



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

Name of industry and location:

Emit Technologies
2571 North Main Street
Sheridan, WY 82801

Control Authority / NPDES Permit No.

City of Sheridan
NPDES Permit No. WY-0020010

IU – NPDES ID

WYPU00104

Date of visit:

November 7, 2023

Approximate Time of visit:

0945 – 1115

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

Al Garcia, garcia.al@epa.gov
Stephanie Passarelli, passarelli.stephanie@epa.gov

City of Sheridan:

- Brian Edwards, bedwards@sheridanwy.gov

General Facility Information:Representatives at Inspection:

- Michelle Wilson – Chief Operating Officer, mwilson@emittechnologies.com
- Casey D. Osborn – Chief Executive Officer, cdosborn@emittechnologies.com
- Scott Kirschner – Asset Manager, skirschner@emittechnologies.com (not present at inspection but copied on report)
- Travis McFadden – Logistics Manager
- Justin McIntosh – Coatings Supervisor

Type of Business Operations:

- Natural Gas Compression Equipment Manufacturing, Structural Steel and Contact Manufacturing per customer specifications. Facility operations include machining, fabrication, TIG/MIG welding, wet paint booths, part cleaning/degreasing and powder coat, and mechanical assembly.

Facility Information:

- About 120 total employees, 75 employees in the manufacturing shop
- five days/week, (Monday through Friday) occasional Saturdays.
- 8-hour shift (6:30 a.m. to 2:30 p.m.) night shift – 2 employees operating press brake

Inspection Description:

Al Garcia and Stephanie Passarelli from the U.S. Environmental Protection Agency (EPA) and Brian Edwards from the City of Sheridan (City) conducted an industrial user (IU) inspection of the Emit Technologies facility (facility) located on 2571 North Main Street, Sheridan, WY 82801. The IU inspection was conducted as part of

the EPA evaluation of the City's Publicly Owned Treatment Works (POTW) and the need for an 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 November 7, 2023 at approximately 9:45 a.m., Al Garcia and Stephanie Passarelli 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 2571 North Main Street; Sheridan WY 82801 is a manufacturing facility of natural gas compression equipment, emission control equipment, catalytic converters, structural steel and contact jobs per customer specifications. The Google Maps view of the facility is shown in Figure 1.

