

Ebensburg Municipal Authority

November monthly report for WTP



December 18th, 2023

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,
Inframark is pleased to submit the November 2023 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 27,718,000 gallons of reservoir water. This equates to an average of 923,933 gallons per day. The table found in plant operations of this packet showcases past month's historical average flows. Historical flow comparisons for November are not representative due to Nanty Glo purchasing water in 2022.

An average of 60,300 gallons per day was purchased from Saltlick and blended into Ebensburg's distributions system.

The DAF unit has been placed back into service and is running well.

Annual boiler cleaning/preventive maintenance was performed on both natural gas boilers at the facility.

Over the past several months Inframark has been checking on the WTP pumping stations (Saltlick, Ogden, and Hillcrest) to assist with additional monitoring at these facilities. Inframark and LB Water's meter specialist repaired a failing signal converter preventing the Saltlick meter from reading on SCADA.

On November 29th, Inframark and Water Service Professionals completed Ebensburg's annual fourth quarter filter bed evaluation with media analysis. The filter was found to be in excellent. We have not received the full report detailing the media analysis, but no issues were detected during the inspection. Once we receive the final report, I will forward it along to the borough manager.

The downstream by-pass flow valve has been operated several times throughout the month to meet the instream flow requirement of 270,000 GPD.

On the Radar

Service clarifiers

PA DEP inspection correctives

Drought Contingency Plan updates

Lagoon pond pumps

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
- Every month 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. Every month we are also 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 to PA DEP detailing historical water loss and future 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 821,000 – 1,045,000 gallons/day.
- Filters are washed every 144 hours which results in each filter being washed once per week.
- Filters have been performing well during longer runtimes and this also reduces the amount of backwash water used weekly.
- 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 flows

Date	Average gallons filtered per day	Total gallons filtered per month	Days Supplying Nanty Glo
November, 2022	1,017,267	30,518,000	15
December, 2022	915,387	28,377,000	0
January, 2023	1,041,323	32,281,000	19
February 2023	885,143	24,784,000	0
March, 2023	895,484	27,760,000	2.5
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

Maintenance & Repair

Inframark staff completed 95 work orders in the month of November

- Fire extinguisher inspection
- SCBA inspections
- Ladder inspections
- Sump pumps exercised
- DAF repairs/inspections
- Boiler maintenance
- Blower lubrication
- Finished water pump packing inspections
- Hillcrest chlorine analyzer cleaning/calibration
- Eye wash/safety shower inspections
- Daylight savings time SCADA/instrument adjustments
- 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
Tractor supply	\$93.24	Generator fuel treatment/ backup cards/snow shovel
Harbor Freight	\$220.87	Shelving organizer/hardware/anchors/extension cord
Heritage Environmental	\$298	Chlorine regulator gaskets
Long Barn	\$109.60	Plumbing supplies
KAZA (All American Fire)	\$8.48	SCBA air
USA Blue Book	\$1,568.79	Sodium permanganate LMI pump/rebuild kit
Water service professionals	\$2,420	Annual filter bed inspection/media analysis

Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$26,522.00	\$11,604.49	\$4,718.97	\$6,885.52

Health & Safety

There were no accidents in the month of November. Personnel have worked 1,399 days (3 years 11 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- COVID-19 news and updates
- Winter weather SOP review
- Lab quality manual updates

Personnel

Name	Title	Water Operator Certifications
Luke Byrne	Water Plant Manager	PA Class A, E, Water Subclass 1,7,8,10,11
Kyle Smiley	Operator	PA Class A, E, Subclass 1
Tony Perott	Operator	PA Class C, E, Water Subclass 1,6,7,8,12