



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

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Allied Iron & Steel, Peoria, Illinois

FROM: David Sutlin, Environmental Engineer
AECAB (MN/OH)

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

TO: File

BASIC INFORMATION

Facility Name: Allied Iron & Steel

Facility Location: 2411 W Clark St, Peoria, IL 61607

Date of Inspection: November 16-17, 2022

EPA Inspector(s):

1. David Sutlin, Environmental Engineer
2. Karina Kuc, Environmental Engineer

Other Attendees:

1. James Gast, Operations Manager, Allied Iron & Steel

Contact Email Address: jgast55@hotmail.com

Purpose of Inspection: To investigate compliance with rules regulating the safe recovery of refrigerants from appliances and compliance with volatile organic compounds (VOC) standards in the Illinois State Implementation Plan (SIP)

Facility Type: Metal recycling and shredding facility

Regulations Central to Inspection: Protection of Stratospheric Ozone through Emissions Reductions in the Refrigerant Recycling Process at 40 C.F.R. Part 82, Subpart F; Illinois SIP

Arrival Time: 12:00 PM

Departure Time: 1:10 PM

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:
- ☒ Provided CBI warning to facility

The following information was obtained verbally from James Gast unless otherwise noted.

Process Description:

Trucks arrive at the scale where the scrap, consisting of auto bodies and other metallic scrap, is weighed. Crane operators inspect material for unacceptable components and materials. Dealers are required to perform their own source control on auto bodies before they are delivered to Allied Iron & Steel (Allied), including fluid drainage, refrigerant recovery, and removal of batteries and tires. Allied takes steps to depollute auto bodies it receives from the general public, except that it expects fluids to be drained prior to delivery. Once auto bodies are inspected and depolluted, they are conveyed into a 500-horsepower hammermill shredder. Metered water is sprayed into the shredding box as the scrap passes through it to provide cooling and to control for particulate matter (PM). The shredder is not equipped with any devices to control VOC emissions. After the material exits the shredder, it is segregated into non-ferrous, ferrous, and waste groupings. Final products are shipped out by either truck or rail.

Staff Interview:

The shredder operates from 6:30am to 3pm, Monday through Friday, which typically includes 90 minutes for startup and 15 minutes for shutdown activities each day. Maintenance of the shredder includes applying approximately 15 cases worth of grease to the hammer mill annually. The shredder operates at a feed rate of 80 tons/hr, and its current maximum rate is 100 tons/hr. Approximately 50 percent of all scrap processed by the shredder consists of auto bodies, coming mainly from 12 to 15 regular dealers. James Gast stated that the facility does not specifically track the number of auto bodies it receives but that it may be able to determine this information from sales records. Allied requires dealers to sign a contract, which states that “refrigerants [...] must be removed prior to disposal or recycling [...]” Approximately 10 cars per month are purchased from members of the general public. These customers sign a ticket which states whether the vehicle air conditioner (A/C) unit is intact and if not, how the refrigerant was removed.

Allied stated that they will recover refrigerant from vehicle A/C units received from the general public only for certain customers. 90 percent of vehicles received from the general public already have the A/C units' refrigerant lines cut. Allied generally accepts such vehicles, unless the customer had tried to sell a vehicle with an intact A/C unit to Allied, was rejected, and then returned a short time later with the lines cut.

Allied has a third party which tests shredder waste material ("fluff") monthly for the presence of battery material, mercury, and polychlorinated biphenyls (PCBs). Allied's lifetime operating permit requires that it maintain records of its PM emissions, which were not available onsite, but which Allied stated are maintained by a 3rd party. James Gast recalled being informed by the city of Peoria of one citizen complaint approximately one year ago. EPA followed up with the city, which did not have record of this complaint. Allied has phased out acceptance of any white goods.

Allied's lifetime operating permit does not contain any rules or standards related to VOC emissions.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

During the opening conference, EPA observed an auto body with tires installed arriving from a dealer. James Gast stated that the tires would be removed prior to shredding. The shredder was down for planned maintenance during our inspection on November 16. James Gast stated that on average the shredder is down for maintenance one day per week.

EPA returned to the facility on November 17 and observed the shredder in operation. EPA observed steam and visible emissions escaping from the shredder. EPA also observed an auto body propped up on scrap, with some liquid dripping from its frame. EPA did not notice any white goods while touring the facility.

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

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- Safety Data Sheet for grease used on the shredder
- Last two years of particulate matter emission records maintained by Allied's consultant
- Shredder inspection/maintenance records for past year

- Any emissions testing reports for the shredder

Compliance Assistance: EPA explained that under the rules for safe disposal of appliances, vehicle A/C units must not be accepted if Allied has reason to know that proper recovery of refrigerant was not performed.

DIGITAL SIGNATURES

Report Author: **DAVID
SUTLIN**  Digitally signed by DAVID
SUTLIN
Date: 2023.01.06
10:51:30 -06'00'

Section Supervisor: **Brian
Dickens**  Digitally signed by Brian
Dickens
Date: 2023.01.11
12:08:38 -06'00'

Facility Name: Allied Iron & Steel
Facility Location: 2411 W Clark St, Peoria, IL 61607
Date of Inspection: November 16-17, 2022

APPENDICES AND ATTACHMENTS

Appendix A: Digital Video Log

Facility Name: Allied Iron & Steel

Facility Location: 2411 W Clark St, Peoria, IL 61607

Date of Inspection: November 16-17, 2022

APPENDIX A: DIGITAL VIDEO LOG

1. Inspector Name: David Sutlin	2. Archival Record Location: EPA Region 5 Electronic Records
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Image Number	File Name	Date and Time (Central Standard Time)	Description of Image
1	PB170048.MOV	~2022/11/17 11:00 AM	Steam and visible emissions from the shredder
2	PB170049.MOV	~2022/11/17 11:02 AM	Auto body propped up on scrap