



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Lisa Carroll, Environmental Director
Ferrous Processing and Trading
Detroit, Michigan
lisa.carroll@fptsrap.com

Re: Finding of Violation
Strong Steel Products, LLC
Detroit, Michigan

Dear Lisa Carroll:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Strong Steel Products, LLC (“you” or “Strong Steel”) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating or have violated the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq., specifically 40 C.F.R. Part 82, Subpart F, Protection of Stratospheric Ozone and 40 C.F.R. Part 70, State Operating Permit Programs at your Strong Steel facility in Detroit, Michigan.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility’s technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Karina Kuc. You may call her at (312) 353-5090 or email her at kuc.karina@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Sarah Marshall
Supervisor, Air Enforcement and Compliance Assurance Section (MI/WI)

cc: Jenine Camilleri
Enforcement Unit Supervisor
Air Quality Division
Michigan Department of Environment Great Lakes and Energy (EGLE)
CamilleriJ@michigan.gov

April Wendling
District Supervisor
Air Quality Division
Michigan Department of Environment Great Lakes and Energy (EGLE)
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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:)

Strong Steel Products, LLC)
Detroit, Michigan)

FINDING OF VIOLATION

EPA-5-23-MI-08

Proceedings Pursuant to)
the Clean Air Act,)
42 U.S.C. §§ 7401 et seq.)

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Strong Steel Products, LLC (Strong Steel) is violating or has violated the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq. Specifically, Strong Steel has failed to reduce emissions of ozone depleting substances as required by EPA's regulations for the Protection of Stratospheric Ozone, Recycling and Emissions Reduction, found in 40 C.F.R. Part 82, Subpart F and has failed to supplement its operating permit application as required by 40 C.F.R. § 70.5(b).

Regulatory Background and Authority

Protection of Stratospheric Ozone Requirements

1. In accordance with Section 608 of the CAA, 42 U.S.C. § 7671g, EPA promulgated regulations at 40 C.F.R. Part 82, Subpart F, applicable to recycling and emissions reductions of ozone-depleting substances. As specified at 40 C.F.R. § 82.150(a), the purpose of the regulations is to reduce emissions of class I and class II refrigerants and their non-exempt substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the service, maintenance, repair, and disposal of appliances.

2. Under 40 C.F.R. § 82.152, an appliance is any device which contains and uses a class I or class II substance or substitute as a refrigerant and which is used for household or commercial purposes, including any air conditioner, motor vehicle air conditioner (MVAC), refrigerator, chiller, or freezer. For a system with multiple circuits, each independent circuit is considered a separate appliance.

3. Under 40 C.F.R. § 82.152, an MVAC is an appliance that is a motor vehicle air conditioner as defined in 40 C.F.R. § 82.32(d), which states that MVAC "means mechanical vapor compression refrigeration equipment used to cool the driver's or passenger's compartment of any motor vehicle. This definition is not intended to encompass the hermetically sealed refrigeration systems used on motor vehicles for refrigerated cargo and the air conditioning systems on passenger buses using HCFC-22 refrigerant."

4. Under 40 C.F.R. § 82.152, an MVAC-like appliance is a mechanical vapor compression, open-drive compressor appliance with a full charge of 20 pounds or less of

refrigerant used to cool the driver's or passenger's compartment of off-road vehicles or equipment. This includes, but is not limited to, the air-conditioning equipment found on agricultural or construction vehicles. This definition is not intended to cover appliances using R-22 refrigerant.

5. Under 40 C.F.R. § 82.152, a small appliance is any appliance that is fully manufactured, charged, and hermetically sealed in a factory with five (5) pounds or less of refrigerant, including, but not limited to, refrigerators and freezers (designed for home, commercial, or consumer use), medical or industrial research refrigeration equipment, room air conditioners (including window air conditioners, portable air conditioners, and packaged terminal air heat pumps), dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.

