

INSPECTION REPORT

Inspection Entry Date/Time	01/29/2025 9:14 AM (PT)	Announced: Yes	
Inspection Exit Date/Time	01/29/2025 1:35 PM (PT)	Access: Granted	
Weather	50°F, Sunny		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection		
Permittee Name	Lummi Indian Business Council		
Facility Name	Kwina Road MBR WWTP		
Facility Physical Address	4100 Lummi Shore Road		
City, State, Zip Code	Bellingham, Washington 98226		
County	Whatcom		
Facility GPS Coordinates	48.790239, -122.612852		
FRS ID	110038391406		
Permit Number	WA0026727		
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 Lummi Kwina Road MBR WWTP (“Facility”), located at 4100 Lummi Shore Road, Bellingham, Washington, at 9:14 AM (PT) on 01/29/2025 for an announced inspection. I presented my credentials to Daniel Jeffries, Lead Operator, and informed him I was there to conduct an inspection to determine the facility’s compliance with the Clean Water Act (CWA) and its National Pollutant Discharge Elimination System (NPDES) permit, permit # WA0026727. This report is based on information supplied by Mr. Jeffries, 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.

This is the third of three inspections I conducted on Lummi Tribal wastewater treatment facilities. The Kwina Road MBR Wastewater Treatment Plant’s permit became effective on January 1, 2023, and will expire on December 31, 2027.

The Gooseberry Point WWTP maintains the tribal laboratory that conducts the in-house analysis for specific parameters for all three facilities.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA Region 10	Raymond Andrews	Lead Inspector	Yes	Yes
Lummi Tribal Sewer and Water District	Daniel Jeffries	Lead Operator	Yes	Yes

Facility Information

Responsible Official?	Jim Heigzman, District Manager, jimh@ltswd.com
How many employees does the facility have?	The Lummi Sewer and Water District (“District”) shares three employees between its three facilities. Of the District’s three employees, two hold level one certifications and the third is in training.
What is the facility’s operation schedule?	There is an operator on site for two hours Monday and Friday, and one hour on weekends with a person on-call for holidays.
What is the facility’s service population?	The facility services approximately 1,500 residents.
What is the facility’s design capacity and average daily flow?	The facility has a design capacity of 0.108 million gallons per day (mgd), and an average daily flow of 0.120 mgd. The average daily flow exceeds the design capacity but, per Mr. Jeffries, the exceedance does not seem to be an issue currently, but it is the reason for the upgrade to double capacity.
What is the facility’s primary flow measuring device?	The facility uses two Magmeters to measure flow, one at the influent and one at the effluent.
How often is the flow measuring device calibrated?	The manufacturer specifications state the magmeters do not require calibration.
What is the facility’s receiving water?	The facility discharges into a wetland area that is not specifically named but is designated Wetland area # 211-08.
How many outfalls does the facility have?	The facility has a single outfall.
How often is the outfall inspected?	An operator visually inspects the outfall daily.

Where do you sample influent? Effluent?	The influent is sampled prior to the headworks. The effluent is sampled right before the outfall.
Are water samples analyzed in-house or sent out to a contract laboratory?	The facility analyzes total suspended solids (TSS), biological oxygen demand (BOD), fecal coliform, dissolved oxygen (DO), pH, and temperature in-house. A contract laboratory analyzes water samples for total Kjeldahl nitrogen (TKN), ammonia and total nitrate + nitrites (N+N).
Laboratory contact information.	Edge Analytical 805 Orchard Drive Suite 4 Bellingham, Washington 98225 (360) 715-1212
How are biosolids managed?	Biosolids are picked up by a 3rd party contractor and disposed of on an as-needed basis.
Does the facility have a failure alarm? How is an alarm addressed?	The facility uses a supervisory control and data acquisition (SCADA) system to monitor the facility. If the system detects a failure, it sends an automated to the on-call operator.
Does the facility have back-up power?	The entire facility is on back-up power. The back-up power automatically activates if the system detects a loss of main power.
What is the facility's overflow/emergency capacity?	The facility does not have an emergency or overflow capacity.
Are there any industrial users?	The facility does not have any industrial users.
Are there shared or contributing jurisdictions?	There are no shared jurisdictions.
Does the facility accept waste from septage haulers?	The facility does not accept waste from septage haulers.
Has the facility had any bypasses or hydraulic overloads in the past 5-years?	Around 2021, the plant bypassed treatment but sent the effluent to the Gooseberry plant for treatment and discharge.
Has the facility been renovated or upgraded in the last 5-years?	The membrane bioreactors (MBR) were upgraded in 2022.
Are there any plans to renovate or upgrade the facility?	The District plans to add another MBR system to double capacity within the next couple of years.

