

Ebensburg Municipal Authority

January 2023 monthly report for Ebensburg WWTP



February 27, 2023

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,
Inframark is pleased to submit the January 2023 monthly report detailing the operations and maintenance of the Ebensburg wastewater treatment facility.

Thank you for the opportunity to provide Operations and Maintenance Services to the Borough 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,
Michael Montgomery

Executive Summary

During the month of January 2023, Ebensburg wastewater treatment plant treated 22.697 million gallons of clean water to Howells Run. This equates to a daily average of 1.218 million gallons for the month of January. All testing and operational requirements were met for the month of January. Centrifuge operation was ran as needed for the month of January and 3.332 tons of sludge was sent to the landfill.

- Ebensburg WWTP had one monthly ammonia violation, permit parameter is 3.5 mg/L plant reading was 4.5 mg/L for the month. This was due to very cold weather in January. This is the first violation in 11 years at Ebensburg WWTP

On the Radar

Borough Engineer is looking into getting a new 20" influent valve installed at the facility, for SBR tank # 2. Contractor Hickes on site (12-7-22) to look at up and coming valve replacement project.

Operations

Compliance:

- Mon, Wed, Fri SBR tank testing is done for process control purposes.
- Tues, Thurs influent and effluent compliant testing is done for reporting to DEP.
- All data is entered into the computer daily for monthly reporting.
- Monthly reports are sent to DEP electronically by the 28th of each month.

Plant Operations

- Made plant rounds and equipment checks daily several times a shift.
- Ran centrifuge was ran as needed for the month.
- Influent screening unit hosed and cleaned daily.

- Work orders complete for the month.
- Swept and hosed influent building floor, centrifuge building floor, centrifuge sludge dumpster area.
- Plant safety inspection complete for the month of January 2023

Maintenance & Repair

- Greased decanters on SBR tanks for the month
- Monthly safety inspection complete for the month.
- Centrifuge building floor hosed and cleaned as needed.
- Control building floors swept and mopped weekly.
- Replaced burnt out light bulbs in main building.

Financial Update

Maintenance Expenditures

| | | |
|--------------|----------|---|
| | | |
| Ace Hardware | \$12.46 | PVC fittings to repair utility waterline in Influent building |
| Tercek | \$180.00 | Yearly alarm service |
| NAPA | \$111.29 | 5 gallons of gear oil for plant equipment |
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| Caps For WWTP | Contract Total per Year | January 2023 | Contract year to date | Remaining Balance |
|-----------------|-------------------------|------------------------|------------------------|------------------------|
| Maintenance Cap | Will report next month | \$303.75 | Will report next month | Will report next month |
| Sludge | Will report next month | Will report next month | Will report next month | Will report next month |

Health & Safety

There were no accidents in the month of January. Personnel have worked 6571 Days (17 years 10 months) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- COVID-19 news and updates
- Personal Protective Equipment
- Cyber security updates

Personnel

| Name | Title | Wastewater Operator Certifications |
|--------------------|----------------------|--|
| Michael Montgomery | Plant Manager | PA Class A, E, Wastewater Subclass 1,2,3,4 |
| Sharon Burkett | Lab Supervisor | PA Class A, E, Wastewater Subclass 1,2,3,4,5 |
| Kyle Smiley | Operator | PA Class A, E, Water Subclass 1 |
| | Operator in Training | |

Ebensburg Municipal Authority

Effluent Quality and Permit Compliance for

[January] Monthly Report [2/27/2023]

Operations

- ✓ Plant returned 22.697 million gallons of clean water to Howells Run
- ✓ All tests and operational requirements were met for January.
- ✓ Had one monthly ammonia violation, permit parameter is 3.5 mg/L plant reading was 4.5 mg/L for the month. This is the first violation in 11years at Ebensburg WWTP.

Maintenance & Repair

- I. Made daily equipment checks and plant rounds several times a shift.
- II. Plant safety inspection complete for the month.
- III. Ran centrifuge as needed for the month.
- IV. Swept and mopped control building floors weekly
- V. Repaired broken utility water line in Influent building due to freezing.
- VI. Replaced burnt out light bulbs in main building.

| Caps | This Month | Contract Year to Date | Remaining Balance |
|---------------------|------------------------|------------------------|------------------------|
| Maintenance Cap | \$303.75 | Will report next month | Will report next month |
| Sludge Disposal Cap | Will report next month | | |

Michael J. Montgomery
Plant Manager- Ebensburg WWTP

Ebensburg Municipal Authority

January monthly report for WTP



February 27, 2023

Ebensburg Borough
300 West High Street
Ebensburg, PA 15931

Dear Authority Members,
Inframark is pleased to submit the January 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 January, the Ebensburg water treatment plant treated 32,281,000 gallons of reservoir water. This equates to an average of 1,041,323 gallons per day. The table found in plant performance of this packet showcases past month's historical average flows. It should be noted that Nanty Glo was purchasing water during the month.