6. Under 40 C.F.R. § 82.154(a)(1), no person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the environment any refrigerant or substitute from such appliances, with certain exceptions not relevant to this matter. See also 42 U.S.C. § 7671g(c).

7. Under 40 C.F.R. § 82.154(b)(1), no person may maintain, service, repair, or dispose of an appliance containing a class I or class II refrigerant or a non-exempt substitute refrigerant without observing the applicable practices in 40 C.F.R. § 82.155, 40 C.F.R. § 82.156, and 40 C.F.R. § 82.157.

8. Under 40 C.F.R. § 82.155(b), the final processor – i.e., persons who take the final step in the disposal process (including but not limited to scrap recyclers and landfill operators) of a small appliance, MVAC, or MVAC-like appliance-must either:

- (1) Recover any remaining refrigerant from the appliance in accordance with 40 C.F.R. § 82.155(a); or
- (2) Verify using a signed statement or a contract that all refrigerant that had not leaked previously has been recovered from the appliance or shipment of appliances in accordance with 40 C.F.R. § 82.155(a). If using a signed statement, it must include the name and address of the person who recovered the refrigerant and the date the refrigerant was recovered. If using a signed contract between the supplier and the final processor, it must either state that the supplier will recover any remaining refrigerant from the appliance or shipment of appliances in accordance with 40 C.F.R. § 82.155(a) prior to delivery or verify that the refrigerant had been properly recovered prior to receipt by the supplier.¹

¹ In the Preamble to the original rule and in revisions to 40 C.F.R. Part 82 Subpart F, EPA described under what circumstances a contract was appropriate and when a disposer should use a signed statement: "EPA notes here that a contract is appropriate for businesses to streamline transactions in cases where they maintain long-standing business relationships. A contract would be entered into prior to the transaction, such as during the set-up of a customer account, not simultaneously with the transaction. A signed statement is more appropriate for one-off transactions between the supplier and the final processor." 81 Fed. Reg. 82,272 at 82,309 (Nov. 18, 2016).

9. Under 40 C.F.R. § 82.155(b)(2)(i), it is a violation of 40 C.F.R. Part 82, Subpart F to accept a signed statement or contract if the person receiving the statement or contract knew or had reason to know that the signed statement or contract is false.

10. Under 40 C.F.R. § 82.155(b)(2)(ii), the final processor must notify suppliers of appliances that refrigerant must be properly recovered in accordance with 40 C.F.R. § 82.155 (a) before delivery of the items to the facility. The form of this notification may be signs, letters to suppliers, or other equivalent means.

11. Under 40 C.F.R. § 82.155(b)(2)(iii), if all refrigerant has leaked out of the appliance, the final processor must obtain a signed statement that all the refrigerant in the appliance had leaked out prior to delivery to the final processor and recovery is not possible. "Leaked out" in this context means those situations in which the refrigerant has escaped because of system failures, accidents or other unavoidable occurrences not caused by a person's negligence or deliberate acts such as cutting refrigerant lines.

12. 40 C.F.R. § 82.152 defines "disposal" as the process leading to and including:

- (1) The discharge, deposit, dumping or placing of any discarded appliance into or on any land or water;
- (2) The disassembly of any appliance for discharge, deposit, dumping or placing of its discarded component parts into or on any land or water;
- (3) The vandalism of any appliance such that the refrigerant is released into the environment or would be released into the environment if it had not been recovered prior to the destructive activity;
- (4) The disassembly of any appliance for reuse of its component parts; or
- (5) The recycling of any appliance for scrap.

Title V Requirements

13. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1) requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. Pursuant to Appendix A of 40 C.F.R. Part 70, on December 4, 2001, EPA granted Michigan final approval of its Title V Clean Air Act Permit Program, effective November 30, 2001. 66 Fed. Reg. 62949. On November 10, 2003, EPA granted final approval of subsequent revisions, effective December 10, 2003. 68 Fed. Reg. 63735.

14. 40 C.F.R. § 70.2 defines "major source" as, among other things, any stationary source that directly emits, or has the potential to emit (PTE), 100 tons per year of more of any air pollutant subject to regulation.

