



NPDES Compliance Inspection Report

Ketchikan Pulp Leachate Facility Ketchikan, AK

NPDES Permit Tracking Number
AK0053392

Inspection Date: September 25, 2024

Prepared by:

Katrina Chambon
U.S. Environmental Protection Agency, Region 10
Enforcement & Compliance Assurance Division
Water Enforcement & Field Branch
Surface Water Enforcement Section

Inspector Signature/Date:

KATRINA CHAMBON	Digitally signed by KATRINA CHAMBON Date: 2024.11.12 10:37:42 -09'00'
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Supervisor Signature/Date:

Marshalonis, Daniel (Dino)	Digitally signed by Marshalonis, Daniel (Dino) Date: 2024.11.13 13:51:37 -08'00'
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ATTACHMENT A - Project Location

ATTACHMENT B - Photo Log

[Unless otherwise noted, all details in this inspection report were obtained from conversations with Ms. Barry Hogarty, Mr. John Peterson with Ziegler Law Firm and Mr. Dereck Heitz with Maul Foster & Alongi, Inc. or from observations made during the inspection.]

I. Facility Information

Facility Name:	Ketchikan Pulp Leachate Facility
Facility Address:	409 Brusich Road Ketchikan, Alaska 99901
Facility Operator:	Phillip Benning Ketchikan Pulp Company 409 Brusich Road Ketchikan, Alaska 99901
Facility Owner:	Ketchikan Pulp Company 409 Brusich Road Ketchikan, Alaska 99901
Facility Contact(s):	Phillip Benning Operations Manager Phillip.Benning@lpcorp.com Barry Hogarty TECS-AK barry.hogarty@gmail.com 907-617-4561 John Peterson Ketchikan Pulp Company jpeterson@kpu.net 907-225-9401
Latitude/Longitude:	Outfall 001 N 55.4042. W 131.7292 SWL4 N 55.4018 W 131.7424 SWL6B N 55.3993 W 131.7418 SWL11 N 55.3993 W 131.7402 SWL12 N 55.3999 W. 131.7366
NPDES Tracking Number:	AK0053392
NAICS Code(s):	562212 Solid Waste Landfill
SIC Code(s):	4953 Refuse Systems

Facility Size: 16.9 acres

II. Inspection Information

Inspection Date: September 25, 2024

Inspector(s): Katrina Chambon
EPA Region 10, ECAD / SWES

Arrival Time: 9:00 AM

Departure Time: 1:40 PM

Weather: Mostly cloudy; moderate temperature

Purpose: To evaluate compliance with the requirements of the Clean Water Act and the Alaska Pollutant Discharge Elimination System (APDES) Individual Permit.

III. Permit Information

Ketchikan Pulp Leachate Facility (hereinafter referred to as the “Facility”) is a closed landfill located in Ketchikan, Alaska. The Ketchikan Pulp Company is the owner and operator of the Facility.

The current version of the Ketchikan Pulp Leachate Facility permit became effective on March 1, 2020, and is set to expire on February 28, 2025. The Facility submitted a renewal application to the Alaska Department of Environmental Conservation on August 28, 2024.

IV. Facility Background

According to the Facility’s renewal application dated August 28, 2024, the Facility is located at 409 Brusich Road, Ketchikan, Alaska. The treatment plant operates 24 hours a day. Current staffing for the treatment facility is one full-time employee with occasional help from a contractor.

The Ketchikan Pulp Company (KPC) owns and maintains the KPC Ward Cove Landfill (KPC Landfill), located northwest of Ketchikan, AK. According to Facility representatives the Facility is a closed solid waste landfill that discharges storm water runoff and treated landfill leachate into Refuge Cove and Ward Cove. The landfill contains two inactive waste disposal areas that were closed in 1997 and 1998. The waste material consists of wood waste, boiler ash, fly ash, and process sludge from past mill operations. The leachate treatment system was installed in 1998 and at that time the treated leachate was pumped back to the pulp mill and discharged through an outfall into

Ward Cove. In 2004, a new leachate Outfall 001 was constructed and the pumping of leachate to the pulp mill ceased. The treatment system consists of a pipe collection system in the closed landfill, a baffled leachate lagoon, a biofiltration swale, a collection sump, four pipes, and an outfall with diffusers. The lagoon is equipped with aerators, but they are no longer being used. The piping continues to collect ongoing leachate from residual material from the cells and conveys the leachate via gravity to a lined lagoon. The lagoon has a design capacity flow of 86,400 gallons per day with the retention time of 100 hours. The retention time in the biofiltration swale is approximately 5 hours. The effluent discharges through Outfall 001 via diffuser into Ward Cove. Parameters of concern associated with the leachate includes total ammonia, total suspended solids (TSS), 5-day biochemical oxygen demand (BOD₅), pH, manganese, color, and zinc. The Facility has an authorized mixing zone for manganese, color, and whole effluent toxicity.

