REGION 3

PHILADELPHIA, PA 19103

Report Title:	Clean Air Act Inspection of Owen Steel
Inspection Date:	March 13, 2024
Regulatory Program(s):	SIP, NESHAP
Company Name:	Same as below
Facility Name:	Owen Steel Company, Inc.
Facility Location:	813 South Market Street Wilmington, DE 19801
Latitude:	39.72529 **Longitude:** -75.55618
County/Parish:	New Castle
AFS/ICIS-Air Number:	DE0000001000300935
Permit Number:	APC-2016/0055-Construction/Operation (GACT) (Amendment 1)
NAICS Code:	332312 **SIC:** 3441
DSB ID #:	ECAD-144

Facility Representatives: **Point of Contact**

William Gregg, Plant Superintendent ☒

Phone: (302) 502-7240 Email: Bill.Gregg@owensteel.com

EPA Inspectors:

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EPA Lead Inspector Signature Deluca, Dean Digitally signed by Deluca, Dean Date: 2024.04.04 08:05:18 -04'00' **Date**

Dean Deluca

1060 Chapline Street, Suite 303

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Supervisor Signature KRISTEN HALL Digitally signed by KRISTEN HALL Date: 2024.04.04 12:38:26 -04'00' **Date**

Kristen Hall

Table of Contents

I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Owen Steel Company, Inc. (Owen or Facility) to verify compliance with applicable State and Federal regulations. The Delaware Department of Natural Resources and Environmental Control (DNREC) was notified of the inspection on February 26, 2024, via email. On March 11, 2024, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to William Gregg, plant superintendent, prior to the inspection (see Attachment 1).

The inspection included an evaluation of the Facility's processes and its compliance with the CAA. All information included in this report is the result of statements by the Facility representatives, materials shown to the inspectors by the Facility representatives, and/or documents provided by the Facility representatives to the inspectors at the time of, or subsequent to, the inspection. In addition, information gathered prior to the inspection from a review of EPA and State records may be included in Section A. Summary of the Facility.

A. Summary of the Facility

The Facility is located at 813 South Market, Wilmington, DE 19801. Owen Steel Company, Inc. was founded in 1936 in Columbia, SC and is still headquartered there with both an office and fabrication facility. Owen fabricates complex structural steel and offers steel contracting services from design to installation as shown on their website: https://www.owensteel.com/. Their steel has been used in a variety of significant structures like skyscrapers and sports stadiums, repeatedly exceeding 10,000 tons of material on their larger projects. They are classified as a fabricated structural metal manufacturer with a NAICS code of 332312 and a SIC code of 3441.

The Facility received a Minor Source Permit (APC-2016/0055-Construction/Operation (GACT) (Amendment 1)) from DNREC issued on November 30, 2017.

Owen Steel is classified as a minor source for particulate matter (PM) and Hazardous Air Pollutants (HAPs) as well as all other air pollutants. The Facility is subject to, or potentially subject to the following federal regulations:

- 40 CFR Part 63 Subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants: Nine Metal Fabrication and Finishing Source Categories

B. Inspection Opening Conference

At 12:40PM on March 13, 2024, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Owen Steel was represented by William Gregg, Plant Superintendent. Also, Ramy Hassan and Dave Potter from DNREC were present. EPA inspectors, Dean DeLuca and Carly Joseph, presented their credentials and explained the purpose of the visit was to

conduct a CAA inspection to determine compliance with their permit and any applicable regulations. Additionally, EPA informed the Facility representatives of their right to claim any confidential business information (CBI). At that time, William Gregg did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

Owen Steel started in 1936 in Columbia, SC and is a family-owned business with no parent companies. It is also a female-owned business with Anny Zalesne as the current owner. Falcon-Helmark operated at the South Market Street facility until 2013. In 2014, Owen Steel bought the building, some of the on-site equipment, and started operations in July 2014. Owen has another facility less than 0.5 miles away at 601 Garasches Lane, also in Wilmington, DE which accepts finished products from the South Market Street Facility and is also permitted for a plasma cutter with a dust collector. Owen also has the office and fabrication location in South Carolina as mentioned above. The Market Street Facility has about twenty-seven acres and 36,000 square feet under roof with fifty-five full-time employees. The Facility's typical hours of operation are 5am-3:30pm on Monday-Thursday and 5am-1:30pm on Friday, however there are potential night shifts or overtime shifts if work demands it. There are no maintenance shifts, maintenance work, or scheduled maintenance shutdowns occuring outside of the full shifts.

