



Industrial User Facility Inspection Report U.S. EPA, Region 8

Name of industry and location:

5 Star Coatings LLC
702 5th Street
Greeley, CO 80631

Control Authority / NPDES Permit No.

City of Greeley
NPDES Permit No. CO-0040258

IU – NPDES ID

COPU00173

Date of visit:

January 30, 2024

Approximate Time of visit:

1015 – 1050

Name(s) / Affiliation / email of inspector(s):U.S. EPA:

Al Garcia, garcia.al@epa.gov

City of Greeley:

- Joseph Martinez, joseph.martinez@greeleygov.com
- Kayla Reed, kayla.reed@greeleygov.com
- Joe Kunovic, joseph.kunovic@greeleygov.com

General Facility Information:Representatives at Inspection:

- Joshua Nelson – Shop Manager
- Ken Alvarez – owner

Type of Business Operations:

- Powder Coating per customer specifications, the facility sandblasts and phosphate coats steel, aluminum and brass parts in preparation for powder coating.

Facility Information:

- 3 employees
- five days/week, (Monday through Friday).
- 10-hour shift

Inspection Description:

Al Garcia from the U.S. Environmental Protection Agency (EPA) and Joe Kunovic, Joseph Martinez, and Kayla Reed from the City of Greeley (City) conducted a significant industrial user (SIU) inspection of the 5 Star Coatings facility (facility) located on 702 5th Street, Greeley, CO 80631. The SIU inspection was conducted as part of the EPA Pretreatment Audit of the City's Publicly Owned Treatment Works (POTW) and EPA-approved Pretreatment Program. The inspection of the facility provides current conditions of the facility's unit operations and consisted of an evaluation of the wastestreams generated from the unit operations, management of these wastestreams, including potential for spills and slug discharges. The facility discharges to the sewer collection

system leading to the City's POTW.

Upon arriving at the facility on January 30, 2024 at approximately 10:15 a.m., Al Garcia of the EPA presented credentials to the facility representatives and explained the purpose of the inspection. During the opening interview, the facility representatives provided an overview of the operations and processes at the facility, wastestreams generated and management/discharge of these wastestreams. The opening interview was followed by a facility tour to visually inspect the unit operations. The EPA conducted a closing conference to discuss potential findings and recommendations identified during the inspection.

Process Description:

The facility located at 702 5th Street, Greeley, CO 80631 powder coats customer-supplied parts. The facility receives and prepares the parts through sandblasting and phosphate spray operations. The Google Maps view of the facility is shown in Figure 1.



Figure 1 – 5 Star Coatings LLC -Google Maps View

Chemical and Raw Materials Storage –

The facility receives primarily customer-supplied steel parts but may also receive aluminum and brass parts for powder coating. These parts are received in the storage room located behind the building, next to the phosphate

spray washroom. The customer received parts are tagged and palletized. The facility typically has one 55-gallon phosphoric acid barrel in the phosphate spray room. The facility also stores numerous 25 lbs. boxes in a powder coat storage room and in storage shelves for use in the powder coat booth. The facility also stores 1,500-lb supersacks of sand for use in each of the two sandblasting rooms/booths.

Paint Preparation and Powder Coating –

The customer-supplied parts are tagged for processing in the facility and may be either sandblasted or phosphate sprayed to prepare for powder coating, depending on factors such as cleanliness of the part, customer specifications or size/orientation of the part. The facility has two sandblasting rooms/booths, a smaller booth located in a sub-grade room in the southern portion of the building and a larger booth located in a satellite building, located next to the alley. (see Figure 1). According to Mr. Nelson, the facility uses about 3 to 5 buckets of sand daily in each booth. The sand is transported from the 1,5000-lb bags to the sandblasting hopper. The sand and dust are collected in the filtration system. The sandblasted parts are then sent to the powder coat booth in the main building.

The customer-supplied parts may be prepared for powder coating or finished as raw steel by the phosphate coating operation. The parts are hung on racks in the approximately 20-feet x 20-feet phosphate spray coating room. The phosphoric acid barrel is located along the west wall, next to a Hotsy water pressure washer. The phosphoric acid is metered into the pressure washer, mixed with water and pressured sprayed onto the parts hung on the rack to degrease and clean the part in preparation for powder coating. The phosphate spray room appears to be slightly sloped towards a large floor drain located in the center of the room. The floor drain leads to a sub-grade floor pit approximately 2-feet x 2-feet x 2-feet in dimensions that collects the process wastewater. The wastewater is allowed to overflow to the City as the pit fills up. The solids in the pit are periodically collected and disposed in the domestic trash.

According to Mr. Nelson, the facility sprays an average of 3 to 4 hours per production day. The water usage is metered by a flowmeter located on the water supply side of the process and the pH of the wastewater is tested with every wash. During the inspection, wastewater from the phosphate spray room was observed exiting the room through the bay door and was evident in the concrete pad located south the spray room.

The parts either sandblasted or sprayed with phosphoric acid are considered prepared for powder coating. The powder coating is performed in a powder coat booth. The overspray and waste paint are collected on the filtration media or swept up from the floor and disposed in the domestic trash. Between color changes, the powder coat guns, tips and lines are air sprayed and the waste paint collected and disposed in the domestic trash. The powder coated parts are cured in an oven, packaged and shipped to, or picked up by the customer.

According to Mr. Nelson, minor off-spec paint jobs may be hand sanded with scotch brite pads and powder coated. Major off spec paint jobs are sandblasted and powder coated.

EPA Classification of the Industrial User

Based on observations and information received during the inspection, the facility is categorized as a facility subject to the Metal Finishing Categorical Pretreatment Standards for New Sources found at 40 C.F.R. § 433.17. The phosphate coating operation is a core Metal Finishing operation [ref: 40 C.F.R. § 433.17].

Summary of Findings

5 Star Coatings LLC
NPDES ID# COPU00173
January 30, 2024

Pretreatment Inspection Findings	Follow up Action Items
1. The process wastewater generated from the phosphate spray coating operation was observed exiting the spray room through the bay door and collecting on the concrete pad located south of the phosphate spray room. The Pretreatment Regulations at 40 C.F.R. § 403.8(f)(2)(vi) require the facility to control slug discharges defined as any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or Permit conditions. The facility's Pretreatment permit #2CA-030 at Part 8.B.1 states the following: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.8(f)(2)(vi) 5 Star Coatings LLC Permit #2CA-030, Part 8.B.1 <u>Corrective Action Item</u> Properly operate the phosphate spray coating operation by eliminating the potential for generated wastewater to exit the phosphate spray room through the garage bay door and collect on the outside concrete pad. Ensure the process wastewater is contained in the phosphate spray coating room and discharges into the floor pit, identified in the facility's permit.

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Al Garcia	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202 303-312-6382	02/07/24
Reviewer Name	Address/Phone Number	Date
Stephanie Passarelli	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NP Denver, Colorado 80202 303-312-6803	02/12/24

Supervisor Signature/Name	Address/Phone Number	Date
MICHAEL BOEGLIN  Digitally signed by MICHAEL BOEGLIN Date: 2024.02.14 08:19:02 -07'00'	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202	02/14/2024
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