The Facility has four storm water discharge locations that discharge into the marine waters of Ward Cove and Refuge Cove. The Facility constructed ditches, culverts, and swales to help reduce storm water flow to avoid erosion of the landfill cover. Limestone lined ditches are used as a treatment method to neutralize pH in the storm water prior to it leaving the Facility. Parameters of concern associated with storm water includes color, pH, TSS, manganese, and copper.

Ward Cove is classified as a Category 4a impaired waterbody for residues and dissolved gas. Discharges from Outfall 001 require to monitoring of BOD₅ to verify that levels of oxygen-demanding substances will not contribute to a depletion of dissolved oxygen.

V. Inspection Chronology

To confirm on-site availability and logistics, this inspection was announced on September 18, 2024, via email. I informed Mr. Phil Benning, Responsible Party, that the inspection was to assess compliance with coverage under the individual permit and that the inspection would consist of an opening conference, a records review, a tour of the facility and a closing conference. Mr. Benning informed me that he would be unavailable for the inspection and that he would have a contractor, Mr. Hogarty, attend the inspection on his behalf.

I arrived on-site at approximately 9:00 AM, I entered the office and was greeted by Ms. Hogarty and Mr. John Peterson. Following our initial introductions, I presented my EPA credentials, discussed the purpose and expectations of the inspection, and provided them with my business card. We had a brief discussion regarding the project's general timeline and recent activities. Ms. Hogarty explained the treatment process and daily activities.

The inspection consisted of an opening conference, a walk-through of the Facility's treatment plant and storm water areas, a records review, and ended with a closing conference. I was accompanied by Ms. Hogarty throughout the inspection.

VI. Opening Conference

Opening conference began at 9:00 AM.

The opening conference was held with Facility representatives shortly after my arrival. We had our initial introductions; I presented my inspector credentials and discussed the purpose and scope of the inspection. During the opening conference Ms. Hogarty and Mr. Peterson provided a general background of the Facility operations, current staffing, and general management responsibilities.

VII. Site Review

I began the inspection by interviewing Mr. Peterson and Ms. Hogarty. We discussed current operations at the Facility and discussed that there are no planned upgrades to the system. The Facility uses a HACH to monitor the flow, a continuous discharge with an average flow of 0.03 million gallons per day. KPC recently submitted a renewal application and stated whole effluent toxicity testing was conducted along with the priority pollutants as required by the permit.

Ms. Hogarty stated that Mr. Bret Serlin, Professional Engineer, with Tongass Engineering collects the water samples. Leachate monitoring is conducted once a month and storm water monitoring is conducted twice a year. Mr. Serlin conducts the pH onsite, and the remaining samples are sent to ALS in Kelso, WA for analysis. Ms. Hogarty stated that the weekly wastewater treatment plant inspections are conducted by herself, Phil Benning, or Roy Blair.

I began the facility walkthrough with Ms. Hogarty at 11:30 am starting with storm water outfall SWL6B located at the northern portion of the property. Storm water from SWL6B flows to the northwest into Refuge Cove (**Photos 6, 7, and 8**). Next, we drove to the treatment facility, and I observed the backup generator (**Photo 9**). Ms. Hogarty stated that the generator is serviced as needed and it has not been used since there have been no issues with power outages. A copy of the permit was observed in the generator room (**Photo 10**).