15. Michigan's Title V renewable operating permit program regulations are codified at Michigan Administrative Code R 336.1210-1219 and are federally enforceable pursuant to Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3).

16. The regulation at 40 C.F.R. § 70.6(b)(1) provides that all terms and conditions in a Title V permit are enforceable by EPA.

17. The regulation at 40 C.F.R. § 70.5(a) provides that “for each part 70 source, the owner or operator shall submit a timely and complete permit application in accordance with this section.”

18. The regulation at 40 C.F.R. § 70.5(b) provides that any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

Relevant Factual Background

19. In many circumstances, when refrigerant recovery equipment is used on a small appliance, that process leaves easily recognizable signs indicating that proper recovery has occurred, including but not limited to: for any appliance with visible refrigerant lines, puncture marks on refrigerant lines; for refrigerators, air conditioners and some freezers with refrigerant lines hidden behind metal, plastic, or cardboard panels, those coverings will be removed and puncture marks will be visible.

20. Strong Steel owns and operates a scrap metal recycling facility at 6464 Strong St., Detroit, Michigan 48211 (Facility).

21. At the Facility, Strong Steel accepts for recycling and disposal, among other things, small appliances and MVACs that contain or once contained refrigerant.

22. The Facility operates a metal shredder to prepare vehicles and appliances, including small appliances and MVACs, for recycling and is the final processor in the disposal process for these items.

23. EPA conducted an unannounced inspection of the Facility on August 16, 2022 (August 2022 inspection).

24. During the August 2022 inspection, Strong Steel’s representative informed EPA that the Facility operates equipment to recover refrigerant from small appliances and vehicles.

25. During the August 2022 inspection, Strong Steel’s representative informed EPA that the Facility puts stickers on the small appliances if they recover the refrigerant.

26. During the August 2022 inspection, EPA looked at 11 refrigerators that were on the scrap pile to be shredded:

- (1) One of the refrigerators had a puncture mark on the refrigerant lines and a sticker indicating the refrigerant was recovered;
- (2) Three of the refrigerators had visibly cut lines (indicating refrigerant had been improperly vented);

- (3) Six of the refrigerators appeared to still contain refrigerant, as the refrigerant lines were intact and there were no easily recognizable signs indicating that proper recovery had occurred or a sticker indicating the refrigerant was recovered; and
- (4) One of the refrigerators contained refrigerant that was vented to the atmosphere when a Strong Steel representative broke the refrigerant line, as observed by EPA.

27. During the August 2022 inspection, while attempting to verify whether one of the six refrigerators that appeared to still contain refrigerant in fact contained refrigerant, a Strong Steel employee broke one of the condenser lines and vented refrigerant to the atmosphere.

28. On March 22, 2023, EPA requested signed verification forms from August 16, 2021 to August 16, 2022 and a process flow diagram from Strong Steel via email.

29. On April 6, 2023, in response to EPA’s March 22, 2023 email, Strong Steel uploaded verifications forms from August 1, 2021 to August 31, 2022.

30. The verifications form states the following: “If Seller is delivering materials concurrent with the execution of this Agreement, Seller hereby certifies with respect to such first sale delivered concurrent with execution of this Agreement, that to the best of Seller's knowledge, all refrigerant (including but not limited to CFCs, HCFCs, HFCs and/or any substitutes as defined in Section 608 of the Clean Air Act, as amended, and 40 CFR Part 82):

[Check Appropriate Box(es)]

that had not leaked previously has been recovered from the appliance or automobile or shipment of same delivered under this sale in accordance with 40 CFR § 82.155 (a) The refrigerant and/or any substitute has been recovered by:

Name: _____

Address: _____

Date Recovered: _____

had "leaked out" (as defined in 40 CFR Part 82.155(b)(2)(iii)) from the appliance, automobile or shipment of same delivered under this sale prior to delivery and could not possibly be recovered.

