

# Ebensburg Municipal Authority

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## May monthly report for WWTP



June 24<sup>th</sup>, 2024

Ebensburg Borough  
300 West High Street  
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the May 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

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## Executive Summary

During the month of May, the Ebensburg wastewater plant treated 20,883,700 million gallons of wastewater. This equates to an average of 673,700 gallons per day.

The centrifuge was operated twice a week on average and 19.136 tons of dry sludge was sent to the landfill.

The month of May brought many challenges due to a mechanical failure of SBR#1 air valve actuator. The actuator began acting up at the beginning of May and staff made several repairs. Ultimately the actuator had an internal failure that was unrepairable. Staff manually aerated the basin for several days but eventually made the decision to take the basin out of service. The SBR was drained, pressed, pumped, cleaned, and placed in maintenance mode. Several days later SBR#3 air valve actuator began failing to close. We saw the same patterns forming that ultimately lead to the failure of SBR#1 air valve actuator. Since SBR#1 was taken out of service, an operational decision was made to install the new actuator on SBR#3. We received the expedited actuator on Friday May 24<sup>th</sup> and were able to get it installed preventing a second basin upset. Once we receive the remaining actuators, they will be installed accordingly, and SBR#1 will be placed into service. The actuators are expected to be shipped on 9-19-24.

Some good did come from the challenges faced in May. Troubleshooting the wiring, learning SCADA inputs, and getting to see the equipment normally under the water, was all educational to our staff. After SBR#1 basin was drained, it allowed staff to clean the basin and inspect the aeration diffusers, mixers and WAS pumps. All aeration diffusers were found to be in good condition and 100% operational. A broken impeller was discovered on the WAS pump and has been sent for repair.

Staff has been cleaning out the WWTP over the past several months. A scrap metal dumpster was hauled out and now a residual waste dumpster has been delivered to continue the cleanup.

Repairs were made to the check valve on the wet well pump line.

Staff has been working with Dodson electric to replace several broken conduits around the facility.

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 industrial park lift station repairs were completed on 6-11-24. Inframark staff managed the stop of flow and pumping of wastewater during the repairs. Roughly 60,000 gallons of wastewater was pumped during the repair and hauled to the treatment facility. New pump flanges were installed and slide rails. Staff was also able to thoroughly clean the wet well with the use of the pump truck.

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## On the Radar

Level sensors for SBR tanks

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 28<sup>th</sup> 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 98 work orders in the month of May
- Greased decanters on SBR tanks
- Greased screening unit
- Cleaned SBR#1
- Actuator wiring
- Cleaned out process water chamber
- Clean out #3 and #4 digester weirs and troughs
- Wet well check valve repair
- Cleaned polymer feed system
- Installed new motor actuator on SBR#1 air valve
- Replaced AUMA air valve actuator on SBR#3
- 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	\$247.22	3 inch water pump
Aqua fix	\$569.36	Algae treatment/oxygen increaser
Varco	\$1,297.20	2-3 inch hose for tank pumping/cleaning
Long Barn	\$36.10	PVC fittings/ process water repairs
All American Fire Equipment	\$31.80	Cam lock fittings for pumps
Tractor supply	\$49.79	Fittings for pumps
Amazon	\$77.31	Grease/PVC pipe reducer
Rays lawn mower	\$467.49	Belts and blades for riding mower
Sheetz	\$75.48	Deisel/gas for pumps/pressure washer

## Caps

Caps For WWTP	Contract Total per Year	Previous Balance	Total Spent this month	Remaining Balance
Maintenance Cap	\$25,000	\$15,489.64	\$2,851.75	\$12,637.89
Sludge Cap	\$80,000	\$49,358.61	\$8,082.49	\$41,276.12

## Health & Safety

There were no accidents in the month of May. Personnel have worked 1,582 days (4 years 5 months) without an accident/injury.

### Inframark Training and Presentations

- Weekly tailgate meetings
- SCADA trending SOP
- Trojan UV 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