

REPORT OF INDUSTRIAL USER COMPLIANCE SAMPLING INSPECTION

**AT
Extrusions Inc.
2401 S. Main
Fort Scott, Kansas 66701**

KANSAS PRETREATMENT PERMIT: KSP000008

**BY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

**Enforcement and Compliance Assurance Division
January 18, 2023**

INTRODUCTION

I conducted an Industrial User Compliance Sampling Inspection at Extrusions Inc., in Fort Scott, Kansas, on January 18, 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

Extrusions Inc.:

Brian McGowen, General Manager (620) 223-1111

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Tracy Smith, EHS/Human Resources

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Tim Allen, Anodizing Manager

U. S. Environmental Protection Agency (EPA)

Joe Heafner, Life Scientist (913) 551-7091

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Caitlin Dix, Physical Scientist

FACILITY DESCRIPTION

Extrusions Inc. extrudes aluminum billets into various aluminum products. The operations consist of taking 1-ton aluminum billets, cutting the billets to a more usable size, heating the billet, and then extruding the aluminum through various dies to form the desired shape. The extruded aluminum then is cleaned and etched through an anodizing process, milled for further processing, and/or sent through a powder coating paint process. All process wastewater from the paint line and anodizing line is pumped to a neutralization tank, where pH is adjusted then process wastewater is discharged to the

city of Fort Scott's Wastewater Treatment Facility (WWTF). Process wastewater from the die cleaning process is piped to the neutralization tank. This facility is subject to the Aluminum Forming Standard for Existing Sources, 40 CFR Part 467.35.

INSPECTION PROCEDURES

I arrived at the facility on January 18, 2023 at 8:45 a.m. and introduced myself, then presented my credentials to Ms. Smith. Ms. Smith stated that she had a family emergency come up that morning and stated that Mr. McGowen and Mr. Allen would help me during the inspection. I explained the purpose and procedures of the inspection. I explained I would complete a full walkthrough inspection of the facility, complete a record review as necessary, and collect samples. During my inspection, I completed the Region 7 Industrial User Inspection Checklist (attachment 1). Fourteen photos were also taken during the inspection (attachment 2).

SAMPLING PROCEDURES:

On January 18, 2023, I collected grab samples of the facility's wastewater from the west end of the neutralization tank. Samples taken were to be analyzed for Metals and Oil and Grease. The temperature and pH analyses were performed immediately on site. The tank drains into a line that acts as Outfall 001. The tank is typically drained two to three times per week, depending on production, in individual batches.

All samples collected were packed in ice then hand delivered 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 Extrusions Inc. became effective on January 1, 2022, and will expire December 31, 2026 (attachment 3). The permit requires the facility to monitor its effluent for flow, pH, metals (chromium and zinc), Oil and Grease (O&G), and cyanide. Numerical limitations on those parameters are based on the production at the facility. The facility's Discharge Monitoring Report (DMR) is designed to calculate limits based on the actual production for the day samples are collected. 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 on a semi-annual basis, by January 28 and July 28 of each year.

Mr. Allen described that the cleaning and anodizing operation uses different cleaning tanks and rinsing tanks to prepare the aluminum for the anodizing process. He stated that all the extruded aluminum that goes through the anodizing process is sent through all six etching baths and rinses. He stated that all process wastewater from the tanks is sent through the neutralization tank before being discharged to the WWTF. During the inspection, Mr. Allen explained that the facility has not changed any chemicals since the last EPA inspection (December 11-13, 2019). I reviewed copies of the Safety Data Sheets and noted that the cleaners were a combination of strong acids (Sulfuric acids; pH of less than 2) and strong bases (sodium hydroxides; pH greater than 13).

2. Discharge Monitoring Reports (DMRs): I reviewed the facility's compliance status for the years 2020-2022. The facility provided me their monthly operating reports from January 2020 through December 2022. The facility performs a quarterly analysis of their wastewater and uses those numbers to calculate each month's discharge values for that quarter. I did not observe any exceedances of the facility's regulated limits. After the review, I placed the monthly operating reports into the ECAD electronic file system.

3. Water Balance: An accurate water balance was achieved during the inspection. The facility utilizes one source of water (City of Fort Scott); however, the facility receives that water via two separate water mains. One water main is connected to the anodizing and paint lines while the other is connected to the die cleaning and the office area/sanitary wastewater. All process wastewater generated by the facility is sent through the neutralization tank before being discharged to the city. I determined the facility receives an average of 260,000 gallons per month, with the average monthly discharge from the neutralization tank being approximately 200,000 gallons per month. The facility also has three cooling towers which consume approximately 500 to 600 gallons per day. With 100 employees using an average of 15 gallons per day, the balance of water can be accounted for through evaporation due to the high temperatures of process water used in the etching processes.

4. Total Toxic Organics: The facility permit allows for the monitoring of O&G in lieu of monitoring to Total Toxic Organics (TTOs). The facility monitors for O&G on a quarterly basis and results are submitted on the monthly DMRs.

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

Sample Results For Anodizing/Extrusions Inc., mg/l, lbs/d

	Flow	Cr, lb/d		CN		O&G, lb/d		Zn, lb/d		pH (s.u.)	
		Dmax	Mavg	Dmax	Mavg	Dmax	Mavg	Dmax	Mavg	Min	Max
Outfall 001		0.019	0.008	0.01	0.004	0.51	0.51	0.052	0.022	5	10
	lbs 0.01098MGD	0.0038		No CN		ND		0.0064		6.42	
				taken							
Result:		C				C		C		C	

Permit limits were based on the production and the sample taken on January 18th. The EPA's sample results indicate the facility was in compliance for the sampling event from January 18, 2023.

As part of my inspection, I collected a sludge sample from the Ft. Scott WWTF. The results can be found in attachment 4.

6. Treatment System: The facility has a very basic treatment system that consists of one above ground holding tank that is used for pH treatment as needed. Process waste waters are generated when the facility empties the different etching tanks from the etching process. Prior to discharge to the Ft. Scott WWTF, the facility tests the pH and adjusts it as needed to keep within the permit limits. The tank has aerators in it to keep the solids suspended and to maintain a good mixture of the wastewaters and any pH adjustment added.

7. Facility Sampling Procedure: Also, while conducting my sampling event I discussed the sampling location with Mr. Allen. Mr. Allen explained that the facility had always taken samples directly from the treatment tank. Mr. Allen explained that he takes grab samples from the top of the treatment tank and submits them for analysis. During the inspection, I noted that this appears to be the best way to collect samples before discharging to the sanitary sewer system.

The facility's lab is certified by the Kansas Department of Health and Environment for on-site analysis of pH. The lab certification number is E-92420.

8. Summary:

Extrusions Inc, did not exceed permit limits for the time reviewed during the inspection (January 2020 – December 2022)

EPA sampling during the inspection, indicated that the facility did not violate effluent limits for January 18, 2023. Effluent limits were calculated for the day of sampling.

**JOSEPH
HEAFNER**

Joe Heafner
Life Scientist

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**NICOLE
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Nicole Moran
Section Chief

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Attachments:

1. Region 7 Industrial User Inspection Checklist (6 pages)
2. Photos and Photo Log (9 pages)
3. Kansas Pretreatment Permit (15 pages)
4. Data Transmittal Packet for Activity JAH2306 (16 pages)