UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Clean Air Act Inspection Report

Finalized: October 15, 2024

EPA Inspectors: Grace Perry, Environmental Engineer, Air Compliance Section
Karen Peltier, Environmental Engineer, Air Compliance Section
Darren Fortescue, Manager, Air Compliance Section

GRACE PERRY Digitally signed by GRACE PERRY Date: 2024.10.15 13:04:24 -04'00'

EPA Reviewer: John Melcher, Senior Enforcement Coordinator, Air Compliance Section

JOHN MELCHER Digitally signed by JOHN MELCHER Date: 2024.10.15 13:17:37 -04'00'

Date of Inspection: September 18, 2024

Facility Name: Sims Metal (SMM New England) North Haven Plant

ICIS Air ID#: CT0000000900902001

Facility Location: 234 Universal Dr. North Haven, CT 06473

Mailing Address: 234 Universal Dr. North Haven, CT 06473

Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Inspection Attendees

Name	Title	Organization
Grace Perry	Environmental Engineer	EPA Region 1
Darren Fortescue	Manager, Air Compliance Section	EPA Region 1
Karen Peltier	Environmental Engineer	EPA Region 1
Shaun Burke	Environmental Engineer	EPA Headquarters
Seng Phouthakoun	Supervising Environmental Analyst	CT DEEP
Dominik Grzywacz	Air Pollution Control Engineer	CT DEEP
Robin Baena	Air Pollution Control Engineer	CT DEEP
Mike Kiwanis	Director of Operations	Sims Metal
Mike Trupin	Director of Air and Permitting & Compliance Programs	Sims Metal

Facility/Process Description

Sims Metal ("Sims") Representatives provided the following details about the facility during the inspection:

- Sims is a business division of Sims Limited. The Facility, located at 234 Universal Dr. North Haven, Connecticut, was purchased by Sims in 1998. At this location, Sims operates a scrap metal processing plant, where ferrous and nonferrous scrap metal is received and processed. The Facility also performs equipment maintenance and scrap auto depollution. The Facility accepts scrap white goods (air conditioners, refrigerators, etc.), scrap autos, and other scrap metal materials for shredding.
- Sims operates a metal shredder at the Facility that has a maximum shredding rate of 168 net tons per hour.
- Sims employs approximately 50 people at the Facility.
- The Facility's primary operating times are from 6 a.m. to 5 p.m., Monday to Friday and a half day on Saturday. There is also a second shift for maintenance.
- The shredder typically operates from 6am to approximately 3pm on weekdays.

Potentially Applicable Clean Air Act Requirements:

Section 22a-174-32 of the Federally Approved Connecticut State Implementation Plan - Reasonably Available Control Technology (RACT) for volatile organic compounds

40 CFR Part 70 — State Operating Permit Programs

Previous Enforcement Action:

On April 12, 2024, Connecticut Department of Energy and Environmental Protection ("CT DEEP") issued Sims two Notices of Violation ("NOV"s) against the Facility for alleged violations

of Connecticut General Statutes Section 22a-174 and Section 22a-174-23(a)(1) for failing to control the emission of a substance or substances which creates or contributes to an odor, and Connecticut General Statutes Section 22a-174-18(c)(3) for allowing the emissions of visible particulate matter from torch cutting operations into the ambient air in such a manner as to cause a nuisance.

Entry and Opening Conference:

The inspection was announced by CT DEEP to the facility on July 31, 2024.

EPA inspectors Grace Perry, Darren Fortescue, Karen Peltier and Shaun Burke, and CT DEEP representatives Seng Phouthakoun, Dominik Grzywacz and Robin Baena arrived at the Facility at 9:27 a.m. The group was met by Sims representatives Mike Turpin and Mike Kiwanis, and Ms. Perry presented her credentials. Upon entry into the Facility, the group was instructed to sign in online and to watch a site safety video.

The Sims representatives told the inspectors that they were permitted to take photos onsite on the condition that they notify facility representatives when doing so. Mr. Fortescue told the Sims representatives to let EPA and CT DEEP representatives know if any of the information that they provide could be considered confidential business information.

The Sims representatives told the inspectors that the shredder was currently offline due to a motor issue, but that it was expected to be running again shortly.

Mr. Kiwanis said that the Facility is the largest Sims facility in New England and it operates a metal shredder.

<u>Nonferrous Metal Processing</u>

Mr. Kiwanis said that the Facility buys and sells nonferrous scrap metal such as copper wire. Mr. Kiwanis said the facility buys the nonferrous scrap, "cubes" the scrap, and sells it. Mr. Kiwanis said that nonferrous scrap that is longer than five feet needs to be cut to size using either torch cutters or using mobile shears, if the material is less than one inch in thickness.

