

Ebensburg Municipal Authority

June monthly report for WTP



July 22nd, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the June 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 June, the Ebensburg water treatment plant treated 36,431,000 gallons of reservoir water. This equates to an average of 1,214,367 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 June indicate an increase of 301,734 gallons per day.

An average of 90,043 gallons per day was purchased from Saltlick and blended into Ebensburg's distributions system. This is higher than normal due to the excessive water loss and contractors flushing for the water line project.

During June staff worked on troubleshooting a reoccurring issue with the lagoon pond pump #2. After the pump runs for some time, it becomes air locked. It was discovered the flange seal was leaking and allowing air to become trapped in the pump. Staff was able pull the pump from the vault and clean the face of the flange allowing the pump to seal tight. Since the repair the pump has been running well with no issues.

On June 15, staff was called out for a low chlorine alarm at the treatment facility. The flow to the chlorine analyzer became clogged and began reading inaccurately. The supply lines were flushed, and an acid cleaning was performed on the analyzer optical eye.

On May 23-24th Pennsylvania DEP performed a filter plant performance evaluation. An exit meeting is to be scheduled in the upcoming month to review the final inspection. Inframark has been working with Stiffler McGraw to address some of the proper permit needs that were discovered during the inspection.

Inframark staff notified Ebensburg's public works director of an increase of 100GPM on the low system on May 20th. The contractor was to make a repair to resolve the water loss, but no decrease has been seen to the low system usage.

Inframark was able to provide Ebensburg Borough swimming pool staff with parts and assistance in repairing the chlorine feed system suction line.

On June 23, staff was called out to Hillcrest tank site for a low elevated tank alarm. The motor starter contactor for pump #2 was found to be burnt up. Also, the wires to and from were burnt off the lugs. A new VFD is scheduled to be installed to replace the old motor contactors in July.

Water pumping stations were inspected regularly throughout the month. A high AC voltage alarm was discovered on the generator at Hillcrest. This was triggered the same night the motor contactor burnt up. Inframark has started boosting the chlorine residual at the Ogden tank. The chemical feed pump was installed and connected to the injection lines historically used by Borough staff. The tank at Ogden was inspected for leaks, nothing observed. Saltlick pump station cooling fan was adjusted to 80 degrees. All pumpstation pumps/motors were greased for the month.

On the Radar

Lagoon pond pump

DAF Spare parts

DAF scraper repairs

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.
- June 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 June, 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 June 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.
- Second quarter filter evaluation was completed on filter #2. The filter was found to be in excellent condition meeting all performance requirements.

Plant Operations

- Plant production has fluctuated through the month ranging from 1,111,000–1,298,000 gallons/day.
- Seasonal adjustments have been made to the filter wash cycles to increase media clean up after backwash. Air scour duration has been increased by 60 seconds and filter runtimes have been reduced to 96 hours.
- 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
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
May, 2024	1,138,258	35,286,000	0
June, 2024	1,214,367	36,431,000	0

Maintenance & Repair

Inframark staff completed 58 work orders in the month of June

- Fire extinguisher inspections
- DAF scraper adjustments
- DAF Permanganate pump maintenance
- CL17 cleaning
- SCBA inspections
- Installed grating on clarifier walkway replacing plywood
- Ladder inspections
- Sump pumps exercised
- DAF lightning mixer oil level inspections
- Blower lubrication
- Lagoon vault cleaning/float adjustments/pump flange repairs
- 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
HACH	\$3,506.80	TU5300 Turbidimeter
OSCO Safety	\$854.78	Clarifier walkway grating

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$25,000	\$16,443.35	\$4,361.58	\$12,081.77

Health & Safety

There were no accidents in the month of May. Personnel have worked 1,612 days (4 years, 6 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- Lagoon electrical schematic review
- Hillcrest LOTO 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