Clean Air Act Compliance Inspection Report

United States Environmental Protection Agency
Region 10 – Seattle, WA

Clean Air Act Full Compliance Evaluation Inspection Report

Steel West Inc.

Chubbuck, ID 83202

Inspection Date: July 21, 2022

Bryan Lange Digitally signed by Bryan Lange Date: 2022.09.29 10:48:38 -04'00'

Report Author Signature Date

Bryan Lange
U.S. Environmental Protection Agency, Contract Inspector
Eastern Research Group

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Section Chief Signature Date

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Attachments

Attachment 1.....Idaho Air Quality Compliance Inspection, Preliminary Inspection Findings
Attachment 2..... Email from Shawn Lund of Steel West Inc. Received August 1, 2022
Attachment 3.....Welding Wire - Safety Data Sheets
Attachment 4..... EPA Region 10 Digital Image Log

1. Basic Facility and Inspection Information

Facility:	Steel West Inc. 5690 Industrial Way Chubbuck, ID 83202
AFS/FRS Number:	Not available
State Facility ID:	005-00098
SIC:	3441 Fabricated Structural Metal
NAICS:	332312 Fabricated Structural Metal Manufacturing
Permit Number:	Idaho Permit to construct exemption concurrence, dated January 17, 2018
Facility Contacts:	Shawn Lund Finance & Administration Officer Steel West Inc. (208) 680-6220 Slund@steelwest.net
Inspectors:	Bryan Lange U.S. Environmental Protection Agency, Contract Inspector Eastern Research Group 1600 Perimeter Park Drive Morrisville, NC 27560 (919) 622-2374 Bryan.Lange@erg.com Shayne Aytes Air Quality Compliance Officer Idaho Department of Environmental Quality Pocatello Regional Office (208) 239-5009 Shayne.Aytes@deq.idaho.gov Heidi Orr Air Quality Compliance Officer Idaho Department of Environmental Quality Twin Falls Regional Office (208) 737-3873 Heidi.Orr@deq.idaho.gov
Date of Inspection:	July 21, 2022

Inspection Start/End Times: July 21, 2022, 10:45 am – 12:00 pm MST

Inspection Notice: This was an announced inspection.

Mr. Lange notified Mr. Lund, by phone on July 14, 2022.

This was a Clean Air Act (CAA) compliance inspection by an Environmental Protection Agency (EPA) Contractor. Inspector Mr. Lange, with Eastern Research Group, led the inspection. The state air agency was made aware of the inspection beforehand and participated in the inspection. The purpose was to identify potential compliance concerns with CAA regulations, specifically to gather information to determine if the facility is in compliance with permit exemption and the NESHAP subpart XXXXXX (Area Source Standards for Nine Metal Fabrication and Finishing Source Categories).

Disclaimer

This report is a summary of observations and information gathered from the facility at the time of the inspection. The information provided does not constitute a final decision on compliance with CAA regulations or applicable permits, nor is it meant to be a comprehensive summary of all activities and processes conducted at the facility.

1. Facility/Process Description:

The following facility description is based on information provided by a facility representative in the opening conference as well as information found on-file regarding permits and prior inspections.

Steel West Inc. receives aluminum and steel in beam, pipe, and sheet form. The facility fabricates the received materials by flexing, cutting, and welding for a variety of customers including schools, sewer plants, high end homes.

2. Compliance History

In the past 5-years, Steel West Inc. has not been the subject of either formal or informal enforcement actions.

Steel West Inc. has no history of an on-site inspection conducted by either the Idaho Department of Environmental Quality (DEQ) or the US Environmental Protection Agency. Further, the facility is not registered in EPA's ECHO as of the date of this report.[1]

[1] See https://echo.epa.gov/

3. Records Review Prior To The Inspection

Prior to the inspection, Mr. Lange reviewed a copy of the Idaho DEQ permit to construct exemption concurrence and statement of basis (project ID: 61961) issued January 17, 2018.

a. Entry and Opening Conference

Mr. Aytes, Ms. Orr, and Mr. Lange ("the inspectors") arrived at the facility at approximately 10:45 am MST on July 21, 2022. They entered the administrative offices and met with Mr. Lund. The inspectors presented identification cards and explained that they were at the facility to conduct a CAA permit inspection. The inspectors explained that the inspection would consist first, of a review of the permit exemption conditions, second a walk-through, and finally a closing conference where records related to permit exemption will be reviewed.

The inspectors explained that after the closing conference, they would leave a carbon copy of an Idaho DEQ Air Quality Compliance Inspection Preliminary Inspection Findings Form (PIFF) documenting the inspection details and Mr. Aytes would keep the original.

4. Facility Walk-Through and On-Site Records Review

At approximately 11:10 am MST, the inspectors were escorted to each step in the material handling path specifically the: 1) product receiving area, 2) fabrication and welding area, 3), burn table 4) outdoor abrasive blasting and painting areas, 5) delivery staging area.

1. All product is received by truck; the facility has no access to a rail. All fabrication, cutting, and welding take place under the open layout warehouse. To maintain the DEQ permit exemption, the propane heater is limited to 1,920 hours annually. Mr. Lund explained that the heaters had been converted to natural gas fired and the only propane used on-site is for the forklift.

