



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Date: *Dated as shown on electronic signature(s)*

Subj: September 27, 2023, Inspection Report
Clean Water Act - National Pollutant Discharge Elimination System ("NPDES")
Attleboro WPCF

From: David Turin, Environmental Scientist
Water Compliance Section 2

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DAVID TURIN
Date: 2023.11.16
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DAVID TURIN

Thru: Doug Koopman and Grace Beery
Water Compliance Section 2

To: File

I. Facility Information

- A. *Facility Name:* Attleboro Water Pollution Control Facility (WPCF)
- B. *Facility Location:* 27 Pond Street North
Attleboro, MA 02703
- C. *Facility Contacts:* Thomas Hayes, Supt.
Bill Johnson, Asst Supt
- D. *NPDES ID No(s):* WPCF: MA0100595
MSGP: MANOEJ03G
- E. *CWA 311:* SPCC: R1-MA-00175

II. Background Information

- A. *Date(s) of inspection:* September 27, 2023
- B. *Weather Conditions:* Mostly sunny, mid-60s
- C. *US EPA Representative(s):*
David Turin, Grace Beery (trainee)

D. State/Local Representative(s):
David Burns, MassDEP

E. Federally Enforceable Requirements Covered During the Inspection:
CWA 301 and 311

F. Previous Enforcement Actions:
N/A

III. Type and Purpose of Inspection

Evaluation of facility in response to permit violations reported by the facility on its Discharge Monitoring Reports (DMRs)

IV. Facility Description

The facility is an advanced municipal wastewater treatment facility, owned and operated by the City of Attleboro. The facility discharges to the Ten Mile River under NPDES No. MA0100595, issued on June 9, 2008. For several permit cycles of the Multisector General Permit for industrial stormwater (MSGP), which includes a sector that is applicable to municipal wastewater treatment plants, the facility has filed a “No Exposure Certification” (NOE). The facility also stores volumes of oil that require the development and implementation of a Spill Prevention, Control, and Countermeasure (SPCC) plan under CWA Sec. 311.

V. Inspection

I announced my intent to inspect the Facility on September 15, 2023, and provided a specific date for the inspection on Sept 24, 2023.

A. Opening Conference

I arrived at approximately 10 am and after introducing myself and Ms. Beery, I presented my inspector credentials. I explained that the purpose of the inspection was threefold: to evaluate the facility performance under its NPDES No. MA0100595, especially with regard to the conditions leading to violations of its permit that had been reported to EPA over the past several quarters; to evaluate its compliance with the MSGP regarding coverage for stormwater generated and discharged from the site; and, to evaluate ongoing compliance with the SPCC program, under CWA Sec. 311.

Regarding plant performance, Mr. Hayes and Mr. Johnson (collectively, “facility staff” or “staff”) told us that a recent series of violations were the result of operator error, caused by a single employee who has since left the facility. For other violations over the past couple of years, facility staff told us that the primary cause is the need for repairs to the sand filtering system, which provides final effluent polishing. We were informed that while repairs are planned, the costs have come in much higher than expected (\$1.23 M compared to an initial estimate of about \$600 K) and getting American Rescue Plan Act (ARPA) funding took far longer than expected. Now, the facility staff says they are

waiting for materials for the repair of the 3 sand filters, which is also taking longer than expected. Facility staff did not provide a timeline for these repairs but hope to get the materials in November 2023.

Other issues that were discussed that affect treatment effectiveness include the age of the plant and lack of adequate staffing. Regarding staff, we were told that they are down approximately 1/3 of the personnel that they require and as a result are operating smaller shifts and some plant employees are working 7 days per week. They say they are doing what they can to attract and hire additional staff. Regarding the age of the plant, the facility staff observe that they filed an application for a new NPDES permit in 2013 and have yet to receive a reissued permit from EPA. According to the staff, while the entire plant needs upgrading, as it is already being called on to perform at a treatment level it was not designed for, they are reluctant to initiate planning for treatment plant upgrades before they see the treatment requirements of the new permit. Current treatment challenges that they described include removing nitrogen compounds and high levels of aluminum salts, including in slug loads from the municipal water treatment plant. The facility staff also discussed the challenge of treating copper, associated with the up to 30,000 gallons of septage they accept per day. I acknowledged the benefit of seeing the requirements of a new permit in planning treatment plant upgrades but suggested that they should be developing additional phases of upgrades to address the upgrades that will be necessary irrespective of the potential future permit requirements, like they are doing regarding repairs to the sand filters.

Other issues that were briefly discussed included the volume of flow coming to the plant compared to the permitted and design flow, the status of ongoing and recently completed inflow and infiltration (I/I) studies, efforts to identify and remove cross connections from the stormwater system, and work on phase 1 of a flow model, being prepared by the consultant CDM.

