

Ebensburg Municipal Authority

September monthly report for WTP

Ebensburg Borough Municipal Authority Water Treatment Plant

Public Water Supply # 4110009



Bureau of Safe Drinking Water



October 28th, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the September 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 September, the Ebensburg water treatment plant treated 37,603,000 gallons of reservoir water. This equates to an average of 1,253,433 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 September indicate an increase of 313,200 gallons per day.

An average of 251,720 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, contractors flushing for the water line project and Nanty Glo purchasing water.

On May 23-24th Pennsylvania DEP performed a filter plant performance evaluation (FPPE). An exit meeting was held at the borough building on October 10th to review the findings of the inspection. The Ebensburg Filter plant received an overall "**Commendable**" performance rating. PA DEP stated that less than 12% of facilities operated in PA receive a commendable rating and congratulated EMA's system for achieving this accolade.

WTP staff performed several preventative maintenance services to online instruments thru the month. A new salt bridge and solution was installed to on the raw water pH probe. The CL17 was cleaned, and new tubing installed. A new seal kit was installed on the spare caustic pump.

On September 11th, Nanty Glo requested 200GPM due to their facilities inability to produce enough water for their system. Nanty Glo shut off on September 17th, then turned back on September 19th increasing to 300 GPM. Nanty Glo is still currently buying water into October.

The upper reservoir level is currently down 8.5 feet. The upper reservoir has dropped 2.0 ft this month. The stream flow bypass valve was operated several times during the month to ensure a minimum of 270,000 gallons of water bypassed per day.

Water pumping stations were inspected regularly throughout the month. Staff installed new led lighting inside the base of the elevated tank pumping station. Inframark continues to boost/monitor the chlorine residual at the Ogden tank site. On September 6th, staff rebuild the hypo pump at the Ogden tank site. Both Ogden and Saltlick ran extensively during August to assist supplying Nanty Glo with water. The #1 pump at Saltlick tripped out and failed to start twice during the month. Staff investigated the issues, but nothing was found. Currently the pump is functioning properly. All pumpstation pumps/motors were greased for the month.

On the Radar

DAF Spare parts

WTP finished water pump inspections and rebuilds

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.
- September 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 September, 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 September 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.

Plant Operations

- Plant production has fluctuated through the month ranging from 1,123,000–1,309,000 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 72 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
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
July, 2024	1,176,161	36,461,000	0
August, 2024	1,216,452	37,710,000	20
September, 2024	1,253,433	37,603,000	19

Maintenance & Repair

Inframark staff completed 58 work orders in the month of September

- Fire extinguisher inspections
- Ladder inspections
- Sump pumps exercised
- CL17 service
- Caustic pump rebuild
- pH probe salt bridge/solution
- Seal kit on LMI pump
- Dock step repair
- 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

Maintenance Expenditures

Vendor	Expense	Description
Ace Hardware	\$56.74	Dock repairs and safety chains
Home depot	\$438.46	Shelving in office for O&M books
Lowes	\$338.14	AC window unit
All American Fire	\$63.39	Annual Fire extinguisher inspection
Amazon	\$452.63	Hydraulic press/DAF neoprene/repairs
Wal-Mart	\$79.75	Sampling bottles/disinfectant wipes/bleach

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$25,000	\$9,166.60	\$1,429.14	\$7,737.46

Health & Safety

There were no accidents in the month of September. Personnel have worked 1,704 days (4 years, 9 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- LMI pump rebuild SOP
- Driving safety

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