

REPORT OF INDUSTRIAL USER COMPLIANCE EVALUATION INSPECTION

AT

Merrill Manufacturing
309 NE 1st Street
Alta, IA 51002

BY THE

U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

May 16, 2023

INTRODUCTION

I conducted an Industrial User Compliance Evaluation Inspection at Merrill Manufacturing in Alta, Iowa, on May 16, 2023, in conjunction with a Compliance Sampling Inspection at the City of Alta Wastewater Treatment Facility (WWTF) (separate report). 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

Merrill Manufacturing:

James Tiedman, Supervisor (641) 425-1931
Adam Olson, Plant Manager (712) 266-3556
Email: adam.olson@merrillmfg.com

Alta WWTF

Brad Pedersen, Wastewater Superintendent/Operator (712) 299-1638
Email: pedersen@alta-tec.net

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

Joe Heafner, Life Scientist (913) 551-7091
Email: heafner.joseph@epa.gov

FACILITY DESCRIPTION

Merrill Manufacturing assembles frost free water hydrants for a variety of uses then prepares the hydrants for powder coat paint. Parts are ran through a 3-stage parts washer then are powder coated. Process wastewater generated at the facility is discharged to the City of Alta WWTF. There is no treatment before being discharged other than pH adjustment as needed.

This facility is classified as subject to the Metal Finishing Point Source Category, 40 CFR Part 433, because of the metal finishing process.

INSPECTION PROCEDURES

Staff from the City of Alta notified personnel on Monday, May 15, 2023, that we would be inspecting the facility on Tuesday, May 16, 2023, at approximately 8:30 a.m. Mr. Pedersen and I arrived at the facility at approximately 8:30 a.m. of May 16, 2023, I introduced myself, presented my credentials, and explained the purpose and procedures of the inspection. Staff present including Mr. Tiedman, who showed me the production area including the wastewater treatment facility. I completed the Region 7 inspection checklist (attachment 1). I took six photographs during the inspection (attachment 2).

FINDINGS AND OBSERVATIONS

1. Treatment Agreement: Merrill Manufacturing is a significant industrial user that discharges process wastewater to the Alta WWTF according to the City's National Pollutant Discharge Elimination System (NPDES) permit (IA-0024449) (attachment 3). The permit requires the facility to monitor its effluent for flow, pH, metals (Cadmium, Chromium, Copper, Lead, Nickel, Silver, and Zinc), Cyanide, Total Toxic Organics (TTOs) and Oil and Grease. The permit also places numerical limitations on those parameters. The NPDES permit states that the facility is to report all testing to the City of Alta which will then report to the Iowa Department of Natural Resources on a monthly basis.

2. Treatment Process: Mr. Tiedman described the treatment process at the facility. Mr. Tiedman stated that facility utilizes three tanks. The 1st tank (700 gallons) utilizes an iron phosphate chemical wash to pre-treat the parts. The second tank (430 gallons) is a rinse made up of city water. The third tank (430 gallons) utilizes a sealer (rust prevention) chemical before the parts are sent to the powder coat line. See attachment 4 for a flow diagram of the system. Mr. Tiedman stated that the tanks are cleaned out on an as needed basis. The NPDES permit requires that the facility notify the city any time before the cleanout occurs so that sampling can be conducted. Overflow from each tank is piped to a trough that leads to the sanitary sewer system. Sampling is performed on a monthly basis by city personnel. Mr. Tiedman stated that the system is ran approximately two times per month or on an as needed basis.

3. Discharge Monitoring Reports (DMRs): I was able to review the Monthly Operations Reports (MORs) from January 2019 through March 2023 and collected an electronic copy of the MORs reviewed. The reviewed DMRs indicated that there were no violations of the effluent limits set in the NPDES permit. After completing the inspection, I placed a copy of the electronic MORs within the ECAD electronic file system.

4. Water Balance: An accurate water balance was able to be achieved during the inspection. During the inspection, I requested water usage records for 2022 and 2023. Mr. Tiedman stated that when the wastewater system is running, it can be metered. He provided the water usage for the system for 2022 and 2023. Mr. Pedersen also provided the total water usage for the facility during 2022 and 2023. I noted that parts washer utilized approximately 4700 gallons per month, while domestic water usage made up the remainder of total usage by the facility.

5. Total Toxic Organics: The facility can certify compliance with the Metal Finishing limit established for Total Toxic Organics providing a statement that TTOs are not used in the facility. This statement is provided to the city and submitted with the monthly operation reports. During the inspection, I did not observe any solvents within the facility. Mr. Tiedman stated that the powder coating paint operation does not require the use of solvents. I also observed that there are no floor drains within the manufacturing area that would allow solvents to enter the sanitary sewer system.

6. Summary: Merrill Manufacturing discharges process wastewater to the City of Alta sanitary sewer system and is subject to limits set in the NPDES permit for the City of Alta.

No effluent violations were noted during the review of data provided by the city on the DMRs.

The process wastewater system is only used on a bi-monthly basis as needed. The facility was not discharging at the time of the inspection.

**JOSEPH
HEAFNER**
Joe Heafner
Life Scientist

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**Moran,
Nicole**
Nicole Moran
Section Chief

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Attachments:

1. EPA Industrial User Inspection Checklist (6 pages)
2. Facility photos and photo log (7 pages)
3. Alta IA NPDES Permit (23 pages)
4. Treatment flow diagram (1 page)