

Ebensburg Municipal Authority

April monthly report for WTP





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 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 April, the Ebensburg water treatment plant treated 33,906,000 gallons of reservoir water. This equates to an average of 1,130,200 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 April are not representative this month due to Nanty Glo purchasing water.

Second quarter disinfection by-product samples were collected at sample sites 700 Mini mall and 701 Airport. Both samples were found to be under the MCL for Haloacetic acids and Trihalomethanes. This is the sixth quarter in a row that the system has been under the MCL.

Nanty Glo began purchasing water on April 4th due to heavy rainfall on April 2nd. Nanty Glo purchased water for roughly six days shutting the interconnect off on April 10th. Most of the water was supplied through the saltlick interconnection as borough staff continues efforts to reduce the high-water demand for the Ebensburg treatment plant.

Staff replaced a failing check valve on the caustic feed equipment. Staff made a great discovery that the pump was slowly leaking chemical through and prompted them to investigate the failing valve. That valve was replaced and is working properly.

On April 17th the publics work director requested that we run the Saltlick interconnect overnight while certain areas of the distribution system were isolated in an effort to reduce water pressure for the contractors digging along the west street water line repair.

Saint Francis University tested out an experimental bobber in the lower reservoir that students designed. The bobber is deployed from a boat and slowly sinks to the bottom collecting water quality data long the way. Once it hits the bottom it can then fill with air to float back to the surface.

Cummins generator service completed the annual preventive maintenance on the generator at the water treatment facility. The batteries were replaced and everything else was found to be in good working condition.

On April 22nd, staff installed a sample sink for entry point samples. This was an old oversight that was brought to light in our recent partial inspection last month.

PA DEP has notified our operating staff that EMA will be receiving a filter plant performance evaluation (FPPE) on May 23rd - 24th. EMA's last FPPE was completed in March 2019. The two-day evaluation will allow the state to monitor water quality and filter performance. Historical data will be reviewed, and any questions or concerns will be discussed.

Second quarter PFAS monitoring was conducted on April 17th. Analysis yielded no detects. Next sampling is scheduled for July11th, 2024

The DAF unit was taken offline for one day to complete annual cleaning. Staff also repaired the rubber scraper on the unit at this time. The DAF was placed back online and is running well.

Water pumping stations were inspected regularly throughout the month. The Hillcrest tank site is due for annual generator maintenance. It was discovered during scheduling that the contract with Cummins for the Hillcrest generator was not renewed in 2022. That generator has been added to the contract and will be serviced May 13th. Inframark staff has installed a sample sink at Hillcrest for the collection of entry point samples. The Ogden pumping station chlorine residuals have been stable and do not require boosting this month. The saltlick pumping station was cleaned and all pumpstation thermostats were reduced to a minimum to reduce electrical cost for the summer months. All pumpstation 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.
- April 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 April, 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. Five samples were collected in April and all
 five 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 second quarter PFAS monitoring.

Plant Operations

- Plant production has fluctuated through the month ranging from 969,000– 1,331,000 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
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
April, 2024	1,130,200	33,906,000	6

Maintenance & Repair

Inframark staff completed 56 work orders in the month of April

- Fire extinguisher inspections
- DAF scraper adjustment/repairs
- Caustic pump check valve repairs
- DAF heater thermostat replacement
- Replaced generator batteries
- CL17 cleaning
- SCBA inspections
- Ladder inspections
- Sump pumps exercised
- DAF lightning mixer oil level inspections
- Blower lubrication
- 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

Vendor	Expense	Description
Ace Hardware	\$47.26	DAF heater thermostat/ batteries
USA Bluebook	\$2,367.17	Permanganate pump, pump parts, Asco rebuild kits

Maintenance Expenditures

Caps

Caps For WTP	Contract Total	Previous	Total Spent	Remaining
	per Year	Balance	This Month	Balance
Maintenance Cap	\$25,000	\$21,540.29	\$2,414.43	\$19,125.86

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
- Emergency response plan updates
- SCADA Failure SOP

Personnel

Name	Title	Operator Certifications	
Kyle Smiley	Operator	PA Class A, E, Subclass 1,10,11,12	
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 1,7,8,10,11,12	
		PA Class A, E, Wastewater	