REPORT OF COMPLIANCE SAMPLING INSPECTION (CSI)

AT
Albaugh LLC
4900 Packers Avenue
St. Joseph, MO 64504

NPDES NO: MO-0103705

February 8-9, 2023

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

INTRODUCTION

I performed a Compliance Sampling Inspection (CSI) at Albaugh LLC in St. Joseph, Missouri from February 8, 2023, through February 9, 2023. The inspection was authorized by Section 308(a) of the Federal Water Pollution Control Act, as amended. This narrative report presents the findings of the inspection.

PARTICIPANTS

Albaugh LLC
- Russ Epperson, EHS Manager
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- Valerie Murawski, Environmental Lead
  - Email: valeriem@allbaughllc.com

Missouri Department of Natural Resources
- Karla Pierce, Environmental Section Chief
- Olivia Jackson, Environmental Unit Chief

U. S. Environmental Protection Agency (EPA)
- Joe Heafner, Life Scientist (913) 551-7091
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PROCEDURES

On February 8, 2023, I arrived, unannounced and informed the security officer that I would like to speak with the person with knowledge of the environmental affairs of the facility. The security officer contacted Mr. Epperson. Mr. Epperson came to the security office and I informed him that I would be conducting a sampling inspection at the facility. After being cleared by security, we proceeded to a conference room. I then re-introduced myself, presented my credentials, and explained the purpose and procedures of the inspection. These procedures included completing a comprehensive inspection which would include a facility walk-through with photos (attachment 1), a check of the self-monitoring records, and the collection of samples from Outfalls 001, 005, and an exit interview.

On February 8, 2023, and February 9, 2023, I collected grab samples of the effluent at the effluent structure at Outfall 001. I collected the effluent using clean, pre-labeled containers for the analysis of Non-Filterable Solids (NFS), Iron, Oil and Grease, Dicamba, and 2,4-Dichlorophenoxyaceitic Acid (2,4-D). I measured the pH and temperature using a field meter.

Outfall 005 was not discharging on February 8, 2023, however, it was discharging on February 9, 2023. Grab samples were taken from Outfall 005 and analyzed for NFS, Settleable Solids, Dicamba, and 2,4-D on February 9, 2023.

I placed the samples I collected on ice in an ice chest, sealed the container and hand delivered the samples to the EPA Region 7 Science and Technology Center (STC) for analysis on February 9, 2023. I followed Region 7's LSASD standard operating procedures in the collection, packaging, transportation, and handling of the samples. Field Sheets and Chain of Custody forms were electronically submitted each day following Region 7 procedures.

FACILITY DESCRIPTION

The Albaugh LLC facility formulates and packages agrochemical crop protection products. The Standard Industrial Classification is #2879. The physical address of the facility is 4900 Packers Avenue, Saint Joseph, MO 64504. The facility's corporate office and mailing address is 1525 NE 36th Street, Ankeny, IA 50021. The facility has two discharge outfalls. A description of the discharge for each outfall is listed below.

Outfall 001: Process wastewater discharged through Outfall 001 consists of steam condensate, RO reject water, incidental overflow from a cooling tower, single-pass heat exchanger, air compressor blowdown, and stormwater from the north end of the facility. See attachment 2 for a flow diagram of all process wastewater discharges through Outfall 001. Outfall 001 discharges to a tributary that is locally known as Brown's Branch which then discharges to the Missouri River. The design flow from Outfall 001 is 0.415 million gallons per day (MGD). Actual flow is approximately 0.228 MGD.

Outfall 005: Stormwater from the southwestern portion of the facility discharges through Outfall 005. Stormwater discharges into Brown's Branch then into the Missouri River. Flow from the Outfall is dependent on precipitation.

Stormwater from the east third of the facility (see attachment 2) discharges to the City of St. Joseph's Combined Sewer System.

The facility also has an on-site wastewater treatment facility that discharges to the South Saint Joseph Industrial Sewer District before being sent to the Saint Joseph Wastewater Treatment Facility. The on-site wastewater treatment facility is only utilized when the facility running their glyphosate line. The on-site system was not running at the time of the inspection.

The WWTF's National Pollutant Discharge Elimination System (NPDES) Permit MO-0103705 was issued on October 1, 2018 (attachment 3**)**. The permit expires on June 30, 2023. Albaugh submitted a renewal application for the NPDES permit in December 2022.

REGULATED HISTORY

MDNR sent a Letter of Warning (LOW) on July 12, 2022, for Iron effluent limit violations. MDNR conducted a Compliance Assistance Visit (CAV) on August 3, 2022, concerning the effluent violations (attachment 4).

