Federal Cartridge Co – Anoka, Anoka, Minnesota
Facility Location: 900 Bob Ehlen Drive, Anoka, Minnesota
Date of Inspection: July 12, 2022

APPENDICES AND ATTACHMENTS

Appendix A: Digital Photo Log

Facility Name: Federal Cartridge Co – Anoka, Anoka, Minnesota

Facility Location: 900 Bob Ehlen Drive, Anoka, Minnesota

Date of Inspection: July 12, 2022

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Meaghan Pashen	2. Archival Record Location: Region 5 Electronic Records Center
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Image Number	File Name	Date and Time (incl. Time zone and DST)	Latitude and Longitude	Description of Image
1	IMG_0141.JPG	07/12/2022 2:01 PM CST	Not Available	Lead extruder
2	IMG_0142.JPG	07/12/2022 2:01 PM CST	Not Available	Building 40, A1 (lead melt pot)
3	IMG_0143.JPG	07/12/2022 2:01 PM CST	Not Available	Building 40, A1 (lead melt pot)

Note: All photographs are confidential business information