



NPDES Compliance Inspection Report

Moclips River Estates WWTP Taholah, Washington

Permit #: WA0026603

Inspection Date: February 9, 2021

Prepared by:

Raymond Andrews
U.S. Environmental Protection Agency, Region 10
Enforcement & Compliance Assurance Division
Water Enforcement & Field Branch
Field, Data & Drinking Water Enforcement Section

Signature/Date:

Andrews, Raymond L.	Digitally signed by Andrews, Raymond L. Date: 2021.04.12 07:29:30 -07'00'
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Supervisor Signature/Date:

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(All details in this report were obtained through conversations with Mr. Dave Hinchin or from observations made during the inspection.)

I. Facility Information

Facility Name: Moclips River Estates Wastewater Treatment Plant

Facility Owner/Operator: Quinault Indian Nation

Physical Address: 715 Qui'Nai'Elt Drive
Taholah, WA 98587

Lat/Long: 47.2461, -124.1836

Mailing Address: P.O. Box 189
Taholah, WA 98587

NAICS Code: 221320 (Sewage Treatment Facilities)
SIC Code: 4952 (Sewerage Systems)

Facility Contacts: Dave Hinchin
Quinault Indian Nation Utilities Manager
P.O. Box 189
Taholah, WA 98587
Office Phone: 360-276-0074
Cell Phone: [REDACTED]
Email: dhinchin@quinault.org

Christina Breault
Quinault Indian Nation Health Officer
Email: cbreault@quinault.org

Permit Number: WA0026603

Receiving Water: Moclips River

II. Inspection Information

Inspection Date: February 9, 2021

Inspectors: Raymond Andrews, Inspector
EPA Region 10, ECAD /FDDWES
Phone: 206-553-4252

Arrival Time: 12:00 PM

Departure Time: 2:30 PM

Weather: Clear, 36°F

Purpose: To determine compliance with the National Pollutant Discharge Elimination System (NPDES) permit and the Clean Water Act.

III. Permit Information

Moclips River Estates Wastewater Treatment Plant (“Facility”) is permitted under the National Pollutant Discharge Elimination System (NPDES) for wastewater treatment facilities. The Facility’s permit, NPDES permit # WA0026603, became effective on December 1, 2017, and will expire on November 30, 2022.

IV. Background

The Quinault Indian Nation (QIN) owns and operates the Moclips River Estates Wastewater Treatment Plant (WWTP) located in Taholah, Washington. The collection system has no combined sewers. The Facility serves a resident population of 225. Currently, there are no major industries discharging to the Facility.

The design flow of the Facility is 0.035 mgd. The annual average daily flow rate of the Facility is approximately 0.017 mgd. The WWTP process consists of a headworks, two bioreactors, microscreen filtration, and UV disinfection. The Facility discharges year-round to the Moclips River which lies approximately one-half mile South of the plant.

The Facility was last inspected by EPA [REDACTED], 2015. At the time of the inspection, the inspector found several areas of concern that included; failure to follow a required sample monitoring procedure or laboratory procedure, failure to follow or develop a required management practice or procedure, and failure to maintain a record or failure to disclose a document. No formal action was taken.

V. Inspection Chronology

This was an announced inspection. On January 7, 2021, I emailed Mr. Dave Hinchey, QIN Utilities Manager, and stated that I wanted to conduct a NPDES compliance inspection of QIN’s three wastewater treatment facilities: the Queets Village WWTP, the Taholah Village WWTP, and the Moclips River Estates WWTP.

This inspection immediately followed the Queets Village WWTP inspection, so Mr. Hinchey and I drove to the Moclips River Estates WWTP in separate vehicles. We arrived at the Moclips facility just before noon.

Once we arrived at the Moclips facility, I conducted an Opening Conference with Mr. Hinchey.

During the Opening Conference, I interviewed Mr. Hinchey about compliance and Facility operations. Following the interview, I inspected the laboratory.

Following the inspection of the lab, I conducted a site inspection. During the site inspection, I was accompanied throughout by Mr. Hinchén. I was not denied access to any part of the Facility.