SECTION II – Observations

There were no observations made of facility operations that were an Area of Concern.

SECTION III – Records Review

Records may not be in sequential order.

Record: Other - Operations and Maintenance Plan		AOC: Yes
Ref #: RA1-RR-006	Reviewed By: Raymond Andrews	Reviewed Date: 01/29/2025
At the time of the inspection, I requested to review the facility's Operations & Maintenance (O&M) Plan. The facility did not have an O&M Plan.		
Record: Other - EPA's Integrated Compliance Information System (ICIS) Database		AOC: Yes
Ref #: RA1-RR-005	Reviewed By: Raymond Andrews	Reviewed Date: 02/13/2025
Post inspection, I reviewed information submitted by the facility to EPA's Integrated Compliance Information System (ICIS) Database for the time period from February 2020 through January 2025. Per ICIS, the facility did not have any effluent exceedances. ICIS did show the facility was late in submitting DMR data. A table showing the late DMR data is included in Appendix 2. Data in ICIS shows the facility has not yet submitted notification to EPA or the Lummi Natural Resources Department (LNRD) that the O&M Plan, QA Plan and the ERPN had been developed and implemented, which were all due on June 30, 2023.		
Record: DMR Reports		AOC: No
Ref #: RA1-RR-004	Reviewed By: Raymond Andrews	Reviewed Date: 02/13/2025
Post inspection, I reviewed facility Discharge Monitoring Reports (DMRs) from January 2022 through December 2024. I did not note any areas of concern.		
Record: Other - Quality Assurance Plan		AOC: Yes
Ref #: RA1-RR-002	Reviewed By: Raymond Andrews	Reviewed Date: 01/29/2025
At the time of the inspection, I reviewed the Quality Assurance Plan (QAP), dated March 7, 2016. The QAP needs an update. There is no indication the QAP was reviewed annually. The QAP was not prepared in the required format. The QAP did not contain the minimum requirements, i.e., it was missing: • Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements. • Map(s) indicating the location of each sampling point. • Qualification and training of personnel. • Name(s), address(es) and telephone number(s) of the laboratories used by the Permittee.		
Record: Other - Emergency Response and Public Notification Plan		AOC: Yes
Ref #: RA1-RR-001	Reviewed By: Raymond Andrews	Reviewed Date: 01/29/2025
At the time of inspection, I reviewed the facility's Emergency Response and Public Notification Plan (ERPN). The Kwina Road MBR facility uses the same ERPN plan as the Sandy Point facility, which I inspected first. After my inspection of the Sandy Point facility, the contacts were updated. However, the other areas of concern were still present. The plan was undated, and it did not explain how notification of the public would be carried out. The Plan did not explain how emergency operations would be carried out.		

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-006	Records Review: Other - Operations and Maintenance Plan
Permit Requirement Part II.A of the permit states, in part, "...the permittee must develop and implement an Operations and Maintenance (O&M) Plan for the wastewater treatment facility. Any existing O&M Plan may be modified for compliance with this section. Any changes occurring in the operation of the plant must be reflected within the O&M Plan."	
AOC: The facility did not have an O&M Plan.	
AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database
Permit Requirement Part II.A of the permit states, in part, "Within 180 days of the effective date of this permit, the permittee must submit written notice to EPA and LNR that the QAP has been developed and implemented."	
AOC: The facility has not supplied EPA or LNR with notice the O&M Plan had been developed and implemented, which was due on June 30, 2023.	
AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database
Permit Requirement Part II.B of the permit states, in part, "Within 180 days of the effective date of this permit, the permittee must submit written notice to EPA and LNR that the QAP has been developed and implemented."	
AOC: The facility has not supplied EPA or LNR with notice QA Plan had been developed and implemented, which was due on June 30, 2023.	
AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database
Permit Requirement Part II.E.2 of the permit states, in part, "The permittee must submit written notice to EPA and LNR that the plan has been developed and implemented within 180 days of the effective date of this permit."	
AOC: The facility has not supplied EPA or LNR with notice the ERPM had been developed and implemented, which was due on June 30, 2023.	
AOC Reference #: RA1-RR-005	Records Review: Other - EPA's Integrated Compliance Information System (ICIS) Database
Permit Requirement Part III.B of the Permit states, in part, "The Permittee must summarize monitoring results each month on the Discharge Monitoring Report (DMR) form..."	
AOC: The facility was late in submitting DMR data. The late data is in a table in Appendix 2.	
AOC Reference #: RA1-RR-002	Records Review: Other - Quality Assurance Plan