Owen receives raw materials and stores them outside. Most of their raw materials are steel I-beams, but they also receive pipes, tubing, and other steel products. The Facility then finishes the steel to meet the customer's needs and specifications. This often requires Owen to cut the steel using either welding or plasma cutting. They have two operational plasma cutters on-site: a Python X and a PeddiBot-1250. Each plasma cutter has an associated baghouse. Mr. Gregg indicated they have not started disassembling the Python X and it still has the utilities connected, but it is being decommissioned and has not been used since November 22, 2023. It is Owen Steel's intention to disassemble the Python X on weekends and ship it to their Columbia, SC facility along with its baghouse. The PeddiBot-1250 is their new plasma cutter and started operations around November 27, 2023, shortly after they stopped operating the Python X. This PeddiBot-1250 plasma cutter is not listed in their current DNREC permit. The Facility is making final products, but Mr. Gregg said they are operating at about one-third of their full production because they are still trying to determine the best operation for the new plasma cutter. It is a more technologically advanced plasma cutter than their prior unit. The PeddiBot-1250 has not been operated at another location before its arrival at this Facility.

In addition to the two plasma cutters, the Facility also operates the following equipment: an SH-1300F industrial mechanical band saw; an electric camber machine; a hill acme milling machine; a Peddinghaus nine head drill press; approximately forty Lincoln electric 400amp wire welders; and rosebud welders which are sometimes needed. The Facility also operates forklifts, trucks, and electric cranes for moving product in the building. Owen stated they do not have any emergency generators or

cranes on-site and they do not do any abrasive blasting. The final products are transported on trucks and stored at the Garasches Lane facility which also operates two plasma cutters.

The opening conference concluded at 1:35PM.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 2:18PM by William Gregg of Owen and Ramy Hassan and Dave Potter from DNREC were also present for the walkthrough. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 3).

The main interior of the Facility is one large area with separate rooms to one side. The inspection team first observed the PeddiBot-1250 plasma cutter located near the northeast corner. When the inspection team first entered the area, sparks were observed inside the plasma cutter indicating steel was being cut and an employee was moving an I-beam on rollers in preparation for the plasma cutter. The inspection team observed that the PeddiBot-1250 had its own dust collection system which exhausted outside the building and was in operation at the time of the inspection. When asked, Mr. Gregg said the Python X had an alarm system but did not know the differential pressure value at which the system alarmed. He was unsure if the PeddiBot-1250 had a similar alarm system but thought it should. Mr. Gregg said the Python X's dust collector has six filters while the PedditBot-1250 has eighteen cartridges. The Facility changes the filters/cartridges when the differential pressure gets to 5".

The inspection team went outside to observe the dust collector for PeddiBot-1250 plasma cutter. It was observed to be a 2022 Donaldson Torit Downflo Oval and at the time of the inspection, the magnehelic was reading 1.0" water during operation. There were no observed emissions while it was observed in operation. While outside, the inspection team observed the raw materials being stored in the yard. Mr. Gregg stated the raw materials come from a variety of locations such as Ohio, Kentucky, Luxembourg, or Germany. Raw material from Europe is brought in via boat. Mr. Gregg stated the Facility purchases forty-to-ninety-foot beams with the most common beam length being forty feet. I-beams were also being moved on the plasma cutters' rollers when the inspection team was outside. When asked, Mr. Gregg said that site water runs off the eastern side of Owen's property and they have six trackout mats due to a DNREC recommendation as part of their water runoff plan. The inspection team observed a scrap dumpster located near the southeast corner of the building which collects any scrap for recycling. Upon returning inside, the inspection team requested the PeddiBot-1250 operator to show the hours of operation. He said he was still learning the machine and had been in frequent contact with the designer for assistance. After attempting for about five minutes, he was unable to locate the hours of operation, so the inspection team requested Mr. Gregg to get this information after the inspection. Owen provided this information after the inspection and the total working hours was stated to be 1,355 hours.