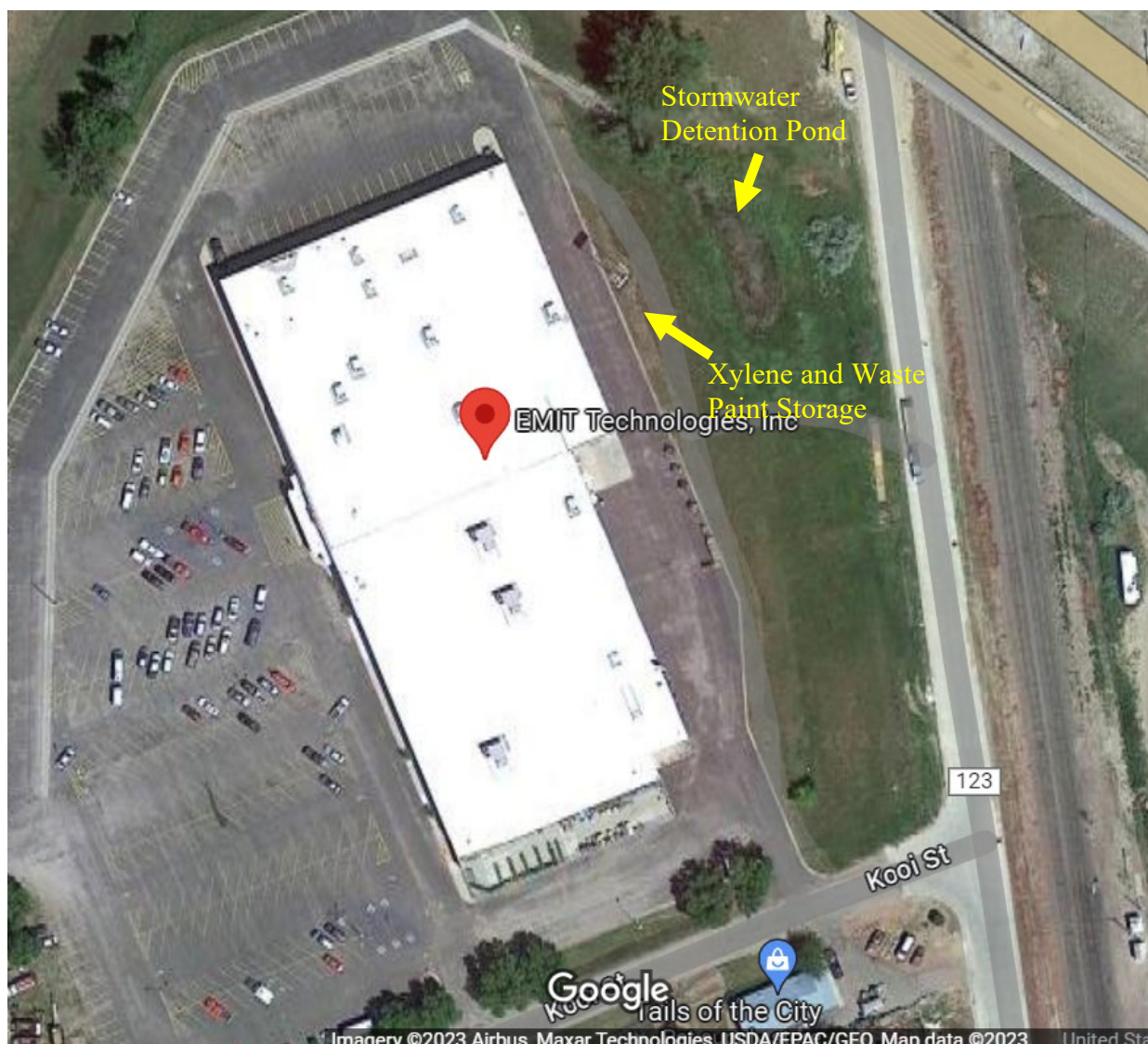


Figure 1 – Emit Technologies-Google Maps View

Chemical and Raw Materials Storage –

The raw materials and chemicals are received on the Northeast side of the building and are either stored outside or transported into the facility. The structural steel received at the facility is stored outside, and the received sheet metal, tube and pipe are transported inside for staging/storage and storage or loading onto a palletizing cassette system for the CNC machines. The acid and sealant supply totes are stored next to the acid wash system for use and backup supply totes are contained in a storage warehouse. The wet and powder coat paint are stored next to the painting operations.

Two 55-gallon barrels of xylene are stored outside next to the waste paint collection barrels located outside on the northeast side of the building, as noted in Figure 1. Based on observations of the inspection, the supply xylene barrel has a spout for the facility to transfer into 5-gallon buckets and transport across the receiving parking lot and inside the building to the wet paint area. The facility uses old supply xylene barrels for waste paint collection and four barrels of waste paint collection are in this area (Emit Technologies Photolog – photos #116 and 117). In addition, the wet paint is collected in 5-gallon buckets to evaporate outside in the storage area. During the inspection, there were about 15 uncovered buckets, with wet paint at varying levels to evaporate. These buckets were not closed or stored within a covered roof and are exposed to the elements. The supply xylene and waste paint collection location is not equipped with containment for spills/leaks and is located about 50 feet from the stormwater detention pond (Emit Technologies Photolog – photo #118).

Manufacturing operations –

The facility has two CNC machining processing areas for sheet metal and tubes. The raw materials are loaded onto a palletized cartridge system for laser cutting. These machines are automatically loaded and can be run on the day and the night shifts. The cut parts are formed in the two robotic press brakes or the manual presses. Depending on the part, they may be sent to the welding stations, the painting operations or mechanical assembly.

The facility has about 18 welding stations and performs both TIG/MIG welding. The gases used in the welding stations are stored in a central location and the individual gas bottles are moved to the stations. The welded parts are painted either in the wet paint booths or the powder coat booth, depending on the part. The facility has two wet paint booths using primarily solvent-based paints and some water-based paint. The paint is mixed in the mixing station, located next to the paint booths. The facility uses primarily black or grey paint, and the hoses, guns and tips are cleaned using xylene during color changes. The waste xylene is kept in the 5-gallon buckets and stored outside the waste paint collection area to evaporate, and the sludge/residue is poured into the 55-gallon waste paint barrels. The painted parts are sent to the mechanical assembly operation, which does not generate process wastewater, according to Mr. Osborn. After assembly, the parts are palletized and shipped.

