

INSPECTION REPORT

Inspection Entry Date/Time	11/07/2023 10:30 AM (PT)	Announced: No	
Inspection Exit Date/Time	11/07/2023 03:45 PM (PT)	Access: Granted	
Weather	57°F, Cloudy		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection		
Permittee Name	City of Lafayette		
Facility Name	Lafayette Sewage Treatment Plant		
Facility Address	260 SE Madison Street		
City, State, Zip Code	Lafayette, Oregon 97127		
County	Yamhill		
Facility GPS Coordinates	45.239149, -123.112026		
FRS ID	110006696316		
Permit Number	OR0022551		
SIC	4952 (Sewage Treatment)		
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 Lafayette Sewage Treatment Plant (the “Site” or “Facility”), located at 260 SE Madison St, Lafayette, Oregon, at 10:30 AM (PT) on 11/07/2023 for an unannounced inspection. I presented my credentials to Chad Snyder and I informed him I was there to conduct an inspection to determine compliance with the Clean Water Act (CWA) and the facility’s National Pollutant Discharge Elimination System (NPDES) permit, permit # OR0022551. This report is based on information supplied by City of Lafayette representatives, my direct observations, and records and reports maintained by the permittee. 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 Lafayette	Chad Snyder	Public Works Director	Yes	Yes
City of Lafayette	Ron Layne	WWTP Operator	Yes	Yes

Facility Information

Responsible Official	Mayor Hillary Malcomson; hmalcomson@ci.lafayette.or.us
STP Service Population	The facility serves a population of approximately 4,700.
Industrial Users?	The facility does not receive waste from industrial users.
Does the facility accept waste from septage haulers?	The facility does not accept waste from septage haulers.
Hours of Operation	The facility is fully staffed Monday through Friday from 0700 until 1700, and on Saturday, Sunday & Holidays from 0700 until 0900. An on-call operator is available 24/7 to address any issues that arise during off hours.
What type of failure alarm does the plant have?	The facility has a supervisory control and data acquisition (SCADA) system which sends a message to the on-call operator if a problem is detected.
STP Design Capacity & Average Daily Flow	The facility has a design flow of 0.63 million gallons per day (mgd) with a peak daily flow of 1.89 mgd. The facility has an average daily flow of 0.55 mgd.
Type of primary flow measuring device?	The facility uses an ultrasonic flow measuring device which is calibrated annually by the manufacturer or a contractor.
Receiving Water	South Yamhill River
Number of Outfalls	The facility has a single outfall.
How often do you visually inspect the outfall?	The outfall is submerged for a large part of the year, so it is not visually inspected on a schedule. The outfall is inspected when the water level is low enough.
How are biosolids managed?	Biosolids are allowed to settle in two storage lagoons. Every two years, a contractor dredges the lagoons, collects the solids, and hauls them away.

Has there been any bypasses or overflows in the last year?	The facility has not had any bypasses or overflows in the past year.
Does the facility have back-up power?	The facility has emergency generators that automatically start in the event of a power failure. The generators power the entire facility.
Are there any plans to renovate the facility to allow for increased wastewater flow?	Currently, there are no plans to increase facility capacity.
Is any part of the facility non-operational?	The facility is fully operational.
Does the facility conduct laboratory analysis in-house?	The facility uses a contract lab to conduct all laboratory analysis except for pH, temperature, and E coli. The contract lab is: Edge Analytical Laboratories 1620 South Walnut Street Burlington, Washington 98233 (800) 755-9295

SECTION II – Observations

Location: Laboratory		
Observation #: RA1-OB-001	Date: 11/07/2023	Weather: 57F, Cloudy
The pH 10 buffer solution used to calibrate the pH meter was expired.		

SECTION III – Records Review

Records may not be in sequential order.

Record: Other - Chain of Custody Documents and Laboratory Analysis		AOC: No
Ref #: RA1-RR-007	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed the Facility's chain-of-custody and laboratory analysis documents from November 2021 through October 2023. The documents appeared to be in order and contain all the required information.		
Record: Permit		AOC: No
Ref #: RA1-RR-006	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed the facility's National Pollutant Discharge Elimination System (NPDES) Permit, permit # OR0022551. The permit was issued by ODEQ on September 30, 2020, with an effective date of November 1, 2020, and an expiration date of August 31, 2025.		
Record: Other - EPA's Integrated Compliance Information System (ICIS) Database Report		AOC: Yes
Ref #: RA1-RR-005	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed data in EPA's Integrated Compliance Information System (ICIS) Database covering the period from November 2018 through October 2023.		
I found 1,131 effluent exceedances over a 17-month period from October 2019 through August 2023. A list of parameter exceedances can be found in Appendix 2, Table 1.		
I found seven Discharge Monitoring Reports (DMRs) that were submitted late or incomplete. A list of those DMRs can be found in Appendix 2, Table 2.		