After leaving the PeddiBot-1250, the inspection team followed Facility personnel to the maintenance and storage areas located on the northern side of the building. The inspection team asked some clarification questions on welding and Facility operations and the observed the oval cartridges used in the PeddiBot-1250's Donaldson dust collector.

Then the inspection team went back to the main area and observed the Hill Acme milling machine which was not in operation and the SH-1300F band saw which was in operation. Following these two pieces of equipment, the team observed the Peddinghaus drill in operation. Mr. Gregg described this drill as a three access nine head drill with drills that were observed on both sides and the top as the steel pieces moved on rollers through the machine. The inspection team observed there were smaller welders at multiple locations throughout the building. Mr. Gregg said the Facility had about forty of these welders and they were all the same 400-amp Lincoln Electric wire welders.

The inspection team observed the electric camber press which was not being used at the time of the inspection. The Python X plasma cutter was then observed in the western side of the building with its six-filter dust collector. The Python X was not in operation at the time of the inspection. When asked, Mr. Gregg said it was currently not operational, but could probably be restarted after about a half days' worth of work and after repairing a bad arm. There was a note on the dust collector saying the filters were changed 11/23/2023.

The walkthrough concluded at 3:45PM.

IV. Records Review

The records review commenced immediately after the opening conference and prior to the plant walkthrough at 1:35PM. EPA inspectors reviewed some of the documents requested in the March 11, 2024, email to William Gregg (see Attachment 1). Some of the records were provided at the time of the inspection by Mr. Gregg and the remainder of the available requested documents were submitted, as requested during the inspection, by March 25, 2024.

Mr. Gregg said they do not have to submit annual emissions inventory statements or annual certifications since they are a minor source, nor do they have any fire pumps or stationary engines located on-site, only vehicle engines. The throughput and emissions records reviewed had both the Garasches Lane Peddinghaus plasma cutter and Market Street Python X/PeddiBit-1250 on the same sheet. Mr. Gregg indicated the PeddiBot-1250 started operation in late November 2023. In 2022, the average throughput for the Python X was 3,375.3 feet per month. In 2023, the average throughput for combination of Python X and PeddiBot-1250 was 3,994.5 feet per month. The average throughput for December 2023 – February 2024 was 4,265 feet per month. Mr. Gregg stated Owen has potentially used more welding rods since the permit issuance in 2017, but they have not changed the welding materials used. There were no visible emissions observed on any of the weekly visible observation records reviewed for the Market St. Facility. When asked, Mr. Gregg stated Owen has not had to do

any corrective actions due to visible emissions being observed. The daily dust collector pressure drop readings were also being maintained and there were no readings outside of the normal operating range for the Market St. Facility. Below are the records which were requested on-site in addition to those records requested in the March 11, 2024, email:

- Toxic Release Inventory (TRI) submittal data for 2021, 2022, and 2023;
- Dust collector filter or cartridge specifications for both the PeddiBot-1250 and Python X plasma cutters;
- Total hours of operation for the PeddiBot-1250 as well as its start date;
- The SDS for the welding wire; and
- The total wire used in 2022 and 2023.

The records review concluded at 2:15PM.

V. Closing Conference

After the plant walkthrough, EPA inspectors, William Gregg, and Ramy Hassan and Dave Potter from DNREC 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 report 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 sixty 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 4:24PM.

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 Owen Steel:

- The PeddiBot-1250 plasma cutter started operation without first receiving a permit from DNREC's air program; and
- The Python X was potentially started to be disassembled without first notifying DNREC.

