

Ebensburg Municipal Authority

March monthly report for WTP



April 22, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

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

Thank you for the opportunity to provide Operations and Maintenance Services to the city 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 March, the Ebensburg water treatment plant treated 35,590,000 gallons of reservoir water. This equates to an average of 1,148,065 gallons per day. The table found in plant operations of this packet showcases past month's historical average water production. Historical water production comparisons for March indicate an increase of 252,581 gallons per day.

An average of 66,459 gallons per day was purchased from Saltlick and blended into Ebensburg's distributions system.

On March 6th, PA DEP conducted a partial inspection of the WTP. The inspection went well with no deficiencies noted.

On March 10th, power was lost to the treatment facility. Everything was able to be restarted successfully except for the VFD for the secondary mixing on the DAF unit. The motors are functioning but after several hours of operation the VFD will fault to motor overload. Inframark is working with the manufacture of the VFD to further trouble shoot the issues.

Daylight savings time adjustments were made on all WTP instruments and SCADA.

First quarter filter evaluation was completed on filter #1. The filter was found to be in excellent condition meeting all performance requirements.

On March 21st, Inframark staff accepted the AWOP award presented to Ebensburg's Municipal Authority. We were honored to accept this award as it truly validates the hard work put into optimizing EMA's filter performance.

Annual Chapter 110 sub facility and primary facility reports were submitted. These reports showcase annual water loss, operations of the system, flushing data, and metering information. 2023 data indicates a 368,677 gallon per day loss or 36.6% loss per day. The goal for water loss is <20% for public water suppliers.

PFAS monitoring was conducted on January 31st. Analysis yielded no detects. Next sampling is scheduled for April 17th, 2024

Water pumping stations were inspected regularly throughout the month. The Hillcrest tank site is due for annual generator maintenance and that work has been scheduled for April 15th. The Ogden pumping station chlorine residuals have been stable and do not require boosting this month. The saltlick pumping station meter reading converter has been replaced and is working properly. All pump station pumps/motors were greased for the month.

On the Radar

Drought Contingency Plan updates

Lagoon pond pumps

DAF VFD secondary mixing

DAF Spare parts

Consumer Confidence Report (CCR)

Operations

Compliance:

- What is the monthly compliance reporting? We send about 10 pages of data that have been collected by our operators and SCADA system. These reports consist of over 20,000 points of data that are compiled into a report and sent to the state every month called the “Monthly Operating Report” (MOR). This report is a representation of how well the plant is operating during the prior month.
- March monthly compliance reporting was collected and submitted to PA DEP.
- Monthly we are required by state regulations to collect and analyze a minimum of nine bacteriological samples per a state approved sampling site plan. In March, we collected nine samples. Of the nine samples, zero were found to be total coliform positive.
- Monthly we are required to monitor chlorine levels in the distribution system. A minimum of one sample per week is required and the sample must be equal to or greater than 0.20mg/L free chlorine. Four samples were collected in February and all four samples were at or above the minimum.
- Inframark submitted a study/plan (12-20-22) to PA DEP detailing historical water loss and plans to address unaccounted for water. We are currently waiting for a response from PA DEP.
- Calibrated online and lab instrumentation to conform to PA DEP requirements.
- Collected and documented comparative grab samples to ensure accuracy of continuous chlorine analyzers.
- Collected and documented comparative grab samples to ensure accuracy of continuous turbidimeters and pH analyzers.
- Monitor water quality in clearwell for all compliance compounds and secondary contaminants.
- Completed first quarter filter evaluation.
- Completed first quarter PFAS monitoring.

Plant Operations

- Plant production has fluctuated through the month ranging from 1,081,000 – 1,225,000 gallons/day.
- Filters are performing well allowing for longer run times of 144 hours and resulting in less backwash water being used.
- Conduct process control analysis daily.
- Backwash flow rates are monitored during backwash cycles.
- Filter media is observed daily for irregularities.
- Clarifiers are continuously monitored for sludge content and settling capability.
- Flows and chemical feed rates are adjusted daily to meet system demands.
- Chemical feed calculations and pump adjustments.
- Overnight flow monitoring.
- Pump station monitoring.
- Monitor clarifier flow setpoints.
- Online instrument flows are verified multiple times daily.
- Downstream flow is monitored daily and adjusted as needed.

Past month's historical average water production

Date	Average gallons filtered per day	Total gallons filtered per month	Days Supplying Nanty Glo
March, 2023	895,484	27,760,000	2.5
April, 2023	909,202	27,276,000	0
May, 2023	902,161	27,967,000	0
June, 2023	912,633	27,379,000	0
July, 2023	860,323	26,670,000	0
August 2023	1,008,484	31,263,000	16
September, 2023	940,233	28,207,000	5
October, 2023	856,484	26,551,000	0
November, 2023	923,933	27,718,000	0
December, 2023	1,081,935	33,540,000	0
January, 2024	1,153,581	35,761,000	0
February, 2024	1,151,690	33,399,000	0
March, 2024	1,148,065	35,590,000	0

Maintenance & Repair

Inframark staff completed 59 work orders in the month of March

- Fire extinguisher inspections
- DAF scraper adjustment
- CL17 cleaning
- Salting/shoveling
- SCBA inspections
- Ladder inspections
- Sump pumps exercised
- DAF lightning mixer oil level inspections
- Blower lubrication
- Flushed permanganate lines/replaced pump
- DAF raw water valve cycling/secondary mixer VFD
- Lagoon vault cleaning/float adjustments
- Eye wash/safety shower inspections
- Grease clarifier drives
- Cleaned clarifier troughs
- Chlorine room alarm test
- Greased finished water pumps/motors
- Alternated finished water pumps
- Cleaned pH and turbidity meters weekly
- Jar testing to optimize chemical usage
- DAF sump level sensor verifications
- Monitored filter bed expansion
- Cleaned facility

Financial Update

Maintenance Expenditures

Vendor	Expense	Description
Ace Hardware	\$18.21	Rivets for grating
Amazon	\$499.57	Entry point lab sink/lead free faucet
LB Water	\$2.33	DAF Sump pump coupler
Walmart	\$86.09	Sampling/filter evaluation binders/operator logbooks
USA Bluebook	\$468.03	Asco raw water solenoid/chemical gloves

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$25,000	\$22,614.52	\$1,074.23	\$21,540.29

Health & Safety

There were no accidents in the month of March. Personnel have worked 1,521 days (4 years 3 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- O/M manual updates
- CMP updates

Personnel

Name	Title	Operator Certifications
Kyle Smiley	Operator	PA Class A, E, Subclass 1
Tony Perott	Operator	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 PA Class A, E, Wastewater