

# Ebensburg Municipal Authority

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## September monthly report for WTP



October 23<sup>rd</sup>, 2023

Ebensburg Borough  
300 West High Street  
Ebensburg, PA 15931

Dear Authority Members,  
Inframark is pleased to submit the September 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

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## Executive Summary

During the month of September, the Ebensburg water treatment plant treated 28,207,000 gallons of reservoir water. This equates to an average of 940,233 gallons per day. Historical comparisons for this month are not representative due to Nanty Glo purchasing water. The table found in plant operations of this packet showcases past month's historical average flows.

An average of 71,347 gallons per day was purchased from Saltlick and blended into Ebensburg's distributions system. This number is above the normal average of 60,000/day due to Nanty Glo purchasing.

Inframark staff performed extensive plumbing on the 1,000-gallon sodium hydroxide (caustic) tank. The main 2 inch shut off valve for the tank was leaking externally. Staff isolated the tank using an inflatable ball to hold back chemical inside the tank while the discharge side of the pump was replumbed.

On September 7<sup>th</sup>, there was a brief power outage. The generator transferred over properly and staff was able to return the plant to normal operations without any issues.

Nanty Glo continued to purchase water until September 5<sup>th</sup>.

A quarterly filter evaluation was performed on filter #2. The filter was found to be in excellent condition meeting all performance requirements.

Staff cleaned out a large amount of settlement from the facility's bulk coagulant tank. The settlement was mostly powered Poly-aluminum that precipitated out over the years. We were able to vac the settlement out of the tank and discharge it into the lagoons for dilution and sedimentation. That water will then be treated at the WWTP. I would like to thank the Josh and his staff for providing/operating the vac truck to help get this job done.

On September 22<sup>nd</sup>, Inframark was asked to help with a customer complaint concerning dirty water in Crestwood. Inframark described the recent mainline repair and possible causes of dirty water to the customer. We also discussed possible resolutions if the problem persisted. There have been no further complaints from the customer.

On September 27<sup>th</sup>, PA DEP collected raw water samples monitoring for cyanotoxins in the raw water source. There were no detects in the sample collected.

Inframark worked closely with borough staff on September 27<sup>th</sup> to repair a large leak discovered in the distribution system. The leak has reduced water loss by roughly 120,00 gallons per day.

The DAF unit was taken offline September 28<sup>th</sup> for annual maintenance and clean up.

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

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## On the Radar

Service clarifiers

PA DEP inspection correctives

Drought Contingency Plan updates

DAF unit cleanup

## 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
- 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 September, 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 August and all five samples were at or above the minimum.
- Inframark received the 2022 Water Allocation Permit Compliance Report reminder from PA DEP. The report is due November 6<sup>th</sup>, 2023. We will be working with the borough manager and public works director to complete this document in a timely manner.
- 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.
- Resampled third quarter Synthetic Organic Compounds (SOC's) due to lab failing quality control.
- Performed third quarter filter evaluation on filter #2
- 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 643,00 – 1,234,000 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.
- DAF scraper adjustments.
- DAF air saturation setpoint adjustments.
- 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

<b>Date</b>	<b>Average gallons filtered per day</b>	<b>Total gallons filtered per month</b>	<b>Days Supplying Nanty Glo</b>
September, 2022	1,047,267	31,418,000	30
October, 2022	949,452	29,433,000	15
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

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## Maintenance & Repair

Inframark staff completed 93 work orders in the month of September

- Greased DAF recycle pump
- Greased DAF scraper
- Fire extinguisher inspection
- SCBA inspections
- Ladder inspections
- Sump pumps exercised
- Caustic tank feed line repair
- Aeration chamber sludge removal
- DAF draining/cleaning
- Blower lubrication
- Finished water pump packing inspections
- Hillcrest chlorine analyzer cleaning/calibration
- Ogden tank chemical feed system priming
- 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	\$118.83	Plumbing, electrical, filter, cleaner
USA Blue Book	\$6.10	chemical pump fitting
Tractor Supply	\$306.80	DEL PAC tank clean out hose
GT&E	\$141.48	DEL PAC tank clean out hose
Walmart	\$219.52	Sample collection supplies/cartridges
RAM Industrial Services	\$328.28	Chemical pump rebuild kit
LB water	\$214.54	Caustic tank repairs

### Caps

Caps For WTP	Contract Total per Year	Previous Balance	Total Spent This Month	Remaining Balance
Maintenance Cap	\$26,522.00	\$16,086.43	\$1,335.55	\$14,772.88

## Health & Safety

There were no accidents in the month of September. Personnel have worked 1,338 days (3 years 9 months) without an accident/injury.

### Inframark Training and Presentations

- Weekly tailgate meetings
- COVID-19 news and updates
- Bulk Tank transfer SOP
- Boil Water Advisory Checklist

## 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
Jacob Dumm	Operator in Training	Preparing for exam