

INSPECTION REPORT

Inspection Entry Date/Time	07/29/2024 09:30 AM (AT)	Announced: Yes	
Inspection Exit Date/Time	07/29/2024 01:40 PM (AKT)	Access: Granted	
Weather	55°F, Overcast		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection		
Permittee Name	City of Petersburg		
Facility Name	Petersburg WWTP		
Facility Physical Address	1404 14 th Street		
City, State, Zip Code	Petersburg, Alaska 99833		
Borough	Petersburg		
Facility GPS Coordinates	56.817036, -132.932961		
Mailing Address	P.O. Box 329		
City, State, Zip Code	Petersburg, Alaska 99833		
FRS ID	110000760917		
Permit Number	AK0021458		
SIC	4952 (Sewerage Systems)		
Lead Inspector:			
Raymond Andrews	EPA Region 10	andrews.raymond@epa.gov	(206) 553-4252
Supervisor Review:			
Peter Contreras	EPA Region 10	contreras.peter@epa.gov	(206) 553-6708

SECTION I – Opening Conference

I arrived at the Petersburg WWTP (the “Site” or “Facility”), located at 1404 14th Street, Petersburg, Alaska, at 09:30 AM (AT) on 07/29/2024 for an announced inspection. I presented my credentials to Justin Haley, the Wastewater Supervisor, and informed him I was there to determine compliance with the Clean Water Act (CWA), and the facility’s National Pollutant Discharge Elimination System (NPDES) permit, permit # AK0021458. This report is based on information supplied by facility representatives, direct observations made by me, and records and reports maintained by the facility. In addition, information gathered prior to, or after, the Inspection from a review of EPA, State, and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA Region 10	Raymond Andrews	Lead Inspector	Yes	Yes
City of Petersburg	Justin Haley	Wastewater Supervisor	Yes	Yes

Facility Information

Responsible official?	Mayor Mark Jensen, mayorjensen@petersburgak.gov cc: Chris Cotta and Justin Haley
Approximate Service Population?	The facility has a service population of approximately 3,000.
WWTP Design Capacity & Average Daily Flow?	The facility has a design capacity of 3.6 million gallons per day (MGD). The average daily flow is 0.438mgd.
How many employees does the facility have? What are the employees’ certifications?	The facility has operators on site seven days a week. The facility has two full time employees and one part time employee. Mr. Haley has a Level 4 certification in Collections and a Level 3 certification in treatment. The full-time employee has a Level 2 certification in treatment. The part time employee, who works primarily in drinking water treatment, holds no wastewater treatment certifications.
What is the facility’s operation schedule?	The facility is fully staffed Monday through Friday from 6am until 3:30pm. There is an operator on-call on weekends and holidays.
Contributing or shared Jurisdictions	The facility receives septage and waste from cruise ships. The facility receives approximately 40,000 gallons of waste per year from the ships and septic systems. The facility has not noticed any negative effects on its systems due to the waste it accepts.
Does the facility have Industrial Users?	The facility has one industrial user, a solid waste bailing facility owned by the Borough. The facility creates liquid waste by squeezing liquid out of garbage and forming the solids into bails for transport to Seattle by barge and then to a landfill in central Washington.
What is the treatment process?	The facility’s treatment train consists of screening with 0.04-inch screens followed by grit removal and primary sedimentation using clarifiers. Sludge is pumped to an aerated holding tank.

How do you manage your biosolids?	The facility treats the sewage sludge to separate as much of the water from the solids as possible. This is done by dewatering using a belt filter press. Then the sludge is moved to a concrete slab and is mixed with woods chips. After the sludge has been mixed with wood chips, it is then composted on site. After composting process is complete, the biosolids are taken to a landfill and used as cover.
Is any portion of the treatment train that is non-operational?	The facility is fully operational.
Type of primary flow measuring device?	The facility uses an in-line Ultrasonic flow meter. Per manufacturer, the meter does not require calibration.
How many Outfalls does the facility have?	The facility has one outfall. The facility discharges into Fredrich Sound. The outfall is submerged and has never been inspected. Inspection of the outfall is not a requirement under the current permit.
What is your overflow/emergency capacity?	The facility does not have an emergency overflow capacity. Per Mr. Haley, the facility has never overflowed.
Have any bypasses or overflows happened at the plant or in the collection system in the last year?	The facility has not had any bypasses or overflows in the last five years.
Do you use in-house or contract out for laboratory analyses?	The facility conducts in-house analysis of all pollutant parameters except ammonia which is performed by a contract lab. The contract lab the facility uses is: Admiralty Environmental 641 W. Willoughby Avenue, Suite 301, Juneau, Alaska 99801 (907) 463-4415
What sort of failure alarm does the plant have?	The facility has a SCADA system which will detect problems with the treatment system. Once the SCADA system detects a problem it sends out an automated message to the operators' cell phones.
Backup electrical power source, and does it turn on automatically?	The facility has a back-up generator which runs the entire facility and main lift station. The generator has an automatic transfer switch, so it automatically activates when it senses a loss of power.
Are there any plans for renovation or additional equipment to allow for increased wastewater flow?	Currently, there are no plans for upgrades. Once the facility receives its next permit iteration, disinfection will be required.

