



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Report Title: Clean Air Act Inspection of Recovermat, LLC
Inspection Date(s): March 18, 2022
Regulatory Program(s): SIP, Title V

Company Name: Recovermat, LLC
Facility Name: Recovermat, LLC
Facility Location: 2202 Halethorpe Farms Road
Baltimore, MD 21227

Latitude: 39.228352 **Longitude:** -76.685849
County/Parish: Baltimore County

AFS Number: 110009684804
Permit Number: 005-2238
NAICS Code: [Enter the NAICS code] **SIC:** [Enter SIC or N/A]
Unique Project #: 3EA22CA076A

Facility Representatives:	Point of Contact
Kelly Boyle, EH&S Manager	☒
Phone: 540-850-9928 Contact: kboyle@jsmith-sons.com	
Dan Donovan, Manager	☐
Phone: 301-789-7084 Contact: ddonovan@jsmith-sons.com	
Susan Barnes, Trinity Consultants	☐
Phone: 240-379-7490 Contact: sbarnes@trinityconsultants.com	

EPA Inspectors:
Erin Willard, Environmental Scientist, 3ED21
Phone: 215-814-2152 Contact: Willard.erinm@epa.gov
Carly Joseph, Environmental Scientist, 3ED21
Phone: 215-814-2127

State/Local Inspectors:
Roland Gorschboth
Phone: 410- 537-4130 Contact: Roland.gorschboth@maryland.gov

EPA Lead Inspector
Signature

Erin Willard
1650 Arch Street (3ED21)
Philadelphia, PA 19103-2029

Date

Supervisor
Signature

Kristen Hall
Table of Contents

Date

Section

Page

I	Introduction.....	3
A	Summary of the Facility.....	3
B	Inspection Opening Conference.....	3
II	Site Activity/Process Information.....	3
III	Observations.....	4
III	Records Review.....	5
V	Closing Conference.....	6
VI	List of Attachments.....	7

I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Recovermat, LLC (Recovermat or Facility) to verify compliance with applicable State and Federal regulations. The Maryland Department of the Environment (MDE) was notified of the inspection on March 1, 2022 via email. On March 15, 2022, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Mr. Kelly Boyle, prior to the inspection (see Attachment 1). These records are listed in the Records Review section of the report.

A. Summary of the Facility

The Facility is located at 2202 Halethorpe Farms Road, Baltimore, Maryland 21227. The Facility is a scrap metal shredder and recycler, and MDE issued the Facility a minor source permit (#005-2238) on October 25, 2022. Recovermat is classified as a minor source for all criteria pollutants and hazardous air pollutants (HAP).

B. Inspection Opening Conference

At 8:45am on March 18, 2022, EPA inspectors (Erin Willard, Carly Joseph and Shaun Burke) arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Recovermat was represented by Kelly Boyle, Dan Donovan and Susan Barnes of Trinity Consultants. Also, Roland Gorschboth from MDE was present. EPA inspectors, Erin Willard and Carly Joseph presented their credentials and explained the purpose of the visit was to conduct a CAA inspection to determine compliance with the permit and any applicable regulations. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, Kelly Boyle did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

Recovermat's main business is that of receiving and shredding post-consumer metallic waste in order to recover the metallic portions for sale to primary metal manufacturers. Recovermat is owned by the Joseph Smith & Sons Company, which was inspected on March 17, 2022 by the same EPA/MDE inspection team and Facility representatives. The site is approximately 8.5 acres, and currently has one "Shredder Company 120" hammermill shredder and associated sorting. The shredder is rated at approximately 240 tons per hour (tph) of shred feed and utilizes a 4000 horsepower (hp) electric motor. The "120" portion of the model denotes a shredder width of 120 inches. The center shaft rotates at 4000 revolutions per minute (rpm) and holds (11) 800-pound manganese tipped hammers that swing freely on the shaft and essentially smash the shredder feed into smaller-sized pieces. Once the last load has been dropped into the shredder, it takes approximately ten minutes to complete the shredding, and a total of 20 minutes to slowly

wind down and stop at the end of the work-day after the unit is powered down. The site previously had a 90” shredder; however, that unit has been disassembled and is no longer in service. Recovermat employs approximately 50 people, that work in eight-hour shifts, five days a week, with occasional weekend work occurring on an as-needed basis.

The site only shreds ferrous materials. There was previously a non-ferrous handling line; however, the building associated with that business were demolished approximately two years ago. The site has a small storage area for batteries and other materials that are removed from scrap loads that must be shipped off site for separate handling. Once materials have left the shredder, they are sorted with electromagnets into two product lines: “frag” (ferrous-containing mill ready materials that are sold directly to the metal manufacturing sector) and “fluff” (all other metals and organic materials that are not ferrous). Frag is sold directly from the site to customers for use in metal manufacturing furnaces. Fluff is trucked directly to the Joseph Smith & Sons site in Capitol Heights, MD, for further processing, as that site has a multitude of separation technologies to further refine non-ferrous metals from the organic materials. Similar to the shredder at the Capitol Heights location, Recovermat also injects roughly 1000 gallons/minute (gpm) of city water to the shredder box in an effort to control the temperatures in the box. There is no surface water withdrawal permit at this site.