Next, we walked over to the treatment lagoon. Ms. Hogarty stated that groundwater is pumped from underneath the landfill and treated as a precaution. There are two ground water pumps located adjacent to the lagoon (**Photos 13, 14, 20, and 21**). The influent pipe was discharging into the lagoon from the influent sump (**Photos 15 and 16**). Vegetative growth was observed around the influent pipe and within the lagoon (**Photos 11 and 12**). At least 3-feet of freeboard was observed at the lagoon (**Photos 36, 37, 38, 39, and 40**). Ms. Hogarty stated that trees and/or vegetation is cut down as needed, usually on a yearly basis. There is an overflow pipe that discharges into the lagoon in case there is a high flow of leachate (**Photo 17**). The aerators for the lagoon are no longer in use because the pilot study conducted in 2007 confirmed that the aerators were not necessary to achieve permit water quality standards. We observed the effluent pipe that discharges into the biofiltration swale. Vegetation was observed around the pipe (**Photos 18 and 19**). Ms. Hogarty pointed out the pinch valve that can be used for cutting off the discharge to the biofiltration swale in case of an emergency (**Photo 22**). We observed the

flow meter (**Photo 23**). According to Ms. Hogarty, the average daily flow is 37,000 – 40,000 gallons per day. Next, we walked to the biofiltration swale (**Photo 24**). From the biofiltration swale, we walked to the weir to observe the sample location and the discharge pipes that flow to Outfall 001 (**Photos 25 and 26**). There are four pipes at the weir that are located at different elevations to help control the flow to the outfall.

Next, we walked to the storm water outfall SW11 located at the south portion of the property and observed the sample location. No sheen or odor was observed, and the limestone ditch was visible (**Photos 27, 28, 29, and 30**). Next, we walked to the storm water outfall SW12 located at the southeast portion of the property. (**Photos 31 and 32**). Next, we walked to the beach to observe the outfall sign and the outfall pipe (**Photos 34 and 35**). The outfall pipe has riprap over it and is not visible. The outfall sign is missing information such as the phone number, the discharge of leachate, and name of the discharger. Finally, we walked through the woods to storm water outfall SWL4 located on the east portion of the property. No sheens or odors were observed (**Photos 41 and 42**).

File Review

The following documents were reviewed as part of this inspection:

- 2020 Individual permit
- Renewal application dated August 28, 2024
- Discharge monitoring reports 2021 through 2024
- Laboratory data 2020 through 2024
- Whole effluent toxicity test 2024
- Priority pollutants lab results 2024
- Quality assurance project plan (QAPP) dated June 2020
- Written notification that the QAPP has been developed and implemented dated July 8, 2020.
- Best management practice (BMP) plan dated July 2020
- Written notification that the BMP plan has been developed and implemented dated July 8, 2020.
- Storm water pollution prevention plan dated June 2020
- Receiving water monitoring results 2022 and 2024

- Notice of noncompliance for lack of monitoring in December 2021
- Quarterly storm water visual assessments
- Flow metering charts 2020 through 2024
- Sampling field notes
- Weekly inspection reports

VIII. Areas of Concern

Observations during the inspection identified the following areas of concern.

A. Effluent limit exceedances for manganese occurred on two separate occasions.

Date	Reported Value	Permit Limit	Monthly average	Total
September 2023	2.18 mg/L	1.5 mg/L	Monthly average	30
September 2021	2.27mg/L	1.5 mg/L	Monthly average	30

Part 1.2.1 of the permit states “The permittee must limit and monitor discharges from Outfall 001A as specified in Table 2. The permittee must comply with effluent limitations in the table at all times unless otherwise indicated, regardless of monitoring frequency or reporting required by other provisions of this permit.”

B. Failure to conduct sampling for color, pH, ammonia, and manganese in December 2021.

Part 1.2.1 of the permit states “The permittee must limit and monitor discharges from Outfall 001A as specified in Table 2.”

C. Missing information on the identification sign. The phone number, the discharge of leachate, and name of the discharger is omitted from the identification sign.

Part 3.3 of the permit states, “At least one sign must be posted on the shoreline near Outfall 001A during discharge. Signs must inform the public that treated landfill leachate is being discharged, state that there is a mixing zone and describe it and provide the phone number and identify of the discharger.”

D. Failure to report “other noncompliance” for the two exceedances of manganese in September 2023 and September 2021.

Part Appendix A 3.5 of the permit states, “A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance

Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2 (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.”

- E.** The quality assurance project plan (QAPP) is missing the sample location for Outfall 001.

Part 2.1.6 of the permit states, “At a minimum, a QAPP must include the following:
2.1.6.2 Maps indicating the location of each sampling point;”

- F.** The QAPP is missing the qualifications and training of personnel.

Part 2.1.6 of the permit states, “At a minimum, a QAPP must include the following:
2.1.6.3 Qualification and training of personnel.”

- G.** There is vegetation growing in the lagoon.

Part Appendix A 1.6.1 of the permit states, “A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee’s duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.”