Record: Other - ODEQ Inspection Report		AOC: No
Ref #: RA1-RR-004	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed an inspection report for an inspection conducted by ODEQ on December 8, 2022. ODEQ found Areas of Concern that included: • numerous effluent exceedance violations, • nine instances of failure to submit noncompliance reports between October 2019 and September 2022, • failure to submit four complete discharge monitoring reports (DMRs) in 2022, and • failure to monitor various parameters between September 2019 and August 2022.		
Record: Other - Oregon Department of Environmental Quality (ODEQ) Mutual Agreement and Final Order (MAFO)		AOC: No
Ref #: RA1-RR-003	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed the Mutual Agreement and Final Order (MAFO) between ODEQ and the facility. The MAFO was filed March 30, 2022. The facility agreed to a penalty of \$5,111, after mitigation due the facility agreeing to complete an ODEQ approved Supplemental Environmental Project (SEP). The MAFO required the facility to repair, install, or replace equipment due to exceedances of effluent limits. The required equipment changes included replacing the alum pumps, adjusting the facility's SCADA system, and purchasing a certified thermometer.		
Record: Other - Quality Assurance (QA) Plan		AOC: Yes
Ref #: RA1-RR-002	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed the facility's Quality Assurance (QA) Plan, dated 2023. The QA Plan appeared to be in draft form. It did not have a date other than the year and was not signed and did not appear to have been reviewed. The QA Plan ("Plan") did not meet the requirements of the Permit. The Plan did not contain sufficient information and was lacking details on equipment maintenance, quality control activities, and data handling procedures.		
Record: Other - Emergency Response Plan		AOC: No
Ref #: RA1-RR-001	Reviewed By: Raymond Andrews	Reviewed Date: 11/07/2023
I reviewed the facility's Sanitary Sewer Overflow Emergency Response Plan, dated December 2015. The Plan was prepared for the City by: Tetra Tech 15350 SW Sequoia Parkway, Suite 220 Portland, Oregon 97224 (503) 598-0583 The Plan appeared to meet the minimum requirements of the Permit.		

