

Ebensburg Municipal Authority

April monthly report for WWTP



May 20th, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the April 2024 monthly report detailing the operations and maintenance of the Ebensburg wastewater treatment facility.

Thank you for the opportunity to provide Operations and Maintenance Services to the Borough of Ebensburg. To ensure we are providing material that is of value to you, please provide any questions or comments to me regarding this report.

Sincerely,
Luke Byrne

Executive Summary

During the month of April, the Ebensburg wastewater plant treated 33,735,600 million gallons of wastewater. This equates to an average of 1,124,500 gallons per day.

All testing and operational requirements were met for the month of April. There was one fecal exceedance during the storm event on April 2nd. Due to excessive rainfall, the plant was hydraulically overloaded. The plant was in storm mode at the time the sample was collected. We received almost 5 inches of rain in 4 days (Sunday-Thursday 4.96").

The centrifuge was operated twice a week on average and 12.703 tons of dry sludge was sent to the landfill.

On April 1st, staff worked with Dodson electric to repair the centrifuge electrical disconnect switch. The switch was locked up and not able to be turned ON and OFF. Dodson was able to get the switch operating but recommended a spare should be purchased. A new switch has been ordered and will be installed if issues continue.

Recently we have been making efforts to clean process tanks out to reduce solids carry over from chamber to chamber. During April staff completed an extensive clean out of the process water channel chamber. This area was full of an aquatic plant (duckweed) causing issues at the facility with process water use. After the clean out, a skimmer was built by staff and installed to combat the issues.

On April 30th staff was preparing to complete the UV chamber clean out when heavy solids were noticed decanting from SBR#1. It was discovered the SBR#1 air valve actuator failed to close prior to the decant cycle. The motor was sent to a local motor repair shop and rebuilt but only lasted a few days as the underlying problem was the actuator gears themselves. A new actuator has been ordered with expedite shipping and two additional actuators have been ordered to replace the antiquated SG series that Auma discontinued.

The sewer lift stations were inspected regularly throughout the month. The pump runtime hours were documented, and generators were exercised. The lift station basket screeners were clean at all locations. The heaters for the lift station buildings have been reduced to the lowest setting for the summer months. Bushes and weeds were removed from inside the fence. Inframark is working with RAM to schedule the repairs needed at the industrial park Marine lift station.

On the Radar

Level sensors for SBR tanks

UV chamber and SBR cleaning

Centrifuge flow meter

Screening unit bearings and brushes

SBR air valve actuators

Operations

Compliance:

- SBR tank testing is performed for process control purposes on Monday, Wednesday, and Friday of each week. Analysis completed is one Settleability, one Mixed Liquor Suspended Solids (MLSS) one Mixed Liquor Volatile Suspended Solids (MLVSS).
- Influent and effluent compliant testing is completed for reporting to DEP on Tuesdays and Thursdays. The testing performed is two Influent Total Suspended Solids (TSS) and two biological oxygen demand (BOD). Two effluent Total Suspended Solids (TSS), two Carbonaceous Biological Oxygen Demand (CBOD), two Phosphorus, two Total Kjeldahl Nitrogen, two Nitrate-Nitrite, two Ammonia as N, and two fecal coliform samples.
- Effluent pH and Dissolved Oxygen are done 7 days a week.
- Record UV intensity.
- Composite samples collected.
- All data is entered into WIMS daily for E-DMR monthly reporting.
- Monthly reports are sent to DEP electronically by the 28th of each month.

Plant Operations

- Inspected Industrial Park and Emerald Estates pump stations
- Composite samples are collected
- Screening unit inspections
- Grit removal process inspections
- Record/adjust process SBR phases
- Utility water pumping
- Operations of WAS pumps vs settleability
- Sludge pumped up to digesters for thickening
- Decant digesters for thickening

- Process control lab work completed daily
- Centrifuge operations
- Optimize polymer feed system
- Sludge dumpster preparation
- Removed floating debris in SBR tanks
- Aeration cycles altered to optimize sludge
- Influent and Effluent samplers checked daily
- UV operational checks

Maintenance & Repair

- Inframark staff completed 115 work orders in the month of April
- Greased decanters on SBR tanks
- Greased screening unit
- Cleaned out process water chamber
- Installed duckweed skimmer
- Clean out #3 and #4 digester weirs and troughs
- Sludge pump check valve leaking (parts ordered)
- Disassembled polymer feed system and cleaned
- Changed oil in mowers
- Replaced Auma actuator motor on SBR#1
- Monthly safety inspections completed for the month
- Hosed and cleaned U.V. trough, bulbs, sensors
- Influent screening unit hosed and cleaned daily
- Checked oil and belts on blowers daily, grease weekly
- Centrifuge building floor hosed
- Greased centrifuge
- Inspect State School weir box
- Control building floors swept and mopped weekly

Financial Update

Maintenance Expenditures

VEVOR	\$215.02	Water pump
Ace Hardware	\$129.91	Hoses for centrifuge and digesters
Online supply	\$166.42	Screen for skimmer
Long Barn	\$287.73	Plumbing, lumber for UV deck repairs
All American Fire Equipment	\$86.92	Cam lock fittings for pumps
Tractor supply	\$16.95	HD suction gun
Amazon	\$208.88	Hydraulic oil for UV/ three-inch pump fittings

Caps

Caps For WWTP	Contract Total per Year	Previous Balance	Total Spent this month	Remaining Balance
Maintenance Cap	\$25,000	\$16,601.47	\$1,111.83	\$15,489.64
Sludge	\$80,000	\$50,177.29	\$818.68	\$49,358.61

Health & Safety

There were no accidents in the month of April. Personnel have worked 1,551 days (4 years 4 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- DMR SOP
- Lock out tag out SOP review

Personnel

Name	Title	Operator Certifications
Sharon Burkett	Lead Operator	PA Class A, E, Wastewater Subclass 1,2,3,4,5
Kyle Smiley	Operator II	PA Class A, E, Water Subclass 1,10,11,12
Randy Lauer	Operator II	PA Class A, E, Wastewater Subclass 1,2,3,4
Tony Perott	Operator I	PA Class C, E, Water Subclass 1,6,7,8,12
Shawn Jones	Operator in Training	Training for PA DEP exam
Luke Byrne	Project Manager	PA Class A, E, Water Subclass 1,7,8,10,11,12 PA Class A, E, Wastewater