Raw materials arrive at the site by truck and consist of post-consumer discarded goods (old appliances, metallic household goods, discarded construction materials etc), and end of life vehicles (ELVs) that come either as flattened hulks from pick and pull parts yards, or the occasional vehicle brought to the site by a private customer.

When ELVs arrive in bulk on flatbed from yards, Recovermat has contracts with the suppliers that guarantee that all fluids, refrigerants, and batteries have been removed from the ELV. Because they are already flattened, it is not possible for staff to check for these items. For ELVs that arrive at the site in a non-flattened format, Recovermat requires that all refrigerants, batteries and fluids must be removed. Gas tanks must have a removal hole visible. If a customer does not follow these requirements, the ELV will be rejected and if the pattern of noncompliance continues, Recovermat will ban the supplier from the site altogether. There is no draining rack at this site.

Mr. Boyle indicated that other than the shredder, there are no other stationary air emissions sources at the site, no boilers, no stationary engines. There are a few portable pieces of equipment that combust liquid fuel, like air compressors.

III. Observations

EPA inspectors, and the MDE inspector were led on a walkthrough of the Facility at 9:37am by Mr. Boyle, Mr. Donovan and Ms. Barnes. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2) and told Recovermat staff that EPA would ask prior to taking any photographs.

The inspection team left the meeting room and proceeded to the scale area of the facility. A pickup truck load of scrap was being unloaded and inspected. Recovermat staff were hand sorting the materials and looking for prohibited items. While sorting the load, Recovermat staff found a fire extinguisher, which then resulted in numerous staffers to begin to fully pull the pile apart to ensure that there were no other hazardous materials present. Mr. Kelly indicated that pressurized tanks, including fire extinguishers are not accepted, and this violation could cause the scrap seller to be banned from the site.

EPA noted that the shredder was operating at the time of the walkthrough, and an employee was using an excavator to load scrap onto a belt that was feeding into the shredder. Steam was visible coming from the shredder box. Shredded material was visible exiting the mill, and the team was able to view the drum magnets used to separate “frag” from the “fluff”. Piles of the different materials were located around the shredder, being added to by conveyor belts.

Mr. Donovan indicated that the frag is loaded into trucks and taken directly to steel mills, or it is occasionally trucked to the harbor and loaded onto barges for shipping via water. Recovermat employees were hand sorting some of the fluff material to remove copper “meatballs” that are formed when the shredder crushes copper bushings around a center of steel.

EPA continued to walk around the back of the material yard, and noted the pieces of the original 90” shredder were staged adjacent to the curbing around the facility. A small pond is located at the back of the facility, but as noted during the initial site review, there is no water withdrawal from it. A set of railroad tracks was noted, and Recovermat staff indicated that they occasionally use railcars to ship frag; however, it is very infrequent.

Mr. Kelly indicated that the shredder is currently averaging in the range 900 to 1300 tons per day, across the eight hour work shift. The inspection team viewed the large pit that catches shredder water and recycles it through the system. The day of the inspection it was sunny, so there was no water located outside the immediate area of the pit and shredder. EPA also noted that the only buildings at the site were the scale house, and a small trailer that held the meeting room, and some very small metal sheds next to the meeting area.

The walkthrough concluded at 10:27am.

IV. Records Review

Because EPA inspected Joseph Smith and Sons on March 17, and Recovermat on March 18, EPA indicated that it would be a more efficient use of resources for EPA to issue a formal CAA Section 114 Information Request Letter to both companies, requiring the submission of operational and emissions data for both facilities. Mr. Kelly indicated that both companies would retain the use of Trinity Consultants to help compile answers to all 114 questions.

V. Closing Conference

After the discussion regarding the impending 114 Letter, EPA inspectors; Mr. Kelly, Mr. Donovan and Ms. Barnes; and Mr. Gorschboth had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the investigation is on-going, and any areas of concern identified in the final reports do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within in 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 10:50am.

The following have been identified as *potential* issues during the inspection. They are issues that require either further investigation by EPA or additional information or explanation by Recovermat.

- EPA will issue a 114 Letter requesting records of annual hours of operation, shred feed tonnage, types of shred feed and other information that will assist EPA in reviewing the air emissions from this facility.

VI. List of Attachments

Attachment 1: Email correspondence to [Name of Facility contact whom the records request was emailed to] of records requested to review during inspection

Attachment 2: Photo Log

[List any additional attachments or delete if not applicable]



Overview of scrap feed pile



Hand sorting a newly dropped load of scrap. Note red fire extinguisher on the ground.



Feed conveyor and shredder. Note steam from the shredder.



Shredder (back view) with conveyor to magnet sorting