IX. Closing Conference

Following the walk-through and file review, a closing conference was held with KPC representatives where I discussed my observations and the next steps regarding inspection report transmittal. I thanked them for their time and cooperation with the inspection. Closing conference concluded at 1:40 PM.

ATTACHMENT A

Facility Map



ATTACHMENT B

Photograph Log

Photographs taken by Katrina Chambon on September 25, 2024

Photo Log- Ketchikan Pulp Leachate Facility

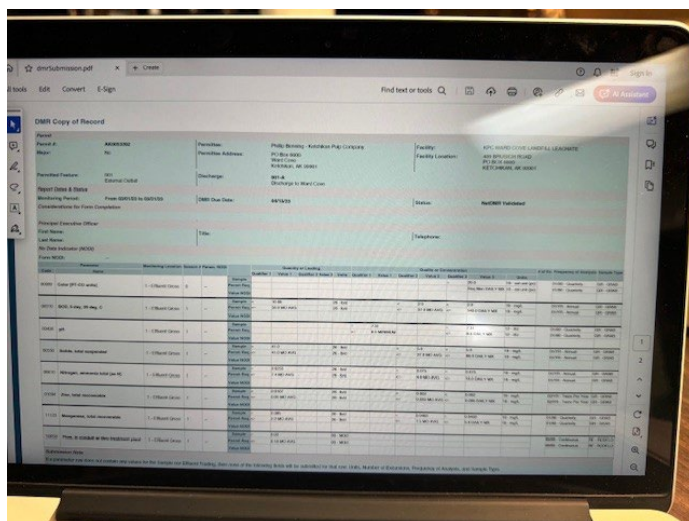
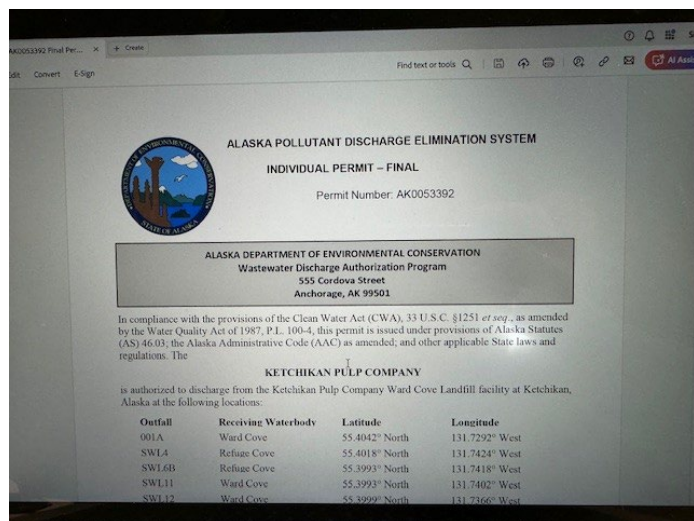


Photo Log- Ketchikan Pulp Leachate Facility

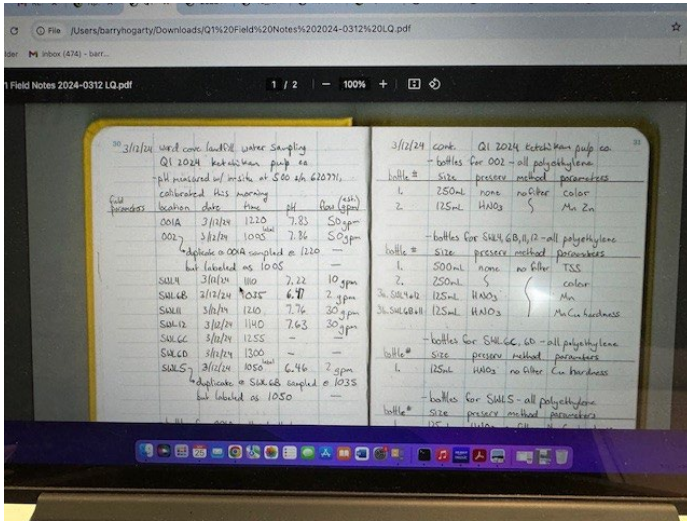


Photo #:05 (013)
Description: Field notes

Photo #:06 (015)
Description: Storm water outfall SWL6B



Photo #:07 (016)
Description: Storm water outfall SWL6B sampling location.



Photo #:08 (017)
Description: Storm water outfall SWL6B flow direction to the northwest.