Permit Requirement

Part II.B of the Permit states, in part, "The Permittee must also certify to EPA that the QAP is being implemented and is reviewed with staff annually. Annual reviews will be registered with EPA by submittal of the staff attendance sheet used for the review sessions, along with a cover letter confirming the QAP review and identifying the enclosed attendance record. The annual QAP review letter and attendance sheet must be submitted with the January DMR of each subsequent year."

AOC:

There was no documentation the QAP was reviewed annually.

AOC Reference #: RA1-RR-002

Records Review: Other - Quality Assurance Plan

Permit Requirement

Part II.B.2 of the Permit states, "Throughout all sample collection and analysis activities, the Permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in the most recent versions of Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance Project Plans (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents."

AOC:

The QAP was not prepared per the reference documents "Requirements for Quality Assurance Project Plans (EPA/QA/R-5)" and "Guidance for Quality Assurance Project Plans (EPA/QA/G-5)".

AOC Reference #: RA1-RR-002

Records Review: Other - Quality Assurance Plan

Permit Requirement

Part II.B.3 of the Permit states, "At a minimum, the QAP must include the following:
a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
b) Map(s) indicating the location of each sampling point. c) Qualification and training of personnel.
d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the Permittee."

AOC:

The QAP was missing all elements required in Part II.B.3 of the Permit.

AOC Reference #: RA1-RR-001

Records Review: Other - Emergency Response and Public Notification Plan

Permit Requirement

Part II.E.1.c of the Permit states, at a minimum, the ERPN must, in part, "Ensure immediate notification to the public..."

AOC:

The ERPN did not explain how notification to the public would be carried out.

AOC Reference #: RA1-RR-001

Records Review: Other - Emergency Response and Public Notification Plan

Permit Requirement

Part II.E.1.e of the Permit states, at a minimum, the ERPN must, "Provide emergency operations."

AOC:

The ERPN did not explain how emergency operations would be carried out.

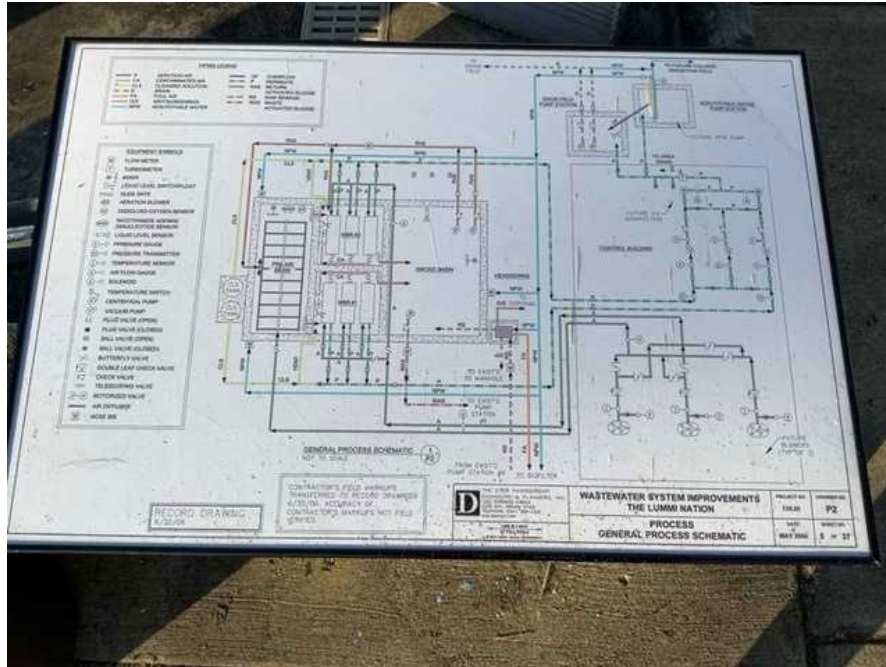
SECTION VI – Closing Conference

I held a closing conference with Mr. Jeffries at 1:35 PM (PT) on 01/29/2025 for the inspection. During the closing conference, I discussed the observations and Areas of Concern 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
2. Area of Concern Tables

APPENDIX 1: Photo Log



Site Diagram			IMG-202501290936463646113119.jpg
01/29/2025 09:36 AM	No CBI	No PII	Photographer: Raymond Andrews
48.78986078, -122.61370399			
This is a pre-upgrade site diagram. The screen on the diagram was replaced with a newer model and an additional pre-air basin was added.			



