



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

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Fritz Enterprises, Inc., Flint, Michigan

FROM: Emma Leeds, Environmental Engineer
AECAB (IL/IN)

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

TO: File

BASIC INFORMATION

Facility Name: Fritz Enterprises, Inc. (Fritz)

Facility Location: 5032 North Dort Highway, Flint, Michigan 48505

Date of Inspection: April 20 and May 4, 2022

EPA Inspector(s):

1. Emma Leeds, Environmental Engineer
2. Joshua Hufferd, Environmental Engineer

Other Attendees:

1. Bryan Fultz, Plant Manager – Fritz
2. Ellis Scropshire, Purchasing Agent – Fritz (April 20)
3. Sam Amer, Corporate Environmental Manager – Fritz (May 4)
4. Dan McGeen, Air Quality Engineer – Michigan Department of Environment, Great Lakes, and Energy (Michigan EGLE)
5. Samantha Davis, Air Quality Engineer – Michigan EGLE (April 20)

Contact Email Address: fultz@fritzinc.com, amers@fritzinc.com

Purpose of Inspection: To investigate compliance with the Clean Air Act

Facility Type: Metal recycling facility with shredder

Regulations Central to Inspection: 40 C.F.R. Part 82, Subpart F: Recycling and Emissions Reduction

April 20, 2022 On-Site Inspection

Arrival Time: 9:00 AM ET

Departure Time: 12:00 PM ET

May 4, 2022 Conference Call

Arrival Time: 10:00 AM CT

Departure Time: 11:30 AM CT

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Fritz personnel unless otherwise noted.

Process Description:

The Fritz Enterprises, Inc. facility in Flint (Fritz) accepts both ferrous and non-ferrous scraps from vendors and peddlers. Scraps are processed on-site in a 80 inch by 104 inch, 2,500 horsepower electric motor hammermill shredder. Some large scraps are broken down into smaller pieces using two on-site torch-cutters before entering the shredder. After shredding, a magnet is used to separate ferrous and nonferrous metals. Nonferrous metals fall into a bin and are then moved by truck into the eddy current separator (“ECR”), which separates non-ferrous metals into fluff, aluminum, and zorba (15-20% aluminum). Ferrous metals are conveyed to the Z-box, where entrapped fluff is separated from the metals by bouncing the materials down three levels. The fluff accumulates beneath the Z-box, while the ferrous metals move through the enclosed picker shack. In the picker shack, two Fritz employees pick out any remaining non-ferrous material from the metals, including copper and rubber. The final clean ferrous metals are conveyed into a pile on the northeastern corner of the facility.

Particulate emissions from the hammermill shredder are controlled by a water spray, and particulate emissions from the Z-box are controlled by a cyclone followed by a wet-scrubber.

Staff Interview:

April 20, 2022

The Flint Fritz facility operates from 8 AM – 4:30 PM Monday – Friday with 12 employees. The shredder typically operates 5 hours a day and had an average processing rate of 40 tons per hour

in January, February, and March 2022. Fritz will shred one car at a time followed by a load of miscellaneous scraps. The miscellaneous scrap loads are used to cool down the motor which heats up during vehicle shredding.

The facility mostly receives and processes vehicles, and mostly receives scraps from vendors. Vendors typically bring in around 50 vehicles per day, all no longer containing refrigerant. When USEPA inspectors asked if Fritz maintains contracts with vendors regarding proper refrigerant recovery from vehicles, neither Bryan nor Ellis were aware. Occasionally peddlers will also sell vehicles to Fritz.

At the time of the inspection, Fritz hadn't accepted scraps from peddlers for the past 6 months because their thumbprint/identification system was down. Bryan shared that if a peddler tries to sell appliances to Fritz, they are required to fill out the "Appliances or Shipment of Appliances Certification" (Peddler Refrigerant Sheet).

Bryan takes opacity readings of the Z-box scrubber/cyclone stack every day from 1:30 – 2:00 PM. Bryan claimed that there is usually little opacity unless a vehicle is being shredded, and that larger shredded pieces are emitted from the stack when phonebooks or foam are shredded. Scrap suppliers sometimes hide phonebooks and dirt at the bottom of their loads to increase the overall weight. Fritz attempts to remove phonebooks before shredding, but some are too buried to see.

The Flint Fritz facility uses a mechanical sweeper and a water truck for fugitive dust control. The sweeper is used daily, except for the winter months.

May 4, 2022

When asked by USEPA if Fritz maintains contracts with vendors regarding proper refrigerant recovery from vehicles, Sam was not aware. Sam shared that on April 25, 2022, a customer was unable to fill out the Peddler Refrigerant Sheet because they were unsure that refrigerant had been properly recovered from their scrap appliances. Fritz accepted the appliances but tried to later return the appliances to the customer, to no avail.