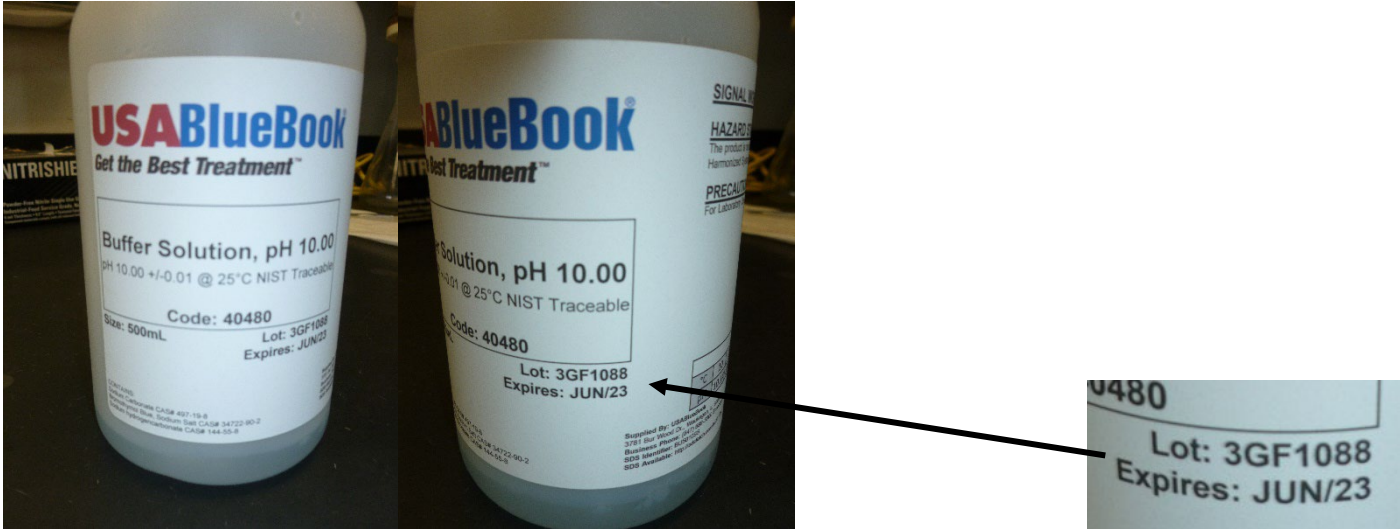
SECTION IV – Sampling Activities

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-OB-001	Location: Laboratory
Permit Requirement Schedule B, Part 3, Table 3 of the Permit requires the facility to monitor pH to ensure it the pH of the effluent is between a minimum of 6.2, and a maximum of 9.0.	
AOC: The pH 10 buffer solution used to calibrate the pH meter was expired as can be seen in the photos below. 	
AOC Reference #: RA1-RR-002	Records Review: Other - Quality Assurance (QA) Plan
Permit Requirement Schedule B.2.c.i of the Permit states, "The permittee must develop and implement a written Quality Assurance Plan that details the facility sampling procedures, equipment calibration and maintenance, analytical methods, quality control activities and laboratory data handling and reporting. The QA/QC program must conform to the requirements of 40 CFR 136.7.	
AOC: The QA Plan ("Plan") did not meet the requirements of the Permit. The Plan did not contain sufficient information and was lacking details on equipment maintenance, quality control activities, and data handling procedures.	
AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database Report
Permit Requirement Schedule A.1 of the Permit states "...the Permittee must comply..." with the effluent limits established in Table A1 of the Permit.	
AOC: I found 1,131 effluent exceedances over a 17-month period from October 2019 through August 2023. A list of parameter exceedances can be found in Appendix 2, Table 1.	

AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database Report
Permit Requirement Schedule B.1 of the Permit states "...must submit to DEQ monitoring results and reports..." as shown in Table B1. Table B1 requires that all monitoring data be submitted by the 15th of the month following the end of the monitoring period.	
AOC: I found seven Discharge Monitoring Reports (DMRs) that were submitted late or incomplete. A list of those DMRs can be found in Appendix 2, Table 2.	

SECTION VI – Closing Conference

I held a closing conference with facility personnel at 03:45 PM (PT) on 11/07/2023. During the closing conference, I discussed my observations and Areas of Concern identified during the inspection and records review. Observations and Areas of Concern have not yet been evaluated for a formal compliance determination.

SECTION VII – List of Appendices

1. Photo Log
2. DMR and Effluent Exceedance Tables

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 Area of Concern are included in the inspection report.

- P1010843 – pH 10 Buffer Solution, expired, photo 1
- P1010844 – pH 10 Buffer Solution, expired, photo 2
- P1010845 – Influent Flow Meter
- P1010846 – Influent Auto Sampler
- P1010847 – Dissolved Oxygen Meter Readout Panel, photo 1
- P1010848 – Dissolved Oxygen Meter Readout Panel, photo 2
- P1010849 – Effluent Auto Sampler

