

Ebensburg Municipal Authority

December monthly report for WTP



January 27th, 2024

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,

Inframark is pleased to submit the December 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 December, the Ebensburg water treatment plant treated 37,518,000 gallons of reservoir water. This equates to an average of 1,210,258 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 December indicate a 128,323 gallon per day increase in production compared to last year.

An average of 130,410 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 December 5th, Inframark along with Water Service Professionals completed Ebensburg's fourth quarter filter evaluation on filter #2. The troughs, filter media, and air scour system were found to be in excellent condition. The filter bed surface is free from deficiencies and anomalies. The media depth and freeboard are within design. The inspection report notes the filter is well maintained and operated.

During the middle of the month the raw water valve began acting erratically. Several call outs indicated the valve was unable to regulate the water coming into the plant. Staff discovered the valve had a torn seal and required a rebuild. The inside components of the valve were all replaced with current stock and the valve has been working well since.

On December 30th, the chemical feed pump for caustic stopped operating. Staff was able to change the pump out with a spare and rebuild the old pump for future needs.

The upper reservoir water level is increasing slightly with the recent precipitation and snow melt events. The current level is 9 ft which is 2 ft higher than last month.

Water pumping stations were inspected regularly throughout the month. Snow plowing and other winter maintenance was performed at all three pumping stations. A fuel delivery for the onsite generate at Hillcrest has been placed. All pumpstation pumps/motors were greased for the month. Weekly sampling, flow recording, and calibrations to the onsite instruments have been completed for the month.

On the Radar

DAF Spare parts

WTP finished water pump inspections and rebuilds

Upper reservoir gate valves

DAF Cleaning/inspections

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.
- December 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 December, 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 November 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.
- Method 334.0 quarterly calibrations completed.
- Fourth quarter filter bed evaluation with media analysis.

Plant Operations

- Plant production has fluctuated through the month ranging from 1,083,000 – 1,253,000 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
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
December, 2024	1,210,258	37,518,000	0

Maintenance & Repair

Inframark staff completed 75 work orders in the month of December

- Fire extinguisher inspections
- Ladder inspections
- Sump pumps exercised
- Caustic replaced
- Filter bed evaluation
- Raw water valve rebuild
- DAF lightning mixer oil level inspections
- DAF Air saturation adjustments
- 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
- Snow removal and salting walkways
- Cleaned facility

Financial Update

Maintenance Expenditures

Vendor	Expense	Description
Ace Hardware	\$123.71	Bathroom sink/Turb meter plumbing
Water Service Professionals	\$2,420	Fourth quarter filter evaluation
RAM	\$525.67	DAF Grundfos permanganate pump rebuild
OSCO Safety	\$212.01	Grating clips for clarifier walkway

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$25,000	\$3,838.71	\$3,281.39	\$557.32

Health & Safety

There were no accidents in the month of November. Personnel have worked 1,796 days (5 years) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- Confined space SOP review
- 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
Matthew Hull	Operator in Training	Training for PA DEP exam
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