The Moclips Rivers Estates WWTP was the second of three inspections I was conducting at the Quinault Indian Nations, so I did not conduct the Closing Conference until after the last inspection, which was conducted on February 11, 2021. Post inspection, I further reviewed files provided by the Facility. Mr. Hinchén answered all my questions.

VI. Opening Conference

Mr. Hinchén has operated the WWTP since 2009. He holds a Level 2 wastewater treatment certification and visits the Facility at least five days a week. Two uncertified employees assist in the operation of the wastewater treatment facilities.

VII. Site Inspection

An aerial image and a system schematic appear in **Attachment A**, and inspection photos and photograph log appear in **Attachment B**.

I started the site inspection with Mr. Hinchén leading me to the headworks. Wastewater is gravity fed to the lift station (**Photo 1**) from the tribal housing area. Once the waste reaches the lift station, it passes through a bar screen to remove large solids. The screenings are removed as needed and shipped off-site for disposal. The influent sample is drawn from the lift station. After passing the bar screen, the waste is pumped to a splitter box (**Photo 2**) through an underground piping system. The Facility operates two bioreactors. Using the splitter box, Mr. Hinchén can decide which of the bioreactors receives wastewater. Each [REDACTED] consists of an anoxic compartment, an aeration compartment, and a clarifier. The bioreactors are covered with deck planks (**Photo 3**) which prevented me from closely observing the processes. From the splitter box, the wastewater enters the anoxic compartment of one of the bioreactors. The anoxic compartment uses low revolutions per minute (RPM) agitation to encourage the sewage to mix with activated sludge. From the anoxic compartment, the wastewater overflows into the aeration compartment which uses fine bubble aeration diffusers to ensure adequate aeration. The wastewater flows into the clarifier at the bottom of the chamber. As the wastewater rises, a sludge blanket is formed which acts as additional filtration to filter out small particles. Excess sludge is pumped to a sludge tank (**Photo 4**). Excess sludge is removed and trucked to another WWTP for disposal. Once the wastewater has completed the anoxic/aeration/clarifying treatment cycle, it flows through a series of microscreen filtration drums (**Photo 5**) to remove any remaining fine particles. The wastewater passes through ultraviolet (UV) disinfection (**Photos 6 & 7**) as the final step in the treatment process. Effluent sampling is conducted on the outlet side of the UV system. Once the effluent passes UV disinfection, it is pumped to the outfall. I did not observe the actual outfall.

VIII. Laboratory Inspection

Mr. Hinchén conducts all wastewater analysis for the Queets Village, Taholah Village, and Moclips River Estates wastewater treatment plants at a laboratory maintained at the Moclips facility. Since the lab is tribally owned and operated, it is not state certified. The lab was clean, well maintained, and well organized.

Each of the three facilities serviced by the Moclips lab has a Quality Assurance (QA) manual labeled with the facilities name. It's basically the same manual with minor changes between the three facilities. One example of a minor change is the sample collection time.

The lab uses standard quality control procedures. All calibration reagents and blanks are current. Instruments are calibrated as recommended by the operations manual. The pH meter is calibrated prior to each use.

The lab has a binder of "Lab Procedures" with step-by-step instructions for conducting permit required wastewater analysis. The lab maintains daily temperature check logs on the refrigerator, incubator, oven, and water bath. From my review of the logs, the daily temperature checks were accurately and consistently completed. The lab used a mercury thermometer for each device to verify the unit's temperature. The daily checks are conducted Monday through Friday except for holidays.

The lab maintains monthly log sheets of raw data and uses an EXCEL spreadsheet to calculate final data reported on the Discharge Monitoring Reports (DMRs), which are submitted electronically through NetDMR.

IX. File Review

I reviewed the following records and documents:

- Integrated Computer Information system (ICIS) Violations Report (January 2016 through December 2020)
- Quality Assurance (QA) Manual [REDACTED]
- Operation and Maintenance (O&M) Plan, dated December 2002
- Facility Discharge Monitoring Report data sheets for 2018 – 2020

X. Areas of Concern

I noted the following areas of concern:

A. Annual Surface Water Monitoring Reports

Part I.C.6.b of the permit states, in part, "...the permittee must submit all surface water monitoring results for the previous calendar year for all parameters in an annual report to EPA by January 31st of the following year and with the application..."