The parts to be powder coated are transported to the powder coating area, located on the southeast side of the manufacturing floor. The powder coating operation consists of a conveyORIZED system in which the parts are hung. The conveyor passes through a 4-stage phosphate cleaning line, a powder coat booth, and a curing oven. The 4-stage phosphate cleaning line was installed in the past year, according to Mr. McIntosh. The phosphate cleaning line consists of the four stages and each stage has a sump that supplies spray nozzles located in the stage to coat/rinse the part as it is flowing through the stage on the conveyor system. The sprayed chemical or rinsewater from the parts are collected in the sump, dedicated for that stage. The four stages of the phosphate coating line are detailed below:

1. Phosphoric Acid Coating: Bulk Bond 777M, 1,750-gallon sump (Emit Technologies Photolog – photo #121)– discharged to the City sewer when spent, about every 6 months. Note: the acid is stored in a 250-gallon tote, located on the backside of the stage 1 acid sump and within 25 feet of the trench drain (Emit Technologies Photolog – photo #120)

2. Rinse Water, 650-gallon sump– continuous overflow to the City sewer (Emit Technologies Photolog – photo #122)
3. Rinse water, 650-gallon sump– continuous overflow to the City sewer (Emit Technologies Photolog – photo #124)
4. Chrome-free Sealant: E-CLPS 1700 RA, 650-gallon sump (Emit Technologies Photolog – photo #125)– discharged to the City sewer when spent, about every 6 months. Note: the sealant is stored in a 250-gallon tote, located on the backside of the stage 4 sealant sump and within 25 feet of the trench drain (Emit Technologies Photolog – photo #119)

Based on observations during the inspection, there is no treatment of the rinse and spent chemical (phosphoric acid and sealant) wastewaters prior to discharge to the trench drain leading to the City sewer system.

During the inspection, it appears that the sealant and acid 250-gallon totes are within 25 feet of the trench drain without spill containment. In addition, bleach bottles and other chemicals were observed stored above the floor drain (Emit Technologies Photolog – photo #123). According to Mr. McIntosh, the water used in the 4-stage phosphate coating line is water treated by reverse osmosis (RO). The RO treatment system is located near the powder coat booth. The RO treatment is a series of two large cartridges. These cartridges are changed out by the manufacturer when spent. The parts move along the conveyor from the 4-stage phosphate cleaning/degreasing line to be powder coated in a booth and cured in a curing oven. The powder coated parts are then moved to the assembly area, palletized and shipped.

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 in the 4-stage phosphate cleaning line is a core Metal Finishing operation [ref: 40 C.F.R. § 433.17]. Because the facility has a core Metal Finishing operation, the machining, painting, welding and assembly operations are ancillary Metal Finishing operations and wastestreams generated from these operations are subject to the Metal Finishing Categorical Standards, if they are discharged to the City.

EPA Role as the Control Authority

The City of Sheridan does not currently have an EPA-approved Pretreatment program and therefore, the EPA is serving as the Control Authority in collaboration with the City until the City develops a Pretreatment program and submits to the EPA for approval.

Summary of Findings

Emit Technologies
NPDES ID# WYPU00104
November 7, 2023

Pretreatment Inspection Findings	Follow up Action Items
1. The process wastewater discharged from Emit Technologies are subject to the Metal Finishing Pretreatment Standards for new sources found in 40 C.F.R. § 433 and found in the following table. In addition, Emit Technologies is classified as a categorical industrial user and is also subject to the monitoring, reporting, notification and	<u>Pretreatment Requirements</u> 40 C.F.R. § 433.17 40 C.F.R. § 403.12

recordkeeping requirements found in the Pretreatment Regulations found at 40 C.F.R. § 403.12.

Pollutant	Daily Maximum (mg/L)	Monthly Average (mg/L)
Cadmium	0.11	0.07
Chromium	2.77	1.71
Copper	3.38	2.07
Lead	0.69	0.43
Nickel	3.98	2.38
Silver	0.43	0.24
Zinc	2.61	1.48
Cyanide	1.20	0.65
Total Toxic Organics (1)(2)	2.13	---

- (1) In lieu of requiring monitoring for TTO, the permitting authority (or, in the case of indirect dischargers, the control authority) may allow dischargers to make the following certification statement: “Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the permitting [or control] authority.”

In requesting the certification alternative, a discharger shall submit a solvent management plan that specifies to the satisfaction of the control authority the toxic organic compounds used; the method of disposal used instead of dumping, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

Corrective Action Item

Ensure compliance with the Metal Finishing Pretreatment Standards for New Sources and the monitoring, reporting, notification and recordkeeping requirements in the Pretreatment Regulations. (*Note: the monitoring and reporting requirements are identified in the following corrective action items.*)

2. **Baseline Monitoring Report:** The Pretreatment Regulations at 40 C.F.R. § 403.12(b) requires the facility to submit to the Control Authority a baseline monitoring report at least 90 days prior to commencement of discharge. The facility is required to include the following information, including information on the method of pretreatment necessary to meet applicable pretreatment standards.