Albaugh LLC, responded to the LOW and CAV by stating that "Albaugh has tested all the contributing sources to the outfall with the exceedance of iron. It was found that the iron is solely present in the ground water pulled from the well. Albaugh utilizes well water as non-contact cooling water for a dilution process of a raw material. Albaugh has taken several steps to address the issue. Albaugh has reduced the flow from the well, researched filtration options (greensand, etc.), explored switching the well water to city water, and currently looking at a closed loop cooling system using well water instead of the single pass with city water."

FINDINGS AND OBSERVATIONS

The following findings were noted during the plant and record review. These findings were discussed with Mr. Epperson and Ms. Murawski during the exit meeting.

Self-Monitoring Data Review:

I obtained a spreadsheet of the NetDMR data for the Albaugh LLC from January 2019, through December 2022, and reviewed the data. During the inspection, I also obtained an electronic copy of the facility's Discharge Monitoring Reports for the years 2019 – 2022. Based on the review of the DMRs submitted, the facility has violated the Iron effluent limits for Outfall 001 from October 2021 through July 2022, and from October 2022 through December 2022. I did note that the violations were a combination of daily limits and monthly averages.

During the exit briefing, I provided to Mr. Epperson a Notice of Preliminary Findings (NOPF) that included the reported effluent violations at Outfall 001(attachment 5). Mr. Epperson provided a response to the NOPF on which he stated that Albaugh has explored many options to reduce and eliminate the effluent violations. He also stated that the facility has decided to use water purchased from the City of St. Joseph for the non-contact cooling water, therefore reducing use of the on-site well, which they believe is the source of the high Iron.

Sample Results

The analytical results from the inspection were received on March 13, 2023, from the Region 7 STC laboratory. This data was not discussed during the exit interview. The analytical results for Outfalls 001 and 005 are presented in Tables 1A and 1B. See attachment 6 for the analytical data packet.

Table 1A: Analytical Results for Effluent Samples Collected During Inspection for Outfall 001

Parameter	(February 8) Sample # 2300051-1	(February 9) Sample# 2300051-02	Concentration Permit Limits[2]
NFS (mg/L)	7.70	62.8	100
Iron (ug/L)	3070	3350	1643/819
Oil and Grease (mg/L)	ND	ND	15/10
Dicamba (ug/L)	0.22	37	NA
2,4-D (ug/L)	3.0	450	NA
Temperature (°C)[1]	11.3	6.4	32.22
pH[1]	6.85	6.67	6.5 – 9.0
Flow in MGD	NA	NA	NA

[1] °C = degrees Celsius, pH is not to be averaged, pH and temperature was measured in the field.
[2]Permit limits are the Daily Maximum followed by the Monthly Average.

Table 1B: Analytical Results for Effluent Samples Collected During Inspection for Outfall 005

Parameter	(February 9) Sample # 2300051-04	Benchmarks
NFS (mg/L)	ND	100
Settleable Solids (mL/L/hr)	ND	1.5
Dicamba (ug/L)	0.54	NA
2,4,D (ug/L)	30	NA
Temperature (°C)[1]	3.6	NA
pH[1]	6.82	6.5 – 9.0
Flow in MGD	NA	NA

[1] °C = degrees Celsius, pH is not to be averaged, pH and temperature was measured in the field.
[2]Permit limits are the Daily Maximum followed by the Monthly Average.

Based on the sampling data, the facility violated the daily effluent limits for Iron at Outfall 001 for February 8, 2023, and February 9, 2023.

Laboratory

Albaugh LLC utilizes the Pace Analytical network of laboratories for all of its regulatory analysis. After the completion of the inspection, Ms. Murawski provided the Analytical Data Sheets provided by Pace Analytical for the years 2020 – 2022. I reviewed the data sheets and compared them with the Discharge Monitoring Reports and noted that there was consistency between the data sheets and DMRs. During the inspection, I also reviewed the data sheets to ensure that all sample analysis performed conforms with the NPDES permit and Chapter 40 Part 136 of the Federal Code of Regulations (40 CRF Part 136). I noted that Albaugh LLC was asking that Total Residual Chlorine be analyzed by the laboratory and that the laboratory was noting that the analyte was being analyzed outside established holding times. 40 CFR Part 136 Table II requires that Total Residual Chlorine analysis is conducted within 15 minutes of the sample being collected. During the exit briefing, I issued Albaugh a NOPF for not having Total Residual Chlorine analyzed within 15 minutes of collection as required. In Albaugh's response to the NOPF, it stated that Albaugh has changed its procedures and will now analyze Total Residual Chlorine on site within 15 minutes of collection. After completing my review, I placed the laboratory data sheets within the ECAD electronic file system.