During review of the ICIS Violations Report, I found the Facility had failed to submit the Annual Surface Water Monitoring Reports for 2017, 2018, and 2019. According to Mr. Hinchey, he was unaware he was required to submit an Annual Surface Water Monitoring Report in addition to the surface water monitoring data he was submitting on the monthly DMRs.

B. Operations & Maintenance Plan (O&M)

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 that the O&M Plan has been developed and implemented."

During review of the ICIS Violations Report, I found that EPA did not receive notification the Facility's Operations and Maintenance Report had been developed and implemented by the due date of June 1, 2018.

C. Quality Assurance Plan (QAP)

1. Quality Assurance Report

Part II.B of the permit states, "Within 180 days of the effective date of this permit, the permittee must submit written notice to EPA that the QAP has been developed and implemented. The permittee may submit written notification as an electronic attachment to the DMR."

During review of the ICIS Violations Report, I found that the Facility did not submit written notification that it had developed and implemented a quality assurance plan.

2. Quality Assurance Plan Format

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 *EPA 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.”

Upon review of the Facility’s QAP, I found that the plan was not designed in the format described in the documents referenced in Part II.B.2.

3. Quality Assurance Plan Requirements

Part II.B.3 of the permit states, in part, “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...”

During the inspection, Mr. Hinchey provided me with a copy of the Moclips River Estates WWTP’s “Quality Assurance Manual.” Upon review of the QA plan, I noted the plan was missing the following elements:

- the analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements;
- a map indicating the location of each sampling point; and
- the training of Facility personnel.

D. Industrial Waste Management

Part II.C.3 of the permit states, in part, “The Permittee must develop and maintain a master list of the industrial users introducing pollutants to the POTW.”

During review of the ICIS Violations Report, I found that EPA did not receive the Industrial User’s Report, which was due by December 1, 2019.

E. Enforceable Municipal Plan

Part II.C.6 of the permit states, “The Permittee must develop a legally enforceable municipal code to authorize or enable the POTW to apply and enforce the requirements of sections 307 (b) and (c) and 402(b)(8) and (9) of the CWA. The draft legal authority must be submitted to EPA for review and comment, to ensure that it complies with the minimum requirements of 40 CFR 403.8(f)(1), within 180 days of the effective date of

the permit. Within 180 days following EPA comment, the Permittee must adopt, implement, and enforce the local pretreatment legal authority.”

During review of EPA’s ICIS Violations report, I found that the Facility did not create, or submit, an Enforceable Municipal Plan.

F. Emergency Response and Public Notification (ERPN) Plan

Part II.D.1 of the permit states, in part, “The permittee must develop and implement an overflow emergency response and public notification plan that identifies measures to protect public health from overflows that may endanger health and unanticipated bypasses or upsets that exceed any effluent limitation in the permit.”

Post inspection, I requested a copy of the Facility’s ERPN plan. Mr. Hinchin said that there was no ERPN plan.

G. Discharge Monitoring Report (DMR) Submission

Part III.B.1 of the permit states, “Monitoring data must be submitted electronically to EPA no later than the 20th of the month following the completed reporting period.”

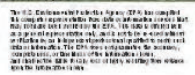
During review of the ICIS Violations Report, I found the DMR for the monitoring period April 2016, due by May 20, 2016, was received May 22, 2017.