- a. Identifying information. The User shall submit the name and address of the facility including the name of the operator and owners.
- b. Permits. The User shall submit a list of any environmental control permits held by or for the facility.
- c. Description of operations. The User shall submit a brief description of the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by such Industrial User. This description should include a schematic process diagram which indicates points of Discharge to the POTW from the regulated processes.
- d. Flow measurement. The User shall submit information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from each of the following:
 - i. Regulated process streams; and
 - ii. Other streams as necessary to allow use of the combined wastestream formula found in 40 C.F.R. § 403.6(e).
 - iii. The Control Authority may allow for verifiable estimates of these flows where justified by cost or feasibility considerations.
- e. Measurement of pollutants.
 - i. The user shall identify the Pretreatment Standards applicable to each regulated process.
 - ii. In addition, the User shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the Standard or Control Authority) of regulated pollutants in the Discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations. In cases where the Standard requires compliance with a Best Management Practice or

Pretreatment Requirements

40 C.F.R. § 403.12(b)

Corrective Action Item

Submit the baseline monitoring report to the Control Authority.

pollution prevention alternative, the User shall submit documentation as required by the Control Authority or the applicable Standards to determine compliance with the Standard.

- iii. The User shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this paragraph.
 - iv. Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the User should measure the flows and concentrations necessary to allow use of the combined wastestream formula of 40 C.F.R § 403.6(e) in order to evaluate compliance with the Pretreatment Standards.
 - v. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto.
 - vi. The Control Authority may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures.
 - vii. The baseline report shall indicate the time, date and place, of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant Discharges to the POTW.
- f. Certification. A statement, reviewed by an authorized representative of the Industrial User and certified to by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O and M) and/or additional Pretreatment is required for the Industrial User to meet the Pretreatment Standards and Requirements; and
- g. Compliance schedule. If additional pretreatment and/or O and M will be required to meet the Pretreatment Standards; the shortest schedule by which the Industrial User will provide such additional pretreatment and/or O and M. The completion date in this schedule shall not be

later than the compliance date established for the applicable Pretreatment Standard.	
3. 90-Day Compliance Report: The Pretreatment Regulations at 40 C.F.R. § 403.12(c) requires the facility to submit to the Control Authority a 90-day compliance report following commencement of the introduction of wastewater into the POTW containing the information above in paragraphs 2(d)-<i>Flow Measurement</i>, (e)-<i>Measurement of Pollutants</i> and (f)-<i>Certification</i>.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.12(c) <u>Corrective Action Item</u> Submit the 90-Day Compliance report to the Control Authority.
4. Self-Monitoring Compliance Report: The Pretreatment Regulations at 40 C.F.R. § 403.12(e)(1) requires the facility subject to a categorical Pretreatment Standard and after commencement of the discharge into the POTW to submit to the Control Authority during the months of June and December, unless required more frequently by the Control Authority, a report indicating the nature and concentration of pollutants in the effluent which are limited by such categorical Pretreatment Standards. In addition, this report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the discharge.	<u>Pretreatment Requirements</u> 40 C.F.R. § 403.12(e)(1) <u>Corrective Action Item</u> Submit self-monitoring reports to the Control Authority.
5. Slug Discharge Control Plan: A slug discharge is 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. Significant Industrial Users are required to notify the POTW immediately of any changes at its facility affecting potential for a Slug Discharge. If the Control Authority determines that a slug control plan is needed, the plan shall contain, at a minimum, the following elements: - Description of discharge practices. - Description of stored chemicals. - Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition as identified in this chapter with procedures for follow-up written notification within five days. - If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plans site	<u>Pretreatment Requirement</u> 40 C.F.R. § 403.8(f)(2)(vi) <u>Corrective Actions</u> Develop a slug discharge control plan to describe discharge practices, stored chemicals, procedures to minimize or prevent accidental spills and non-routine batch discharges from impacting the POTW.

runoff, worker training, building and containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

Based on observations during the IU inspection, the facility has a potential for spills from the 250-gallon acid and sealant chemical totes located next to the 4-stage phosphate cleaning line to reach the trench drain and enter the City sewer. During the inspection, it was observed that the facility stores bleach and other chemicals stored directly above the trench drain leading to the City's POTW. In addition, the facility discharges the 1,750-gallon stage 1 acid tank and the 650-gallon stage 4 sealant tank to the City sewer.

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	11/13/2023
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	11/22/2023
Supervisor Signature/Name	Address/Phone Number	Date
Michael Boeglin	U.S. EPA Region 8 1595 Wynkoop Street 8WD-CWW Denver, Colorado 80202 303-312-6250	11/29/2023