Seller is executing this Agreement concurrently with delivery of scrap materials to Buyer.

Seller is not executing this Agreement concurrently with delivery of scrap materials to Buyer.”

31. None of the verification forms have any boxes listed in paragraph 30 checked.

32. On April 17, 2023, in response to EPA’s March 22, 2023 email, Strong Steel uploaded a process flow diagram that indicated materials on the scrap pile in which EPA observed the 11 refrigerators, were destined for the shredder and therefore in the process of being disposed without the refrigerant being properly recovered.

33. On December 22, 2022, EPA issued a Request for Information (2022 RFI) to Strong Steel.

34. On February 17, 2023, Strong Steel submitted a response (2023 Response) to the 2022 RFI.

35. In the 2023 Response, Strong Steel provided an Air Use Permit Application dated January 2, 1997 and Permit Number 183-97 dated June 17, 1997. The permit application and the permit do not mention volatile organic compound (VOC) emissions. Permit Number 183-97 states, "Applicant shall not process more than 1,252,000 tons of material in the shredding process per year". This permit throughput limit is a limitation on Strong Steel's potential to emit (PTE). The throughput limit is based on particulate matter emissions but also limits VOC emissions.

36. The 2022 RFI, Item 6 requested "any documents containing information about VOC emissions from the metal shredding device(s). Include stack tests, engineering studies, emissions calculations, annual emissions reports from 2017 to the present, applicability studies, permit applications, and related correspondence".

37. In the 2023 Response, in response to Item 6, Strong Steel stated, "There are no responsive documents to this request".

38. In the 2023 Response, Strong Steel provided the number of vehicles shredded monthly. The 2020 EPA Automotive Trends Report estimates the average weight of a car to be 4,156 pounds². EPA estimated the percent of vehicles shredded using an average weight of 4,000 pounds per vehicle to account for parts removed prior to shredding.

39. In order to estimate VOC emissions from the Shredder, EPA evaluated VOC emission test results from a multitude of scrap metal shredders across the United States that demonstrated adequate capture during stack testing. VOC emission factors are based in part on the average rate of automobiles processed by the shredder. To calculate Strong Steel's PTE for VOCs, EPA used the highest annual percentage of vehicles shredded (43%) which equated to an emission factor of 0.348 pounds VOC per ton scrap shredded.

40. Strong Steel's permit limit of 1,252,000 tons of material processed per year results in a PTE of 218 tons per year of VOC.

Violations

41. By venting refrigerant to the atmosphere during the inspection, Strong Steel violated 40 C.F.R § 82.154(a)(1) at the Facility.

42. By disposing of appliances containing a class I or class II refrigerant without observing the applicable practices in 40 C.F.R § 82.155, 40 C.F.R § 82.156, and 40 C.F.R § 82.157, Strong Steel violated 40 C.F.R § 82.154(b)(1) at the Facility.

² <https://www.epa.gov/sites/default/files/2021-01/documents/420r21003.pdf>

43. By failing to recover refrigerants from appliances during scrap recycling in accordance with 40 C.F.R. § 82.155(a), Strong Steel violated 40 C.F.R. § 82.155(b)(1) at the Facility.

44. By failing to verify that refrigerants have been recovered, Strong Steel violated 40 C.F.R. § 82.155(b)(2) at the Facility.

45. By failing to submit supplementary facts and corrected information for the Permit Number 183-97, Strong Steel violated and continues to violate 40 C.F.R. § 70.5(b).

Environmental Impact of Violations

46. These violations caused emissions of ozone depleting substances, including chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs).

47. CFCs and HCFCs are known to contribute to the depletion of the stratospheric ozone layer, which protects life on Earth from the sun's harmful ultraviolet radiation (UV).

48. UV radiation has been associated with adverse health effects, including skin cancer, cataracts and immune suppression. UV radiation may also have adverse effects on plant life and aquatic ecosystems.

49. These violations have caused or can cause excess emissions of VOCs. VOCs contribute to the formation of ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division