



# Alaska Department of Environmental Conservation

## Division of Water

### Authorization to Discharge-**DRAFT**

#### AUTHORIZATION TO DISCHARGE UNDER THE ALASKA POLLUTANT ELIMINATION SYSTEM FOR DOMESTIC WASTEWATER TREATMENT LAGOONS DISCHARGING TO SURFACE WATER

**FACILITY ASSIGNED AUTHORIZATION NUMBER: AKG573041**

**GENERAL PERMIT NUMBER: AKG573000**

See this [General Permit](#) for all permit requirements.

The following facility is authorized to discharge in accordance with the terms of the State of Alaska General Permit AKG573000 and any site specific requirements listed in this authorization.

The authorization effective date is **DRAFT**

The authorization to discharge shall expire at midnight, **August 31, 2023**

The permittee shall reapply for a permit reissuance on or before **March 4, 2023**, 180 days prior to the expiration of the general permit.

#### **SECTION 1 – RESPONSIBLE PARTY**

Issued to: Kasigluk Traditional Council

#### **SECTION 2 – FACILITY INFORMATION**

Facility Name: Old Kasigluk Lagoon

Facility Location:

Facility Location: 60.9019° North

Facility Location: 162.5144° West

Type of Facility: Class C, 3 cell non-aerated lagoon

Waterbody Discharged to: Johnson River

Type of Disinfection: None

## SECTION 3 – OUTFALL 001A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effluent Compliance Point: at the point of discharge from the sewage lagoon

Effluent Parameter	Units <sup>a</sup>	Average Monthly	Average Weekly	Maximum Daily	Minimum Daily	Sample Location	Sample Frequency	Sample Type
Flow	gpd	N/A	N/A	144,000	N/A	Effluent	Daily during discharge	Measured or Estimated
pH	s.u.	N/A	N/A	8.5	6.5	Effluent	2/discharge event <sup>b</sup>	Grab
Dissolved Oxygen (DO)	mg/L	N/A	N/A	17	7	Effluent	Upon DEC request	Grab
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	45	65	N/A	N/A	Effluent	2/discharge event <sup>b</sup>	Grab or Composite <sup>c</sup>
	lbs/day	54	78	N/A	N/A			Calculated <sup>d</sup>
BOD <sub>5</sub> Percent Removal	%	65	N/A	N/A	N/A	Influent and Effluent <sup>e</sup>	1/discharge event	Calculated <sup>f</sup>
Total Suspended Solids (TSS)	mg/L	70	N/A	N/A	N/A	Effluent	2/discharge event <sup>b</sup>	Grab or Composite <sup>c</sup>
	lbs/day	84	N/A	N/A	N/A			Calculated <sup>d</sup>
TSS Percent Removal	%	65	N/A	N/A	N/A	Influent and Effluent <sup>e</sup>	1/discharge event	Calculated <sup>f</sup>
Fecal Coliform Bacteria (FC) <sup>g</sup>	FC/100 mL	200	N/A	800	N/A	Effluent	2/discharge event <sup>b</sup>	Grab
E. coli <sup>g</sup>	counts/100 mL	N/A	N/A	Report	N/A	Effluent	1/discharge event <sup>h</sup> (May-Sept)	Grab

**Footnotes:**

- a. gpd (gallons per day), lbs (pounds), L (liter), mg (milligram), mL (milliliter), s.u. (standard pH units)
- b. Twice per discharge event means once at the beginning or middle, and once near the end of the discharge event.
- c. See Appendix C of AKG573000 permit for a definition.
- d.  $\text{lbs/day} = [(\text{BOD or TSS concentration in mg/L}) \times (\text{facility design flow in gpd}) \times (\text{conversion factor of } 8.34)/1,000,000]$
- e. Influent and effluent samples must be taken over approximately the same time period. A minimum of two influent and effluent samples are required.
- f.  $\text{Minimum \% Removal} = [(\text{monthly average influent concentration in mg/L} - \text{monthly average effluent concentration in mg/L}) / (\text{monthly average influent concentration in mg/L})] \times 100$ . The monthly average percent removal must be calculated using the arithmetic mean of the influent value and the arithmetic mean of the effluent value for that month. Calculation is required only once per discharge event.
- g. For more than one sample, FC and E. coli results must be reported as the geometric mean. When calculating the geometric mean, replace all results of zero, 0, with a one, 1. The geometric mean of “n” quantities is the “nth” root of the quantities. For example the geometric mean of 100, 200, and 300 is  $(100 \times 200 \times 300)^{1/3} = 181$ .
- h. Sampling required only when discharging during the time period May-Sept. Sampling should be conducted at the same time as FC sampling.