We were told that sewage sludge is landfilled on-site and to address anticipated space constraints, they are considering expansion of the landfill and technologies, such as pyrolysis, to destroy PFAS compounds, reduce sludge volumes and facilitate production of potentially beneficial biochar.

As noted above, the facility expressed its belief that it had filed for either an exemption or “no exposure” under the MSGP.

Regarding SPCC, the facility provided a copy of its most recent SPCC plan during the opening conference. The plan, which was updated in February 2019, following the addition of a fuel storage station to the garage. The updated plan was signed by Mr. Hayes on March 7, 2019. I also received an electronic copy of the report, which I reviewed following the inspection. A copy of the SPCC plan review is attached to this report.

B. Facility Tour

The facility tour began at the screening building. Before going in, I noted a diesel-fueled portable pump set up outside the building [photo 1]. I noted that there was no secondary containment in the event of spill, as required by CWA 311 regulations. Adjacent to the pump, I observed a ditch that I was told has an outlet to the Ten Mile River, in the event of a discharge. No water or oil was observed in the ditch at the time of the inspection. In response to my question, I was told the pump was refueled using portable fuel containers brought to this location. I recommended that the facility remove the pump or install secondary containment. Following the inspection, Mr. Johnson provided documentation that the portable pump had been removed, and subsequently, that containment booms had been purchased that will be deployed around the pump, as a standard operating procedure.

In the screening building, I observed minor leaking from seals on pumps 1 and 3 and was told that pump 2 was offline for repairs [photo 2]. At the septage handling building, I was initially told that the tank was full. However, SCADA system indicated that the septage tank was empty. It was later verified that the tank was, in fact, empty and the SCADA reading was correct. I was also told that a scum pump SCADA system reading was incorrectly reporting the tank was full when it was empty.

In the grit chamber, we were told that automatic bar screen cleaning was broken and was being cleaned by hand. We were told that the emergency generator could power the entire plant and that it is tested weekly and under load once per month. It has a 3,500 gallon double-wall diesel tank. Adjacent to the emergency is a pull-off area for refueling. There is a stormwater catch-basin in the pull-off. A shut-off valve for the catch basin visible at the far right of the photo, below [photo 3].

We observed empty 1st stage clarifiers that are no longer routinely used but are used for flow equalization during extreme weather events (most recently during a Christmas time storm in 2019, according to staff recollections) and during maintenance activity for other tanks. The facility has 10 2nd stage aeration tanks. We were told that one of the second stage aeration pumps (pump 3) has an undiagnosed problem causing repeat aeration failures. The facility has compensated by changing its configuration of aerobic and anaerobic zones in the aeration tanks. Three 250-gallon plastic totes and a metal tank of Micro C, used to enhance biological removal of nitrogen, were observed adjacent to the aeration tanks.

The facility has 3 final clarifiers. I was told that the facility maintains a blanket of approximately 1 foot of sludge and that a thin layer of scum observed on the surface of the tanks was excess Micro C [photo 4].

At the sand filters, we were informed about the rehabilitation work that is necessary and being planned, pending the availability of material.

After observing the two chlorine contact chambers and the lab, where the facility performs analysis of biological oxygen demand (BOD), total suspended solids (TSS), pH,

alkalinity, total residual chlorine (TRC) and fecal coliform, we returned to the superintendent's office for a closing conference.

C. Records Review

Prior to the facility tour, I reviewed with facility staff a list of violations over the past 5 years, focusing on the more recent permit excursions that had been reported by the facility on its Discharge Monitoring Reports and briefly reviewed the facility SPCC plan. A more detailed review of the plan is attached to this report.

D. Closing Conference

In the closing conference, the facility reiterated its need for additional staff, the age of the permit, the need for facility upgrades, and its recognition of the need for upgrades to be phased, because of the anticipated high cost of necessary work.

I acknowledged these issues and expressed the need for the facility to expeditiously undertake upgrades necessary to meet current permit limits, even while it waits for an updated NPDES permit.

I left a copy of a signed SPCC Notice of Inspection and acknowledged that we would follow-up of the status of MSGP permit coverage. After the inspection, the facility provided a copy of a No Exposure Certificate (NOE) dated February 13, 2020. With this filing, the facility attested that stormwater is not exposed to pollutants at the site.

I departed at approximately 2:15 pm.

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Photo 1 – Portable Pump at Screening Building



Photo 2 – Screen Building Pump



Photo 3 – Part of Emergency Generator, Catch Basin, and Shut-off Valve (far right of photo)



Photo 4 – One of Three Final Clarifiers