Influent auto sampler.			IMG-202501290939313931123147.jpg
01/29/2025 09:39 AM	No CBI	No PII	Photographer: Raymond Andrews
48.79030225, -122.6134156			
The influent auto sampler takes flow proportional samples.			



Screen system			IMG-202501290941244124118642.jpg
01/29/2025 09:41 AM	No CBI	No PII	Photographer: Raymond Andrews
48.79016113, -122.61381929			



Digester			IMG-202501290942394239136066.jpg
01/29/2025 09:42 AM	No CBI	No PII	Photographer: Raymond Andrews
48.78985863, -122.61394193			
Digester, photo 1			



Digester			IMG-202501290942434243137606.jpg
01/29/2025 09:42 AM	No CBI	No PII	Photographer: Raymond Andrews
48.78996072, -122.61380585			
Digester, photo 2			



Discharge/Outfall			IMG-202501290945254525191892.jpg
01/29/2025 09:45 AM	No CBI	No PII	Photographer: Raymond Andrews
48.79064958, -122.61268236			
The discharge pipe is in the rocks.			



Discharge			IMG-202501290945404540210235.jpg
01/29/2025 09:45 AM	No CBI	No PII	Photographer: Raymond Andrews
48.79061632, -122.61279645			
The discharge flows downhill to an unnamed wetland. It is unclear if the discharge reaches the Nooksack River.			



Membrane Bioreactors			IMG-202501290950125012102950.jpg
01/29/2025 09:50 AM	No CBI	No PII	Photographer: Raymond Andrews
48.78982481, -122.61400777			
Covered membranes.			



Pre-air Tank			IMG-202501290950465046115627.jpg
01/29/2025 09:50 AM	No CBI	No PII	Photographer: Raymond Andrews
48.78994797, -122.61386829			

APPENDIX 2: Area of Concern Tables

Late DMR Parameters

Monitoring Period End Date	DMR Due Date	Parameter	DMR Value Received Date
January 31, 2023	February 20, 2023	Nitrogen, ammonia total [as N]	February 17, 2023
January 31, 2023	February 20, 2023	Nitrogen, ammonia total [as N]	February 17, 2023
January 31, 2023	February 20, 2023	Nitrogen, ammonia total [as N]	February 17, 2023
January 31, 2023	February 20, 2023	Nitrogen, ammonia total [as N]	February 17, 2023
January 31, 2023	February 20, 2023	Nitrogen, Kjeldahl, total [as N]	February 17, 2023
January 31, 2023	February 20, 2023	Nitrite + Nitrate total [as N]	February 17, 2023
July 31, 2022	August 20, 2022	Oil and Grease	August 23, 2022
July 31, 2022	August 20, 2022	Solids, total dissolved	August 23, 2022
February 28, 2022	March 20, 2022	Temperature, water °C	December 08, 2022
February 28, 2022	March 20, 2022	Temperature, water °C	December 08, 2022
February 28, 2022	March 20, 2022	Temperature, water °C	December 08, 2022
December 31, 2021	January 20, 2022	Oxygen, dissolved [DO]	January 26, 2022
December 31, 2021	January 20, 2022	Oxygen, dissolved [DO]	January 26, 2022
December 31, 2021	January 20, 2022	Nitrogen, Kjeldahl, total [as N]	August 03, 2023
December 31, 2021	January 20, 2022	Nitrogen, Kjeldahl, total [as N]	August 03, 2023
December 31, 2021	January 20, 2022	Nitrite + Nitrate total [as N]	August 03, 2023
December 31, 2021	January 20, 2022	Nitrite + Nitrate total [as N]	August 03, 2023
December 31, 2021	January 20, 2022	Phosphorus, total [as P]	August 03, 2023
July 31, 2021	August 20, 2021	Oil and Grease	August 20, 2021
June 30, 2020	July 20, 2020	Nitrogen, Kjeldahl, total [as N]	July 27, 2020
June 30, 2020	July 20, 2020	Nitrogen, Kjeldahl, total [as N]	July 27, 2020