Photo Log- Ketchikan Pulp Leachate Facility

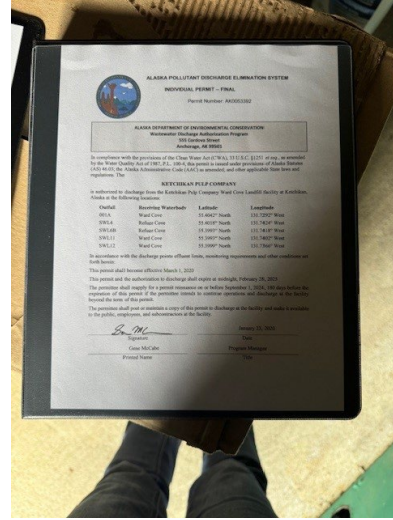


Photo #:09 (020)

Description: Storm water inlet removal for preparation to pour concrete.

Photo #:10 (021)

Description: Copy of permit onsite.



Photo #:11 (026)

Description: Leachate and groundwater influent pipe.



Photo #:12 (027)

Description: Leachate and groundwater influent pipe.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:13 (08463)
Description: Groundwater dewatering pump #1.



Photo #:14 (08464)
Description: Groundwater dewatering pump #1



Photo #:15 (08466)
Description: Influent sump.



Photo #:16 (8467)
Description: Influent sump.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:17 (8469)
Description: Overflow pipe.



Photo #:18 (8472)
Description: Effluent pipe to wetlands.



Photo #:19 (8473)
Description: Effluent pipe to wetlands.



Photo #:20 (8476)
Description: Groundwater dewatering pump #2.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:21 (8477)
Description: Groundwater dewatering pump #2.



Photo #:22 (8479)
Description: Pinch valve to shutoff flow to wetlands.



Photo #:23 (8481)
Description: Flow meter.

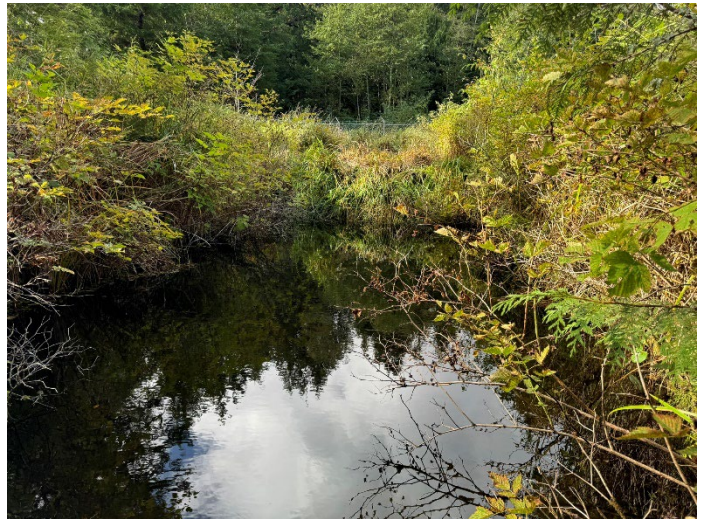


Photo #:24 (8483)
Description: Constructed wetlands for effluent.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:25 (8484)
Description: Weir for effluent flow to discharge pipe and sample location.



Photo #:26 (8485)
Description: V-notch and sample location.



Photo #:27 (8491)
Description: Storm water outfall SWL11.



Photo #:28 (8493)
Description: Storm water outfall SWL11.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:29 (8495)

Description: Storm water outfall SWL11 sample location.



Photo #:30 (8496)

Description: Limestone lined ditches to help with pH neutralization.



Photo #:31 (8491)

Description: Storm water outfall SWL12 sampling location.



Photo #32 (8493)

Description: Storm water outfall SWL12.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:33 (8507)
Description: Closed landfill cap.



Photo #:34 (8508)
Description: Discharge location ID sign.



Photo #:35 (8511)
Description: Outfall 001 discharge location.



Photo #36 (8512)
Description: Wastewater lagoon with vegetative growth.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:37 (8513)
Description: Wastewater lagoon with vegetative growth.



Photo #:38 (8514)
Description: Wastewater lagoon with vegetative growth.



Photo #:39 (8515)
Description: Wastewater lagoon with vegetative growth.



Photo #40 (8516)
Description: Wastewater lagoon with vegetative growth.

Photo Log- Ketchikan Pulp Leachate Facility



Photo #:41 (8521)
Description: Storm water outfall SWLL4 sample location.



Photo #:42 (8522)
Description: Storm water outfall SWLL4 sample location.