The Flint Fritz facility has equipment to recover refrigerant from both vehicles and appliances. Bryan was only aware that the refrigerant recovery had occurred on-site in 2021, but not 2022.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

April 20, 2022

The shredder was not in operation on the day of the inspection because the chain and belt had previously broken, and the replacement chain had too many links. The only main equipment in operation at the time of the inspection was the ERC. Some fluff from the ERC was stored in a 3-sided bunker (Image P4200010), however, inspectors observed a large pile of fluff near the ERC that was not in a 3-sided bunker (Image P4200009). Bryan shared that Fritz was planning to send

the left side of the pile to a landfill, and to run the right side of the pile through the shredder again because Fritz suspected it still contained metal.

Inspectors asked to see the pressure drop gauge and liquid flow indicator for the Z-box scrubber and found that the screens for both monitoring devices were cracked and illegible (Image P4200014).

A week prior to the April 20 on-site inspection, USEPA inspectors observed dark opacity and scrap chunks being emitted from a stack on the Fritz property from across the road (MVI_0003). During the April 20 inspection, USEPA inspectors visually confirmed that this stack was the Z-box cyclone/scrubber stack (the only stack at the facility).

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

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

1. Blank “Appliances or Shipment of Appliances Certification” sheet
2. “Unacceptable Materials” handout sheet
3. Spreadsheet reporting monthly hours of operations, shredder throughput, and water injection rates.

CLOSING CONFERENCE

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

Requested documents:

- 10 most recent completed “Appliances or Shipment of Appliances Certification” sheets
- 10 most recent records regarding vendors’ refrigerant recovery from vehicles

Compliance Assistance: USEPA explained the requirements involving required refrigerant recovery documentation in 40 C.F.R. §82.155(b)(2).

Concerns: During the April 20 inspection, USEPA expressed concerns about the possible lack of contracts with vendors ensuring proper refrigerant recovery from vehicles. USEPA also expressed concerns about the broken pressure drop gauge and liquid flow indicator for the Z-box wet scrubber, which are required to be installed, calibrated, maintained, and operated in Permit No. 92-00B.

During the May 4 inspection, EGLE expressed concerns about paper scraps observed leaving the Z-box cyclone/scrubber stack by other EGLE inspectors, and about fluff not being stored in 3-sided bunkers as required by Permit No. 92-00B.

DIGITAL SIGNATURES

Report Author: **Leeds,
Emma**  Digitally signed by Leeds,
Emma
Date: 2022.05.10
09:07:59 -05'00'

Section Supervisor: **Frank,
Nathan**  Digitally signed by Frank,
Nathan
Date: 2022.05.13
08:38:11 -05'00'

Facility Name: Fritz Enterprises, Inc.

Facility Location: 5032 North Dort Highway, Flint, Michigan 48505

Date of Inspection: April 20 and May 4, 2022

APPENDICES AND ATTACHMENTS

- 1.* Appendix A – Digital Image Log

Facility Name: Fritz Enterprises, Inc.

Facility Location: 5032 North Dort Highway, Flint, Michigan 48505

Date of Inspection: April 20 and May 4, 2022

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Emma Leeds (except for MVI_0003, taken by David Sutlin)	2. Archival Record Location: https://usepa.sharepoint.com/:f:/r/sites/R5_Work/r5erc/ecad/AECAB%20Library/Enf_FritzFlint_MI_22/Digital%20Image%20Log?csf=1&web=1&c=6gAMz6
---	--

Image Number	File Name	Date and Time (ET)	Description of Image
1	P4200007	4/20/22, 10:41 AM	Hammermill shredder with oversized chain
2	P4200008	4/20/22, 10:45 AM	ERC machine
3	P4200009	4/20/22, 10:51 AM	Pile of fluff (left) and material to be reshredded (right)
4	P4200010	4/20/22, 10:51 AM	Fluff from ERC
5	P4200011	4/20/22, 10:56 AM	Picker shack
6	P4200012	4/20/22, 11:02 AM	Magnehelic gauge for Z-box cyclone with no needle
7	P4200013	4/20/22, 11:02 AM	Magnehelic gauge for Z-box cyclone with no needle
8	P4200014	4/20/22, 11:05 AM	Pressure drop gauge and liquid flow indicator for the wet scrubber
9	P4200015	4/20/22, 11:28 AM	Scrap pile to be shredded, containing multiple tires
10	MVI_0003	4/12/22, 3:33PM	Opacity and shredded scraps coming from Z-box cyclone/scrubber stack