

REPORT OF INDUSTRIAL USER COMPLIANCE SAMPLING INSPECTION

AT
Ernest Spencer Custom Coating
1510 N Davis
Ottawa, KS 66067

KANSAS PRETREATMENT PERMIT: KSP000090

BY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7: Enforcement and Compliance Assurance Division
December 19, 2023

INTRODUCTION

I conducted an Industrial User Compliance Sampling Inspection at Ernest Spencer Custom Coating (Ernest Spencer), Ottawa, Kansas, on December 19, 2023. The inspection was conducted under the authority of Section 308 of the Clean Water Act (as amended) and in accordance with EPA Region 7 Standard Operating Procedures. This narrative report and attachments present the results of the inspection.

PARTICIPANTS

Ernest Spencer:

Preston Kilgore, EHS (not present)

Email: pkilgore@esmetals.com

Bill Hutting, Coating Manager (via phone)

Email: whutting@esmetals.com

Stan Pattison, Operator

Marcie Magee, Office Manager

U.S. Environmental Protection Agency (EPA), Region 7:

Hannah Lewis, Life Scientist, (913) 551-7679

Email: lewis.hannah@epa.gov

FACILITY DESCRIPTION

The facility performs powder coat painting of steel parts. The parts are prepared prior to painting using a phosphate conversion coating process. A 5-stage washer is utilized for smaller parts while an open hand spray wash booth is used for larger parts. The first two stages were not being utilized at the time of the inspection due to needed repairs to Tank 1. At both wash locations, iron phosphate is used for the phosphate conversion coating process. Water is metered at each wash location (photos 10, 11). The facility is subject to the 40 C.F.R. Part 433 Metal Finishing Regulations for new sources.

INSPECTION PROCEDURES

Facility personnel were not notified prior to the inspection. I arrived at the facility unannounced at 10:00 a.m. on December 19, 2023, presented my credentials to Ms. Magee and Mr. Pattison, and explained the purpose and procedures of the inspection. I also stated that during the inspection, I would collect samples of the facility's process wastewater that is discharged to the city of Ottawa. Eleven photos were taken during the inspection (attachment 1). I completed the Region 7 inspection checklist after the completion of the inspection (attachment 2). I provided a Notice of Preliminary Findings (NOPF) to Ms. Magee which she signed during the exit meeting (attachment 5).

SAMPLING PROCEDURES:

According to the permit, flow-proportioned grab samples are to be collected from each wash process drain (5-stage washer and hand spray wash booth) then combined. On December 19, 2023, I collected grab samples from the 5-stage drainage channel leading to Outfall 001. A grab sample was not collected from the hand spray wash booth drain because it was not discharging at the time of the inspection. The facility often refers to the drain at the 5-stage washer as outfall 1 and the sump drain at the hand spray booth was outfall 2. Both of these drains combine underground at Outfall 001 and then flow to the city of Ottawa sanitary sewer system.

Mr. Pattison described that he collects grab samples from the 5-stage wash discharge channel by collecting one grab sample at the furthest upstream point of the channel followed by a separate grab sample at the furthest downstream point of the channel (photo 8). Each grab sample is of equal amount. The two samples are then shipped to the contract laboratory where lab personnel combine the two samples. The chain-of-custody records indicate a sample from "outfall 1" (5-stage) and "outfall 2" (hand spray booth). To be consistent with how the facility samples process wastewater, I collected equal volume grab samples from the upstream point and downstream point then combined them.

All samples collected were transported to the EPA Region 7 Laboratory. Chain-of-custody procedures were used for all samples. All appropriate Region 7 standard operating procedures in the collection, packaging, transportation, and handling of the samples were followed.

FINDINGS AND OBSERVATIONS

1. Permit: A Kansas Pretreatment Permit for Ernest Spencer became effective on January 1, 2021, and will expire December 31, 2025 (attachment 3). The permit requires the facility to monitor its effluent for flow, pH, metals (cadmium, chromium, copper, lead, nickel, silver, zinc), total toxic organics (TTOs), and cyanide. The permit also places numerical limitations on those parameters. The permit further requires the facility to sample and analyze the parameters on a quarterly basis and submit discharge monitoring reports (DMRs) to the Kansas Department of Health and Environment (KDHE) on a semi-annual basis, by January 28 and July 28 of each year.