Stormwater Pollution Prevention Plan (SWPPP)

The NPDES Permit does require that the facility have an SWPPP. During the inspection, I did a general review of the SWPPP and SWPPP documents that were available. After the inspection, Ms. Murawski provided a complete copy of the SWPPP. After reviewing the complete copy of the SWPPP, I placed the copy into the ECAD electronic file system. A partial copy of the SWPPP is provided as attachment 7. The last review and substantial update to the SWPPP by the facility was in 2018. I reviewed the SWPPP during the inspection and after the completion of the inspection and found that the SWPPP meets the requirements of the NPDES permit.

The SWPPP and permit require monthly routine inspections of the stormwater structures and best management practices implemented by the facility. During the inspection, I reviewed inspection records from 2020 through the present. After the completion of the inspection, Ms. Murawski provided electronic copies of the inspection reports reviewed. I again reviewed the inspection reports, then placed them in the EPA Region 7 ECAD electronic file system.

During the inspection, I noted that inspections in December 2022 and January 2023 had not occurred. During the inspection, Ms. Murawski stated that this was an oversite on her part that the inspections were not completed as required. I also noted during the inspection review that when deficiencies were noted during a monthly inspection, corrective actions taken to address the deficiency were not documented. During the exit briefing, I issued a NOPF for not completing the monthly inspections and for not documenting the corrective actions taken to correct any deficiencies as required by the SWPPP and permit. Albaugh LLC responded to the NOPF by stating that the facility has changed its procedures to ensure that monthly inspections and the documentation of corrective actions taken as required.

The SWPPP also requires that the facility maintain records of all SWPPP trainings that the facility has performed. I reviewed the training records for the facility during the inspection and noted that they were complete in accordance with the SWPPP and the permit. After the completion of the inspection, Ms. Murawski provided copies of the SWPPP training roster that was conducted in 2020 through 2022. After my review, I placed the SWPPP training records that were provided into the ECAD electronic file system.

Operational Issues and Observations

During the facility tour, I observed the stormwater flow paths throughout the facility and the three permitted stormwater outfalls (photos 1-9). I noted that stormwater runoff from the east third of the facility flows east and is collected by the City of St. Joseph's combined sewer system (attachment 2). Stormwater from the west two-thirds of the facility flows through stormwater conveyances throughout the facility and discharge through either Outfall 001 or 005 (attachment 2).

While observing Outfall 001, I noted a large amount of foam that was forming at the sampling point (photo 2, 4-5). Mr. Epperson and Ms. Murawski both stated that they had not seen this

foam at Outfall 001 before. They both stated that Albaugh would investigate the foaming. I did note that process wastewater and stormwater discharges through Outfall 001. I also noted that between February 8 and February 9 the St. Joseph area received up to 4 inches of snow. On February 9, 2023, the snow was actively melting and contributing to stormwater being discharged through Outfall 001. Little to no foam was observed on February 9, 2023 at Outfall 001.

On February 8, 2023, I observed Outfall 005 and noted that it was not discharging, however when I returned on February 9, 2023, stormwater associated with melting snow was discharging through Outfall 005.

Summary

The facility has had previous effluent violations for Iron for Outfall 001. Samples taken during the inspection, indicate that the facility violated the Iron limits of the NPDES permit. The facility has recently taken corrective action by changing the source water for the non-contact cooling water which it believes is the biggest contributor to the effluent violations.

The facility was exceeding the holding times established by 40 CFR Part 136 for analyzing Total Residual Chlorine. The facility has changed procedures and will be analyzing Total Residual Chlorine in house and in accordance with 40 CFR Part 136

The facility did not complete SWPPP inspections in December 2022 or January 2023. The facility has changed procedures to make sure that SWPPP inspections are completed as required.

JOSEPH HEAFNER
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Date: 2023.03.27 11:00:56 -05'00'

Joe Heafner
Life Scientist

Moran, Nicole
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Nicole Moran
Section Chief

Attachments:

1. Digital Photographs with Photo Log (6 pages)
2. Facility Maps (4 pages)
3. NPDES permit issued on October 1, 2018 (7 pages)
4. MDNR Documents (4 pages)
5. Notice of Preliminary Findings and Facility Response (3 pages)
6. Laboratory Analytical Report for Activity JAH2308 (18 pages)
7. Partial SWPPP (45 pages)