2. The burn table or the plasma cutting machine is an import part of fabrication. It cuts large sheets of steel into smaller pieces. Software allows staff to specify and optimize each cut from a drawing. To maintain the DEQ permit exemption, plasma cutting shall be less than 5,400 inches per hour. Mr. Lund explained that the table operates approximately 30 percent of the workday, and its mode of operation has not changed since its 2016 installation. The preparation required for a cut is significant given the logistics of moving large sheets of steel and test cuts. Mr. Lund also explained that the 5,400 figure was based on cutting 3/4-inch-thick steel, a cutting speed of 90 inches per minute, and an operation rate greater than its 30 percent normal rate.

The DEQ permit exemption also requires that the burn table be equipped with a baghouse that can achieve 95 percent control efficiency of particulate emissions. The inspectors observed the baghouse. It has 16 bags that are periodically shake-cleaned. Annually the filter bags are replaced. Whenever the machine is cutting, the baghouses is on. The inspectors affirmed that 95 percent control efficiency is achievable. See Photograph 1 in attached photo log.

3. Mr. Lund stated that some tungsten inert gas (TIG) welding is used on aluminum products, but most of the welding is done with metal inert gas (MIG). An example of a fabrication that occurs

on-site i.e., coping or notching of beams is necessary such that beams fit together. Coping removes material from a beams flange or web so that the intersecting steel pieces fit together.

4. Outdoors, past the warehouse there were designated areas for abrasive blasting and painting. No abrasive blasting was occurring at the time of the inspection. The blast media was visible on the grounds. Mr. Lund stated that the media is not recycled or reused.

Approximately 60 percent of manufactured product is painted with a primer, the balance of product is unpainted. Mr. Lund remarked that additional coatings are often applied once the product is received, because products are inevitably scratched in transit.

5. Product is arranged prior to shipment in the staging area. There has been no history of citizen complaints. Additionally, Mr. Lund indicated that Steel West Inc. had offered to erect a fence on the property line to combat fugitive dust, but citizens were not concerned by dust or noise.

The walk-through ended at approximately 11:20 am MST.

5. Records review

To identify potential compliance concerns the National Emission Standards for Hazardous Air Pollutants (NESHAP) subpart XXXXXX (Area Source Standards for Nine Metal Fabrication and Finishing Source Categories) Mr. Lange asked if the welding, painting, or abrasive blasting operations had the potential to emit metal fabrication and finishing HAP (MFHAP). Mr. Lund produced a collection of SDS sheets. SDS sheets showed that MFHAP was present in the welding wire but absent in the abrasive blast media and primer.[2]

Relevant SDS	Presence of MFHAP
Stainless Steel Flux Cored Wire	Chromium between 4 – 32% Nickel between 0.6 – 22.5% Manganese between 0.5 – 2.5%
Carbon Steel Welding Wire	Chromium 0.15% Nickel 0.15% Manganese between 0.9 – 2.0%

To maintain the DEQ permit exemption, the welding wire usage shall be limited to 10,979 pounds per year. Aggregate totals of purchase wire are shown in the table below indicate the operational limit was exceeded in both 2021 and 2020.

[2] Pursuant to 40 CFR 63.11522, material containing MFHAP means a material containing one or more MFHAP. Any material that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal) or contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing MFHAP.

Purchased welding wire	2021	2020
Stainless steel (lbs.)	30	33
Carbon steel (lbs.)	15,437	11,860

Mr. Lund explained additional welding wire had been purchased to combat supply chain disruption caused by the COVID-19 pandemic. Specifically, more wire was purchased than could be used to plan for uninterrupted production. Mr. Lange contended that the permit exemption condition requires a record of consumption. Mr. Lund proposed to investigate their existing records with the hope of differentiating consumption from purchase records. Mr. Lund volunteered that at the time of the inspection, there was an unused pallet is carbon steel welding wire weighing approximately 1,500 pounds in storage.

Steel West Inc. is pursuing welding wire inventory controls, specifically an industrial vending machine that will deliver a single roll of wire on an as needed basis.

6. Closing Conference

At approximately 11:45 am MST, the inspectors held a closing conference. Mr. Lange led the closing conference and summarized the exemption permit conditions and records the inspectors had reviewed. Mr. Lange went through his inspection notes and described a single area of concern.

1. To maintain the DEQ permit exemption, welding wire usage shall be limited to 10,979 pounds per year. The available purchase records indicate a potential compliance concern.
2. The SDS shows the presence of MFHAP in welding wire. An initial notification should have been submitted no later than January 11, 2010 or 120 days after the source became subject. Further, at least one of the NESHAP identified management practices, intended to minimize emissions of MFHAP, should be implemented.

Ms. Aytes presented Mr. Lund with carbon copy of an Idaho DEQ Air Quality Compliance Inspection PIFF documenting inspection details and preliminary status of a “pending” compliance determination at the time of the inspection. See attachment 1.

The inspectors departed the facility at 12:30 pm MST.

Post inspection activities include Mr. Lund investigating the assumptions made to calculate welding emissions including the wire constituents and welding technique (i.e., TIG/MIG). On August 1, 2022, Mr. Lund sent an email stating that “over the past couple of years (2020 & 2021) we bought a bunch of extra wire… I am still trying to get in touch with Mike Settell in order to clarify a few things”. See attachment 2.