XI. Closing Conference

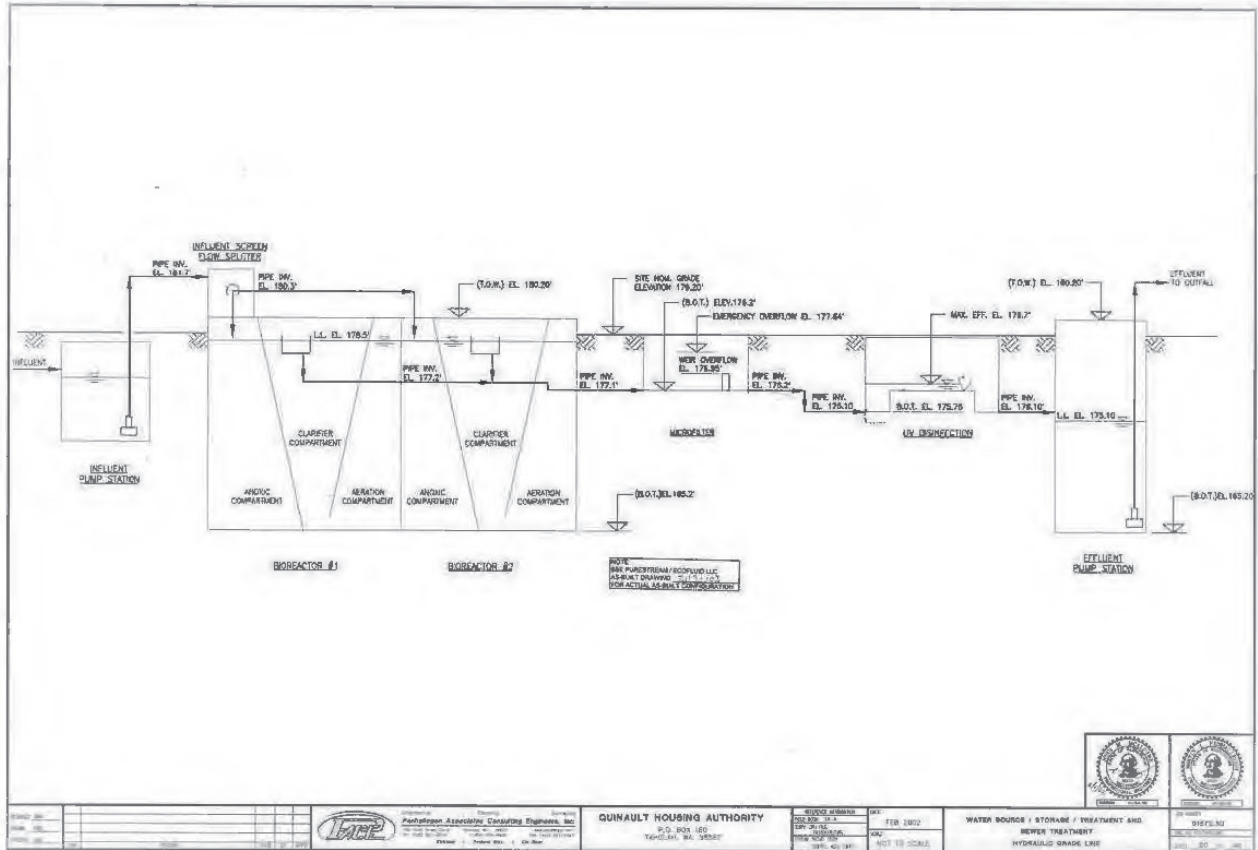
On February 11, 2021, following the conclusion of the third QIN wastewater treatment plant inspection, I held a closing conference with Mr. Hinchin. We discussed my observations and I gave a brief overview of the post-inspection process. I thanked him for his time and assistance.

Post inspection, I emailed a copy of the EPA Small Business Information Resource Sheet to Mr. Hinchin.

Aerial Image of General Site Location from Permit Fact Sheet



Moclips System Schematic from Permit Fact Sheet



ATTACHMENT B

Inspection Photographs and Photograph Log

(Photographs taken by Ray Andrews on February 9, 2021 with a Panasonic DMC-FH25 camera)