## SECTION 4 – MIXING ZONE AUTHORIZATION

A mixing zone is authorized for fecal coliform bacteria.

The mixing zone for this discharge is defined as 830 feet downstream centered over the point where the discharge enters Johnson River.

Mixing zone samples should be collected, if safely possible, from the leading edge of the plume, just outside of the mixing zone boundary.

## SECTION 5 – MIXING ZONE LIMITATIONS AND MONITORING

Mixing Zone Compliance Point: at the outside boundary of the mixing zone

Mixing Zone (MZ) Parameter	Units	Average Monthly	Maximum Daily	Minimum Daily	Sample Location	Sample Frequency	Sample Type
Fecal Coliform Bacteria (FC) <sup>a</sup>	FC/100 milliliters	20	40 <sup>b</sup>	N/A	Boundary of MZ	2/year	Grab

Footnotes:

- a. For more than one sample, FC results must be reported as the geometric mean. When calculating the geometric mean, replace all results of zero, 0, with a one, 1. The geometric mean of “n” quantities is the “nth” root of the quantities. For example the geometric mean of 100, 200, and 300 is  $(100 \times 200 \times 300)^{1/3} = 181$ .
- b. Not more than one sample, or if more than ten FC bacteria samples are collected during the reporting period, not more than 10% of the samples may exceed 40 FC/100 mL.

## SECTION 6 – Electronic Reporting (E-Reporting) Rule for Discharge Monitoring Reports (DMR)

The permittee must submit DMR data electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127) upon the effective date of the Permit. Authorized persons may access permit information by logging into the NetDMR Portal (<https://cdxnodengn.epa.gov/oeca-netdmr-web/action/login>). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g. mixing zone receiving water data, etc...), shall be included as an attachment to the NetDMR submittal. DEC has established an e-Reporting Information website at <http://dec.alaska.gov/water/Compliance/EReportingRule.htm> that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at <https://netdmr.zendesk.com/home>.

**SECTION 7 – DEC STAFF CONTACTS**

If you have any technical questions regarding this authorization or the requirements of the general permit, please contact Melinda Smodey at [melinda.smodey@alaska.gov](mailto:melinda.smodey@alaska.gov) or (907) 269-7564.

If you have questions regarding NetDMR, please contact Lisa Hart at [Lisa.Hart@alaska.gov](mailto:Lisa.Hart@alaska.gov) or (907) 376-1872.

If you have questions regarding compliance with any permit or authorization requirement, please contact Katrina Chambon at [katrina.chambon@alaska.gov](mailto:katrina.chambon@alaska.gov) or (907) 269-7550.

A permittee shall orally report any noncompliance event that may endanger health or the environment within 24 hours after the permittee becomes aware of the circumstances and in writing within five days after the permittee becomes aware of the circumstances. Please use the phone numbers and addresses below to report noncompliance events. Additional information regarding twenty-four hour reporting may be found in Appendix A of General Permit AKG572000. The required written follow-up notification can be sent via fax, email, or U.S. Postal Service.

Alaska Department of Environmental Conservation  
Attn: Compliance and Enforcement Program  
555 Cordova Street  
Anchorage, Alaska 99501

Toll Free Nationwide: 1-877-569-4114  
Anchorage or International: 1-907-269-4114  
Fax: 1-907-269-4604  
email: [dec-wqreporting@alaska.gov](mailto:dec-wqreporting@alaska.gov)

**SECTION 6– CERTIFICATION/SIGNATURE**

**DRAFT**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Earl L. Crapps  
\_\_\_\_\_  
Printed Name

Section Manager Domestic & Industrial Utilities  
\_\_\_\_\_  
Title