VI. List of Attachments

Attachment 1: Email correspondence to William Gregg of records requested to review

Attachment 2: Sign-in Sheet

Attachment 3: Photo Log

Deluca, Dean

From: Deluca, Dean
Sent: Monday, March 11, 2024 8:55 AM
To: bill.gregg@owensteel.com
Subject: EPA CAA inspection at Owen Steel

Mr. Gregg,

Per our recent conversation, EPA is going to conduct a Clean Air Act inspection of Owen Steel (Market St.) on March 13, 2024. EPA will have two inspectors onsite to conduct the inspection, which will include an opening conference, site walkthrough (including photos), and record review/closing conference. DNREC also plans to be onsite for the inspection. EPA should arrive at the facility on the afternoon of 3/13/24 at 12:30PM. Please see the below list of records EPA would like Owen Steel to provide. EPA understands all documents may not be available prior to the inspection but would expect the remaining documents shortly after the inspection. I will include a separate email with a link to upload documents using EPA's goanywhere file sharing site as electronic files are preferred over paper files. As I mentioned on the phone, I would like to have a hardcopy of the facility plot plan available though at the beginning of the inspection. You indicated that the required PPE for the facility includes hard hat, safety glasses, and safety shoes. Let me know if you have any questions about the inspection or record request.

1. Provide a plot plan of the facility available in hardcopy for the inspection opening conference which identifies each processing unit, control device, storage vessel, etc. for the facility.
2. Provide a detailed process description which includes all process units and emission points currently operational at the site.
3. Provide the two most recent annual emissions inventory statements as well as any calculations and emissions factors used to calculate emissions for each pollutant and the origin of each emission factor.
4. Provide the date the facility commenced operations and the date(s) of any ownership change, if applicable.
5. Provide the address of any other locations owned and/or operated by Owen Steel or any parent company.
6. Provide the details on any process, equipment, or material changes which increased or decreased emissions since the last permit issuance in 2017.
7. For each fire pump, generator, or engine located onsite, if any, provide:
    - The make and model of the unit;
    - The size of the unit (HP and displacement (L));
    - Fuel amount and type combusted monthly (gallons) from January 2021-present;
    - Hours of operation monthly from January 2021-present.
8. Provide the documentation showing the manufacturer's recommended differential pressure across each dust collector.
9. Provide the documentation showing the dust collectors filters are at least 99% efficient.
10. Provide all visible emission observations from December 2019, August 2022, and February 2024 for all required on-site processes. If welding observations did not occur in the above months, provide the Method 22 observations closest to the above months.
11. Provide the daily dust collector pressure drop readings for December 2019, August 2022, and February 2024.
12. Provide the two most recent annual certification and compliance reports.
13. Provide the Facility's initial notification and most recent notification of compliance status as required by 40 CFR Part 63 Subpart XXXXXX.

Thanks, Dean

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William Gregg	Queen Steel	Plant Superintendent	Bill.Gregg@QueenSteel.com	(302) 502-7240
Carly Joseph	US EPA	Inspector	joseph.carly@epa.gov	215-814-2127

Attachment 3:
PHOTO LOG

Facility: Owen Steel Company, Inc.

Location: 813 South Market Street, Wilmington, DE 19801

Inspection Date: March 13, 2024

EPA Inspector(s): Dean DeLuca and Carly Joseph

Photographer: Carly Joseph

Photo Number: 23
Photo Description: PeddiBot-1250 Plasma Cutter

Photo Number: 24
Photo Description: I-Beam on Rollers Before Entering PeddiBot-1250

