

Ebensburg Municipal Authority

November monthly report for WTP



December 16th, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the November 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 November, the Ebensburg water treatment plant treated 32,548,000 gallons of reservoir water. This equates to an average of 1,084,933 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 November indicate a 161,000 gallon per day increase in production compared to last year.

An average of 68,907 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.

On November 4th Inframark shut down the raw water feed line from the upper reservoir to draw down the water inside the intake tower. We discovered there is an old, caged ladder that has deteriorated and fallen into the middle of the intake. We also discovered the very bottom intake valve is opened slightly. Additionally, on November 26th, Inframark was onsite with PA DEP for annual Dam Inspections. The recommendations consisted of concrete repairs, clearing of vegetation, and monitoring of seepage at the upper reservoir. The state has also recommended that EMA evaluate the condition of the drain valves and exercise them twice a year. It would be our recommendation to work with the Borough and Stiffler to identify all the necessary repairs.

The upper reservoir level is currently down 10.5 feet. Inframark is monitoring the water levels of the upper reservoir closely. We have had several rain/snow melt events that have helped keep the reservoir levels constant.

Inframark employee Kyle Smiley has passed all required exams to become full certified to operate the WTP. Kyle will be filing his license application with PA DEP and should receive his license by March of 2025.

During the month Inframark discovered a worn pinion gear in the rapid mix gear box assembly. A quote for the repair/new gear box has been requested through the manufacture.

Water pumping stations were inspected regularly throughout the month. Inframark has stopped boosting the chlorine at the Ogden tank site as the colder weather has allowed for chlorine residuals to stabilize. All pumpstation pumps/motors were greased for the month. The chemical and feed equipment has been brought back to the WTP for storage during winter. All heaters and exhaust fans have been set for winter weather operation.

On the Radar

DAF Spare parts

WTP finished water pump inspections and rebuilds

Lower reservoir usage

Rapid mixer 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.
- November 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 November, 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 November 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.
- Method 334.0 quarterly calibrations completed.

Plant Operations

- Plant production has fluctuated through the month ranging from 953,000 – 1,246,000 gallons/day.
- 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
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
October, 2024	1,211,032	37,542,000	17
November, 2024	1,084,933	32,548,000	0

Maintenance & Repair

Inframark staff completed 68 work orders in the month of November

- Fire extinguisher inspections
- Ladder inspections
- Sump pumps exercised
- Caustic pump flushed out
- ASCO solenoid replaced on raw water valve
- CL17 cleaning/roller block assembly
- DAF lightning mixer oil level inspections
- DAF Air saturation gauge globe valve positioning
- 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/manganese levels/reservoir turnover
- DAF sump level sensor verifications
- Monitored filter bed expansion
- Cleaned facility

Financial Update

Maintenance Expenditures

Vendor	Expense	Description
RAM Industrial	\$2013.67	DAF recycle pump stack kit and seals
Long Barn	\$144.40	Hangers/anchors/plumbing relocate TU5300

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$25,000	\$5,996.78	\$2,158.07	\$3,838.71

Health & Safety

There were no accidents in the month of November. Personnel have worked 1,765 days (4 years, 11 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- Upper reservoir intake operations
- DCP review
- CMP review

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