An average of 90,931 gallons per day was purchased from Saltlick and blended into Ebensburg's distributions system.

First quarter disinfection by-product samples were collected on January 3rd. Results from the January samples were roughly half the maximum contaminant level. Inframark has sampled disinfection byproducts twice now since Saltlick started adding a coagulant in their pretreatment process. Both samples have yielded results that indicate the disinfection byproduct (both TTHM and HAA5's) results are decreasing. If this trend continues, Ebensburg should return to compliance in 2023. Inframark believes the recent success with decreasing disinfection by products is directly related to the reduction of total organic carbon which is not a requirement of a membrane treatment facility under PA DEP regulations.

Inframark along with Heritage environmental services performed an annual inspection and service of the WTP chlorine room.

Water was supplied to Nany Glo starting January 5th – 23rd at a rate of 300-150 GPM.

Inframark assisted the publics work director with collecting runtimes at the Ebensburg's sewage lift stations needed for the chapter 94 reports.

Inframark assisted with preparations needed to place the elevated tank back into service which included installing a sample tap, collecting samples for water quality analysis, and communications with PA DEP.

On the Radar

Service clarifiers

DAF service

Inspect breakers in motor control cabinets

Assessment of variable frequency drives

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.
- January monthly compliance reporting was collected and submitted to PA DEP.
- 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.
- 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 January, 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. Five samples were collected in January and all five samples were at or above the minimum requirement.
- First quarter disinfection by product samples were collected
- First quarter total organic carbon and alkalinity samples were collected
- 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 clear well for all compliance compounds and secondary contaminants

Plant Operations

- Plant production has fluctuated through the month ranging from 831,000-1,303,000 gallons/day
- Three times weekly, one filter is taken offline, washed, and placed back into service when clean
- Conduct process control analysis
- Backwash flow rates are being monitored daily
- Filter media is being 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

- 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

| Date | Average gallons filtered per day | Total gallons filtered per month |
|-----------------|---|---|
| January, 2022 | 856,032 | 26,537,000 |
| February, 2022 | 964,679 | 27,011,000 |
| March, 2022 | 1,003,806 | 31,118,000 |
| April, 2022 | 960,800 | 28,824,000 |
| May, 2022 | 1,013,742 | 31,426,000 |
| June, 2022 | 786,433 | 23,593,000 |
| July, 2022 | 760,323 | 23,570,000 |
| August, 2022 | 775,935 | 24,054,000 |
| September, 2022 | 1,047,267 | 31,418,000 |
| October, 2022 | 949,452 | 29,433,000 |
| November, 2022 | 1,017,267 | 30,518,000 |
| December, 2022 | 915,387 | 28,377,000 |
| January, 2023 | 1,041,323 | 32,281,000 |

Maintenance & Repair

Inframark staff completed 88 work orders in the month of January

- Ladder inspections
- Greased DAF recycle pump
- Greased DAF scrapper
- Fire extinguisher inspection
- SCBA inspections
- Sump pumps exercised
- Eye wash/safety shower inspections
- Grease clarifier drives
- Chlorine room alarm test
- Rebuilt regulators in chlorine room
- Annual chlorine room scale calibration
- Repaired settled turbidimeter 1720E
- Greased finished water pumps/motors
- Alternated finished water pumps
- Cleaned pH and turbidity meters weekly
- Jar testing to optimize chemical usage
- Facility plumbing
- Monitored filter beds for deficiencies
- Cleaned lagoon vault

- Cleaned facility

Financial Update

Maintenance Expenditures

| Vendor | Expense | Description |
|------------------------|----------|---|
| Napa | \$299.96 | Blower/Clarifier belts |
| Walmart | \$105.98 | SD cards for online analyzers |
| Hach | \$539.97 | Spectrophotometer glassware/Class A beakers |
| Heritage Environmental | \$5,097 | Class A chlorine repair kit/ Annual chlorine room maintenance |

Caps

| Caps For WTP | Contract Total per Year | Previous Balance | Total Spent This Month | Remaining Balance |
|-----------------|-------------------------|------------------|------------------------|-------------------|
| Maintenance Cap | \$26,010.00 | \$6,513.41 | \$6,024.91 | \$470.50 |

Health & Safety

There were no accidents in the month of January. Personnel have worked 1,096 days (3 years) without an accident/injury.

Inframark Training and Presentations

- Weekly tailgate meetings
- COVID-19 news and updates
- Personal Protective Equipment
- Lessons learned

Personnel

| Name | Title | Wastewater 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 |