Photo Number: 25
Photo Description: I-Beam

Photo Number: 26
Photo Description: Dust Collector for PeddiBot-1250

Photo Number: 27
Photo Description: PeddiBot-1250 Dust Collector Label

Photo Number: 28
Photo Description: Raw Materials in Yard

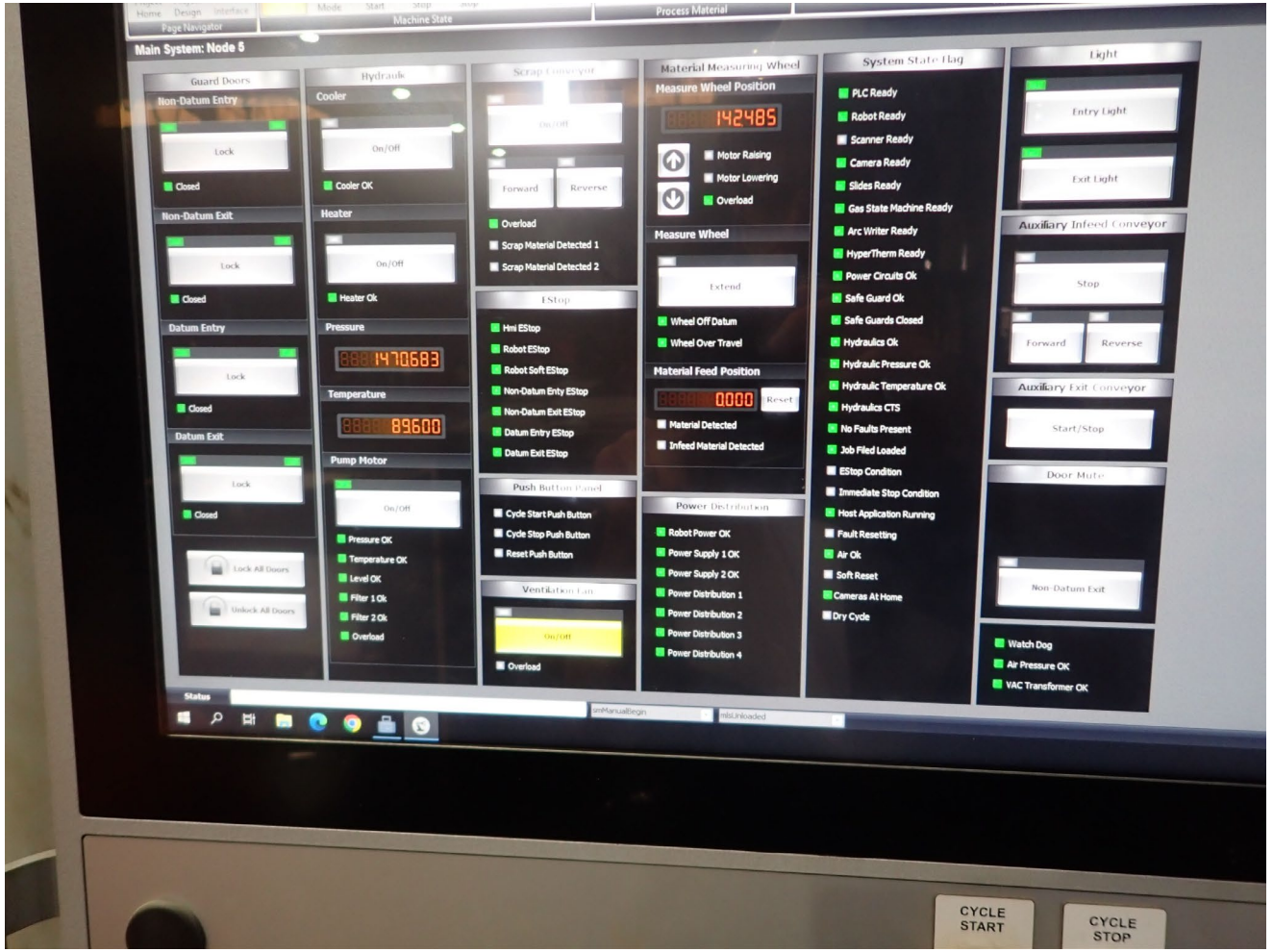

Photo Number: 29
Photo Description: PeddiBot-1250 Operating Screen

Photo Number: 30
Photo Description: SH-1300F Industrial Band Saw

Photo Number: 31
Photo Description: Hill Acme Milling Machine

Photo Number: 32
Photo Description: Peddinghaus Nine Head Drill Press

Photo Number: 33
Photo Description: Electric Camber Machine (blurry)

Photo Number: 34
Photo Description: Electric Camber Machine (blurry 2)

Photo Number: 35
Photo Description: Electric Camber Machine

Photo Number: 36
Photo Description: Python X Plasma Cutter

Photo Number: 37
Photo Description: Python X Plasma Cutter and Its Dust Collector