Mr. Hutting stated that the facility operates two shifts, four days per week and has approximately 20 employees.

Mr. Hutting described each process wastewater operation with me over the phone. Then, Mr. Pattison provided a tour of the facility. Mr. Pattison stated that the first two stages (Tank 1 and Tank 2) of the

5-stage washer were not in use because Tank 1 was in need of repairs (photos 2, 3). Mr. Pattison also stated that the hand spray booth wash is used very infrequently. The water usage records for outfall 2 confirm this.

Overflow from the 5-stage washer tanks flows to a grate-covered drainage channel where samples are collected as “outfall 1” in the facility’s records. Process water from the hand spray booth wash travels along the concrete floor to a sump drain, also known as outfall 2 (photo 9). Both of these internal outfalls flow to Outfall 001 through underground piping to the city’s sanitary sewer system.

2. Discharge Monitoring Reports (DMRs): I reviewed the facility’s compliance status from 2020 – 2023, which were provided to me during the inspection. I found no exceedances of the effluent limits during the review.

3. Water Balance: A reasonable water balance was achieved following the inspection. Ms. Magee provided the purchase water records and both washer flow meter records. According to water purchase records provided by Ms. Magee, from May 2023 to November 2023, it was determined that the facility consumed an average of 5,228 gallons per day. The combined washer water meter records during the same period show an average usage of 4,558 gallons per day plus an estimated 400 gallons per day for sanitary purposes. There is an unknown water usage for the burn off oven.

4. Total Toxic Organics: The facility can certify compliance with the Metal Finishing limit established for Total Toxic Organics (TTO) provided it is following the provisions of its approved Solvent Management Plan. I reviewed a copy of the Solvent Management Plan during the inspection.

5. Sample Results: Analytical results for samples collected during the inspection are presented in the table below. The complete data transmittal package is included as attachment 4.

Table 1. Analytical Results from Samples Collected during the Inspection

Analyte	Value	Dmax	Mavg
Ag	ND	0.43	0.24
Cd	ND	0.11	0.07
Cr	ND	2.77	1.71
Cu	0.0268	3.38	2.07
Ni	ND	3.98	2.38
Pb	ND	0.69	0.43
Zn	0.195	2.61	1.48
Cn	not analyzed	1.20	0.65
pH (s.u.)	6.45	5.0 min	10.0 max

Results of the sampling indicate that the facility was in compliance with its permit limits during the sampling event on December 19, 2023.

6. Other Observations: Ms. Magee provided a sampling plan to me for review during the inspection which explains the proper way to collect samples required by the permit. All facility staff involved with collecting and handling samples should be familiar with this document’s content.

While reviewing the pH meter calibration records, I noted personnel were using a 3-point calibration (4,7, and 10). Beginning in November 2023, the pH meter has not achieved a calibration within the range of the pH standards. I asked Mr. Pattison to calibrate the pH meter during the inspection. The pH meter gave an error on the screen for each calibration point not allowing it to be calibrated. Thus, I included this on the NOPF as not meeting the 40 CFR Part 136 requirements.

SUMMARY

During the exit meeting with Ms. Magee, I provided a NOPF to her and explained the finding below.

1. pH meter is inaccurate; unable to be calibrated (40 CFR Part 136)

I discussed the concept of flow-proportioned sampling methodology with Mr. Pattison during the inspection. I also informed him there was a sampling plan in Ms. Magee's office that he should review before collecting samples.

A response to the NOPF has not been received as of the date of this report.

**HANNAH
LEWIS**

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Hannah Lewis
Life Scientist

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Jodi Bruno
Branch Manager

Attachments:

1. Digital Image Log (12 pages)
2. Region 7 Industrial User Inspection Checklist (6 pages)
3. Kansas Pretreatment Permit (16 pages)
4. Data Transmittal Packet for Activity HML2408 (11 pages)
5. NOPF (1 page)