Mr. Grzywacz asked if the nonferrous metal is cleaned prior to processing. Mr. Kiwanis said that the goal is for the metal to be as clean as possible in order to avoid excess smoke being generated from rubber or oils during cutting, and that the facility can reject metals that come in for processing that are unclean. Mr. Kiwanis said the Facility does not track rejections.

<u>Scale Operation</u>

Mr. Kiwanis said that there are around 300 codes used to document the different metals that are brought into the facility, and that a majority of the codes are for nonferrous materials. Mr. Kiwanis said when a vendor brings a load to the Facility, first the material is weighed on the

scale in front of the Facility, then it is inspected and weighed again inside the Facility. Mr. Kiwanis said the inspector enters the material code, confirms that the weights match, and then the vendor is paid for the material. Mr. Kiwanis said if the vendor brings in a load that is a mixture of ferrous and nonferrous material, this process occurs twice, once for each type of material.

Mr. Kiwanis said that the scales are digital, and that each scale on the property is certified.

Mr. Kiwanis said that, for devices that could contain CFCs (Chlorofluorocarbons), the customer must provide proof that they have been evacuated.

Depollution

The inspectors asked about the depollution process at the Facility. Mr. Kiwanis said that the depollution system punctures holes in the tanks of a vehicle in order to drain contained liquids. Mr. Kiwanis said that the drained liquids flow into vented storage tanks.

Mr. Kiwanis said the Facility operates a SEDA rack depollution system and facility inspectors receive training and follow depollution system standards.

Mr. Kiwanis said some vendors have pre-existing agreements with the facility that require that vehicles are depolluted prior to arrival; however, some do not have a pre-existing agreement. Mr. Kiwanis said that there are usually three to four inspectors onsite at any one time, and vehicles are inspected to ensure proper depollution. Mr. Kiwanis said that if a vehicle is not inspected upon arrival, then the vendor will not get paid.

Mr. Kiwanis said that the Facility is open to the public, and that typically small jobs from public clients will require depollution, while large jobs from frequent vendors arrive to the site depolluted. Mr. Kiwanis said that a majority of vehicles that the facility purchases arrive to the site stripped, because SIMs only pays the scrap value for vehicles, and does not sell for parts.

Sims representatives said that there is no system in place to track when warnings are given to pre-existing customers when they bring in vehicles that are not depolluted. Sims representatives said that the Facility does not tend to reject these vehicles, rather the vehicles are processed differently (i.e., depolluted by the Facility).

Sims representatives said the Facility does not remove engine blocks from vehicles, and depollution involves removal of fluids such as oils, and CFCs. Sims representatives said that depollution can take several hours per vehicle and that extracted fluids are sent offsite as waste.

Tonnage

Sims representatives said that they can export throughput tonnage data to Excel and would provide this data after the inspection.

Sims representatives said the approximate throughput at the facility is currently 20,000 gross tons per month; however, it can be as high as 30,000 gross tons/month.

Shredding

The inspectors asked about the types of shredder process controls the Facility had implemented in the shredder system. Mr. Kiwanis said the Facility uses water injection for cooling purposes, which additionally provides unintentional PM (particulate matter) emissions suppression. Mr. Kiwanis said the shredder system has two air clarifiers that are described as big blue cyclones that include "Z-boxes" that are located downstream of the shredder that pull out light material by passing air through the collection. Mr. Kiwanis said the materials that are pulled out include plastics and nonferrous materials. Mr. Kiwanis said the collected materials are sent to landfill.

Mr. Kiwanis said the shredder produces a ferrous stream and a nonferrous stream, which are separated by magnets. Mr. Kiwanis said that approximately 65-70% of the material is ferrous.

Mr. Kiwanis said that the nonferrous stream is further processed at a landfill in New Jersey.

Facility Changes

The CT DEEP representatives asked if there have been any changes to the torch cutting process since the issuing of the Notice of Violation. Mr. Kiwanis said that the Facility has implemented a dust suppression unit known as "Dust Boss" that sprays an atomized water mist toward the operation in order to capture and dropout dust. Mr. Kiwanis said the Facility has installed a physical cover over the torch cutting area in an attempt to prevent wind from carrying smoke generated by the process. Mr. Kiwanis said the Facility has also installed steel plates in order to keep the ground clean and avoid excess smoke generation.

Sims representatives said the Facility has increased the amount of water added to the shredding process to reduce odor.

Facility Walk-Through

At 10:30 a.m., the Sims representative lead the inspectors in a walk-through of the Facility.

Sims representatives said the shredder was still under repair and was not operating.

The group exited the main office building and observed two truck scales and radiation detectors. The inspectors observed a roll off truck entering the facility. Mr. Kiwanis said that Sims blue dumpster trailers can be found in municipalities across the state, and that some of the blue trailers are leased to contractors and not operated by Sims. Mr. Kiwanis said that the raised scale weighed trucks entering the facility and the other scale weighed trucks leaving the facility. The inspectors observed four trucks entering the facility and being weighed.