SECTION II – Observations

No observations were made that constitute an area of concern.

SECTION III – Records Review

Records may not be in sequential order.

Record: Other - Lab Reports and Chain of Custody Documents		AOC: No
Ref #: RA1-RR-005	Reviewed By: Raymond Andrews	Reviewed Date: 08/06/2024
Post inspection, I reviewed the facility's lab reports and chain of custody documents from August 2023 through July 2024. I did not note any areas of concern.		
Record: Other - Notice of Noncompliance (Effluent Exceedance)		AOC: No
Ref #: RA1-RR-004	Reviewed By: Raymond Andrews	Reviewed Date: 08/06/2024
Post inspection, I reviewed a letter from Mr. Hartley to EPA explaining the exceedance of the BOD, 5-day, 20°C monthly average and daily maximum in the April 2024 monitoring month. The exceedance is further discussed in the EPA's Integrated Compliance Information System (ICIS) Database entry in Records Review and in the Areas of Concern sections of this report.		
Record: Other - Letter from City of Petersburg to EPA		AOC: No
Ref #: RA1-RR-003	Reviewed By: Raymond Andrews	Reviewed Date: 08/06/2024
Post inspection, I reviewed a letter, dated February 1, 2021, the City of Petersburg's Wastewater Operations Supervisor, Justin Haley, sent to EPA explaining the reason the BOD, 5-day, 20°C parameter for the monitoring month ending January 31, 2021, was not included on the discharge monitoring report (DMR) for the stated monitoring period. The reason explained in the letter was the facility's incubator was not functioning properly and a replacement could not be received in time. Additionally, no viable alternative for performing the analysis was available.		
Record: Other - EPA's Integrated Compliance Information System (ICIS) Database		AOC: Yes
Ref #: RA1-RR-002	Reviewed By: Raymond Andrews	Reviewed Date: 08/06/2024
Post inspection, I reviewed a report generated by EPA's ICIS database from July 2019 through June 2024. The report showed the facility exceeded its monthly average and daily max of BOD, 5-day, 20°C for the August 2024 monitoring month.		
The ICIS report also showed the facility did not submit data for BOD, 5-day, 20°C for the monitoring period ending January 31, 2021, which was due by February 10, 2021.		
Record: Other - Quality Assurance (QA) Plan		AOC: Yes
Ref #: RA1-RR-001	Reviewed By: Raymond Andrews	Reviewed Date: 07/29/2024
At the time of the inspection, I reviewed the facility's QA Plan, dated December 2022. The QA plan was revised and certified by the current Public Works Director, Chris Cotta, on July 30, 2024. Based on required elements missing from the QA Plan, it appears the Plan was not developed consistent with <i>Requirements for Quality Assurance Project Plans, EPA QA/R-5 EPA</i> , and <i>Guidance on Quality Assurance Project Plans, EPA QA/G-5</i> as required by the permit. The QA Plan did not include sample shipping methods. The QA Plan did not include qualifications and specific training of the facility staff. The QA Plan did not include the name and contact information of the contract laboratory. The QA Plan did not include qualifications and specific training of the facility staff.		

SECTION IV – Sampling Activity

No sampling was conducted.

SECTION V – Areas of Concern

Areas of Concern may not be in sequential order.

The presentation of Areas of Concern does not constitute a formal compliance determination or violation.

AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan																						
Permit Requirement Part I.G.2 of the permit states, in part, " Throughout all sample collection and analysis activities, the Permittee shall use the EPA approved quality assurance, quality control, and chain-of custody procedures described in: a. Requirements for Quality Assurance Project Plans, EPA QA/R-5 EPA, and b. Guidance on Quality Assurance Project Plans, EPA QA/G-5."																							
AOC: The Plan was not developed consistent with <i>Requirements for Quality Assurance Project Plans, EPA QA/R-5 EPA</i> , and <i>Guidance on Quality Assurance Project Plans, EPA QA/G-5</i> .																							
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan																						
Permit Requirement Part I.G.4 of the permit states, in part, "At a minimum the plan shall include the following...Sampling shipment procedures."																							
AOC: The QA Plan did not include sample shipping methods.																							
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan																						
Permit Requirement Part I.G.4 of the permit states, in part, "At a minimum the plan shall include the following...Qualification and training of personnel."																							
AOC: The QA Plan did not include qualifications and specific training of the facility staff.																							
AOC Reference #: RA1-RR-001	Records Review: Other - Quality Assurance (QA) Plan																						
Permit Requirement Part I.G.5 of the permit states, "Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the Permittee, shall be specified in the Quality Assurance Plan."																							
AOC: The QA Plan did not include the name and contact information of the contract laboratory.																							
AOC Reference #: RA1-RR-002	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database																						
Permit Requirement Part I.A, Table 1 of the permit shows, in part, the effluent concentration limit for BOD, 5-day, 20°C in April is a Monthly Average of 140 mg/L, and a Daily Maximum of 200 mg/L.																							
AOC: The facility exceeded its monthly average and daily max of BOD, 5-day, 20°C for the August 2024 monitoring month.																							
<table><tr><th>Month</th><th>Parameter</th><th>DMR Value</th><th>Permit Limit</th><th>Unit</th><th>Limit Type</th></tr><tr><td>April 2024</td><td>BOD, 5-day, 20°C</td><td>170.9</td><td>140.</td><td>mg/L</td><td>Mon Avg</td></tr><tr><td>April 2024</td><td>BOD, 5-day, 20°C</td><td>255.6</td><td>200.</td><td>mg/L</td><td>Daily Max</td></tr></table>						Month	Parameter	DMR Value	Permit Limit	Unit	Limit Type	April 2024	BOD, 5-day, 20°C	170.9	140.	mg/L	Mon Avg	April 2024	BOD, 5-day, 20°C	255.6	200.	mg/L	Daily Max
Month	Parameter	DMR Value	Permit Limit	Unit	Limit Type																		
April 2024	BOD, 5-day, 20°C	170.9	140.	mg/L	Mon Avg																		
April 2024	BOD, 5-day, 20°C	255.6	200.	mg/L	Daily Max																		

AOC Reference #: RA1-RR-002	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database
Permit Requirement Part II.C of the permit states, in part, "Reporting of Monitoring Results. Monitoring results shall be summarized each month on the Discharge Monitoring Report (DMR) form. The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month."	
AOC: The facility did not submit data for BOD, 5-day, 20°C for the monitoring period ending January 31, 2021, which was due by February 10, 2021.	

SECTION VI – Closing Conference

I held a closing conference with facility personnel at 01:40 PM (AKT) on 07/29/2024 for the inspection. During the closing conference, I discussed the observations and Areas of Concern I identified during the inspection. Observations and Areas of Concern have not yet been evaluated for a formal compliance determination.

SECTION VII – List of Appendices

1. Photo Log

APPENDIX 1: Photo Log

All photos were taken by Lead EPA Inspector, Ray Andrews, during the inspection.

Photos were not manipulated beyond minor cropping for sizing and labels or callouts to draw attention to the subject of the photo.

All photos taken during the inspection are included in the Photo Log; however, only photos that support an Observation or Area of Concern are included in the inspection report.

- P1020007 – Daily Logbook, June 26 – 29, 2024, example pages
- P1020008 – Laboratory Daily Inspection and Maintenance Checklist, page 1
- P1020009 – Laboratory Daily Inspection and Maintenance Checklist, page 2
- P1020010 – Clarifier, photo 1
- P1020011 – Clarifier, photo 3
- P1020012 – Clarifier, photo 4
- P1020013 – Clarifier, photo 5
- P1020014 – Clarifier, photo 6
- P1020015 – Clarifier, photo 7
- P1020016 – Clarifier, photo 8
- P1020017 – Clarifier, photo 9
- P1020018 – Shore Sign