APPENDIX 2: Effluent Exceedance and DMR Tables

Table 1. Effluent Exceedance Areas of Concern

Month	Parameter	DMR Value	Permit Limit	Unit	Limit Type	# Violations
October 2019	BOD, 5-day, 20°C	14.41	10	mg/L	Mon Avg	31
October 2019	BOD, 5-day, 20°C	26	15	mg/L	Wkly Avg	7
October 2019	TSS	34.39	10	mg/L	Mon Avg	31
October 2019	TSS	98.5	15	mg/L	Wkly Avg	7
October 2019	Phosphorus	9.91	1.2	lb/d	Mon Avg	31
October 2019	Solids, susp % rmvl	66.43	85	%	Mo Av Mn	31
July 2020	Phosphorus	9.16	2.8	lb/d	Mon Avg	31
July 2020	Excess thermal load	4.5	4.2	kcal/d	Wkly Avg	7
August 2020	BOD, 5-day, 20°C	15.35	10	mg/L	Mon Avg	31
August 2020	BOD, 5-day, 20°C	26.5	15	mg/L	Wkly Avg	7
August 2020	Phosphorus	8.67	1.2	lb/d	Mon Avg	31
August 2020	E. coli	2420.	406	#/100mL	Daily Max	1
August 2020	Excess thermal load	4.81	4.2	kcal/d	Wkly Avg	7
September 2020	Phosphorus	2.17	1.2	lb/d	Mon Avg	30
September 2020	Excess thermal load	5.33	4.2	kcal/d	Wkly Avg	7
October 2020	BOD, 5-day, 20°C	13.06	10	mg/L	Mon Avg	31
October 2020	BOD, 5-day, 20°C	15.5	15	mg/L	Wkly Avg	7
October 2020	TSS	22	15	mg/L	Wkly Avg	7
October 2020	Phosphorus	6.96	2.8	lb/d	Mon Avg	31
February 2022	Ammonia	30	20.2	mg/L	Daily Max	1
March 2022	BOD, 5-day, 20°C	256.27	210	lb/d	Wkly Avg	7
March 2022	BOD, 5-day, 20°C	281.94	280	lb/d	Daily Max	1
March 2022	TSS	50	45	mg/L	Wkly Avg	7
March 2022	TSS	470.21	210	lb/d	Wkly Avg	7
March 2022	TSS	585.39	280	lb/d	Daily Max	1
May 2022	BOD, 5-day, 20°C	17.6	10	mg/L	Mon Avg	31
May 2022	BOD, 5-day, 20°C	37.5	15	mg/L	Wkly Avg	7
May 2022	TSS	14.1	10	mg/L	Mon Avg	31
May 2022	TSS	32.6	15	mg/L	Wkly Avg	7
June 2022	BOD, 5-day, 20°C	69	10	mg/L	Mon Avg	30
June 2022	BOD, 5-day, 20°C	78	50	lb/d	Mon Avg	30
June 2022	BOD, 5-day, 20°C	100.3	75	lb/d	Wkly Avg	7
June 2022	BOD, 5-day, 20°C	104	15	mg/L	Wkly Avg	7
June 2022	BOD, 5-day, 20°C	126.41	100	lb/d	Daily Max	1
June 2022	TSS	27.9	10	mg/L	Mon Avg	30
June 2022	TSS	48	15	mg/L	Wkly Avg	7
June 2022	Ammonia	14.04	11	mg/L	Mon Avg	30
June 2022	Ammonia	26	20.2	mg/L	Daily Max	1
June 2022	BOD, 5-day, % rmvl	68	85	%	Mo Av Mn	30
July 2022	BOD, 5-day, 20°C	45.6	10	mg/L	Mon Avg	31
July 2022	BOD, 5-day, 20°C	78	15	mg/L	Wkly Avg	7
July 2022	BOD, 5-day, 20°C	83.4	75	lb/d	Wkly Avg	7
July 2022	TSS	18.3	10	mg/L	Mon Avg	31
July 2022	TSS	28.3	15	mg/L	Wkly Avg	7
July 2022	Ammonia	23.61	11	mg/L	Mon Avg	31
July 2022	Ammonia	30.7	20.2	mg/L	Daily Max	1
July 2022	BOD, 5-day, % rmvl	77	85	%	Mo Av Mn	31
August 2022	BOD, 5-day, 20°C	24.3	10	mg/L	Mon Avg	31
August 2022	BOD, 5-day, 20°C	56	15	mg/L	Wkly Avg	7
August 2022	TSS	14.9	10	mg/L	Mon Avg	31

Month	Parameter	DMR Value	Permit Limit	Unit	Limit Type	# Violations
August 2022	TSS	23	15	mg/L	Wkly Avg	7
August 2022	Ammonia	27	11	mg/L	Mon Avg	31
August 2022	Ammonia	37	20.2	mg/L	Daily Max	1
September 2022	BOD, 5-day, 20°C	23	15	mg/L	Wkly Avg	7
September 2022	TSS	14.4	10	mg/L	Mon Avg	30
September 2022	TSS	31.5	15	mg/L	Wkly Avg	7
October 2022	TSS	13	10	mg/L	Mon Avg	31
October 2022	TSS	18.2	15	mg/L	Wkly Avg	7
November 2022	pH	8	9	SU	Daily Max	1
June 2023	TSS	13	10	mg/L	Mon Avg	30
July 2023	TSS	21	10	mg/L	Mon Avg	31
July 2023	TSS	112.3	100	lb/d	Daily Max	1
July 2023	Phosphorus	3.42	1.2	lb/d	Mon Avg	31
August 2023	TSS	15.6	10	mg/L	Mon Avg	31
August 2023	Phosphorus	2.4	1.2	lb/d	Mon Avg	31

Table 2. DMR Areas of Concern

Monitoring Period End	DMR Due Date	DMR Received Date	Notes
12/31/2019	1/15/2020	6/5/2020	Late/Incomplete. Missing BOD, 5-day, % removal, and Solids, suspended % removal
7/31/2020	8/15/2020	9/15/2020	Incomplete. Missing <i>E. Coli</i>
11/30/2020	12/15/2020	12/14/2020	Incomplete. Missing Ammonia, pH, Temperature, and Alkalinity
7/31/2021	8/15/2021	9/15/2021	Late. Phosphorus data was submitted late.
9/30/2021	10/15/2021	11/24/2021	Late.
5/31/2022	6/15/2022	1/3/2023	Late.
7/31/2022	8/15/2022	2/7/2023	Late.