Photo 1 / P1000650 – Lift Station

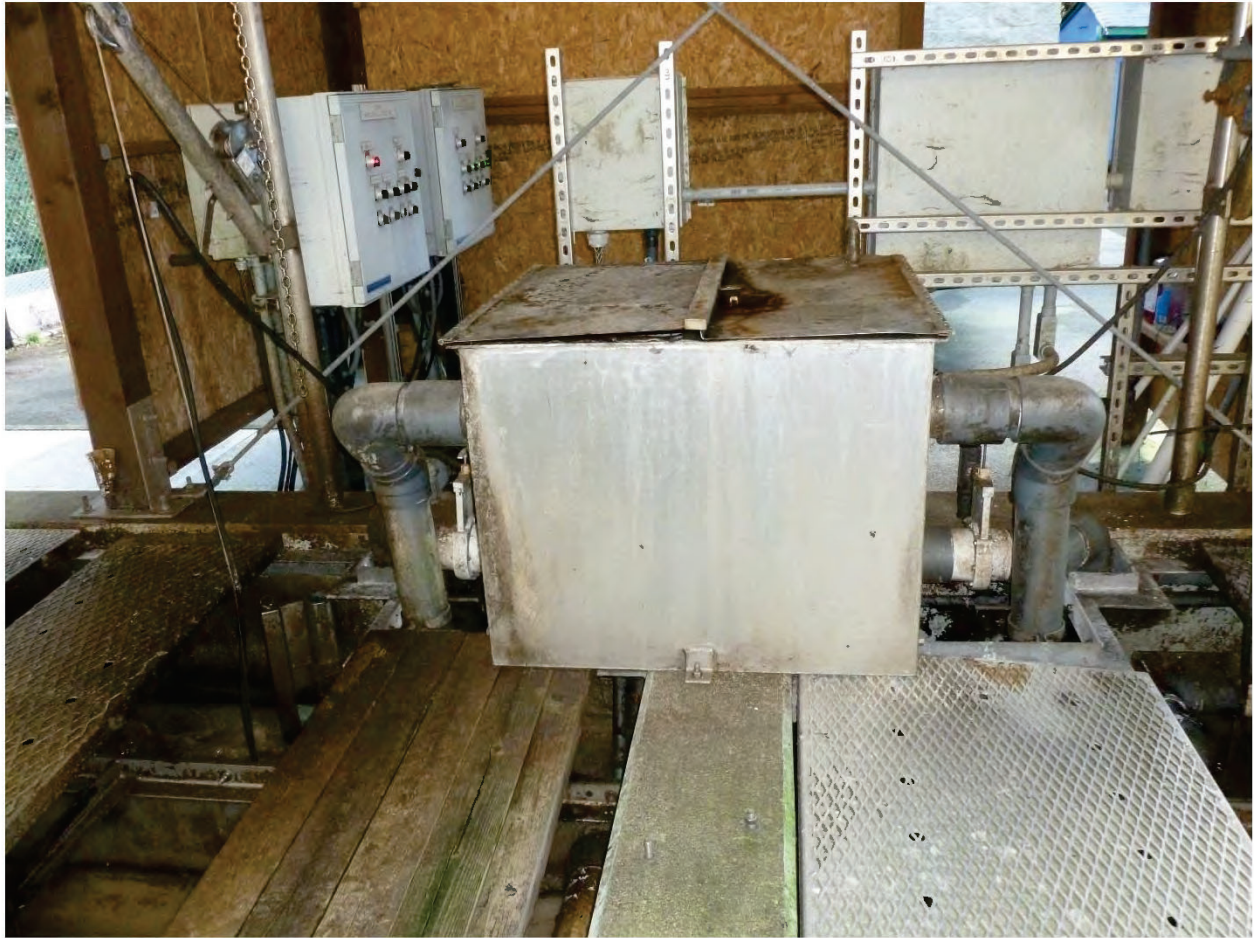


Photo 2 / P1000655 – Splitter Box



Photo 3 / P1000652 – Deck Planks



Photo 4 / P1000651 – Sludge Tank



Photo 5 / P1000656 – Microfilter Drums



Photo 6 / P1000658 – UV Disinfection, Outlet Side



Photo 7 / P1000657 – UV Disinfection, Inlet Side

Complete list of photographs taken during the inspection:

- P1000650 – Lift Station
- P1000651 – Sludge Tank
- P1000652 – Deck Planks
- P1000653 – Aeration Basin under Deck Planks
- P1000654 – Decant Weir under Deck Planks
- P1000655 – Splitter Box
- P1000656 – Microfilter Drums
- P1000657 – UV Disinfection, Inlet Side (1)
- P1000658 – UV Disinfection, Outlet Side (1)
- P1000659 – UV Disinfection, Outlet Side (2)
- P1000660 – UV Disinfection, Inlet Side (2)
- P1000661 – Outlet Flow meter