The group then proceeded past the Nonferrous Material Building. Sims representatives said the building was divided into three sections: purchases, hand sorting, and shipping areas. Outside of the building, the group observed the mobile shears that Mr. Kiwanis had said were used for cutting smaller materials as an alternative to the torch cutter.

The group proceeded to the depollution area. As they moved to the area, the group passed an area that Mr. Kiwanis said contained old hammers and shears from the shredder. Mr. Kiwanis said the hammer of the shredder spins at 600 revolutions per minute when in operation.

The group then observed a SEDA platform located under an awning. Mr. Kiwanis demonstrated how several pump tools are operated on the platform. Mr. Kiwanis explained how there is a rubber boot that seals around the hole in the tank after it is punctured in order to ensure a closed system is formed with the tank while the liquid is pumped out. Under the awning, the inspectors observed tanks that were labeled as a used oil tank and an antifreeze tank. EPA inspectors observed a CFC recovery unit. Sims representatives said the equipment is EPA certified; however, he said the people who operated it do not have EPA certification.

After observing the depollution apparatus, the group went behind the awning where additional storage tanks were located including one for gasoline. Mr. Burke and Mr. Grzywacz used FLIR Cameras to detect potential emissions coming from the tanks.

Mr. Kiwanis said that once a vehicle has been depolluted, a number is spray painted on the side of the vehicle to differentiate from vehicles that are still polluted.

The EPA inspectors observed that the shredder began to operate at approximately 11:10 a.m. The group observed the shredder from an area adjacent to the nonferrous material building. Mr. Burke and Mr. Grzywacz used FLIR Cameras to detect potential emissions coming from the shredder. The EPA inspectors observed what appeared to be visible steam being emitted from the hammer and sheer area of the shredder, from the under-mill oscillator area, and from several locations downstream from this area. The EPA inspectors observed two Sims inspectors working in the scrap metal pile area on foot. EPA inspectors observed that several trucks dumped their loads in the area during the inspection.

Sims representatives described that the shredder system includes two boxes that hold drum magnets that are used to separate the ferrous and nonferrous material, and two classifiers that include “Z-boxes” and cyclones that are used to separate out light material.

The group walked toward the torch cutting area. The inspectors observed rail cars full of the light material that Mr. Kiwanis said is collected from the shredder air clarifiers and sent to landfills. Mr. Kiwanis pointed out a scale system that is used to weigh the rail cars.

The inspectors observed the torch cutting area. Mr. Kiwanis pointed out the controls that have been implemented to the torch cutting process that he had previously described during the opening conference. The ground of the torch cutting area was lined with metal plates. There was a shipping container placed above the cutting area that Mr. Kiwanis said is intended to

prevent wind from carrying smoke. The inspectors observed the Dust Boss control device that sprays atomized water pointed towards the torch cutting area that Mr. Kiwanis said is intended to control particulate matter. The inspectors did not observe the torch cutter in operation while they were on site.

The EPA inspectors observed a water truck, used to control fugitive dust at the Facility, in operation.

The group began to walk back toward the office building. The shredder had stopped operating prior to this time. The group waited for the shredder to begin operation again in an area adjacent to the light material rail cars. The shredder recommenced operation and Mr. Burke and Mr. Grzywacz used FLIR Cameras to detect potential emissions coming from the shredder.

The group completed the facility walk through and returned to the conference room at approximately 12:10 p.m.

Closing Conference

The inspectors thanked Mr. Kiwanis and Mr. Trupin for their time.

CT DEEP representatives said that they would like to return to the facility in order to observe the torch cutting process.

EPA representatives said that they would be writing an inspection report and would provide it to the Facility.

The group engaged in a discussion pertaining to the use of the emission factor of 0.217 lb-VOC per net ton of feedstock material shredded with a throughput restriction of 450,000 net tons per year, which have been used in the Title V permit application submitted by Sims to CT DEEP for the Facility.

Mr. Burke and Mr. Trupin discussed the appropriateness of the emissions factor used and the basis for its generation.

Sims representatives said that the Facility throughput had dropped since COVID, it being as high as 420,000 net tons per year in 2012, and that it is currently at approximately 25,000 gross tons per month.

Mr. Trupin said that Sims would provide, after the inspection, monthly tonnage data for the material that has been shredded for the last three years, and he would do his best to get five years of data.

Sims representatives said the shredder has a 168 net tons per hour capacity and the metal shredded at the Facility consists of approximately 50% automobiles.

The EPA inspectors requested that Sims provide a process flow diagram for the shredder system.

The inspectors left the facility at approximately 12:43 p.m.