



# Alaska Department of Environmental Conservation

## Division of Water

### Authorization to Discharge

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

**FACILITY ASSIGNED AUTHORIZATION NUMBER: AKG573040**

**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, 2018**

The permittee shall reapply for a permit reissuance on or before **March 3, 2018**, 180 days prior to the expiration of the general permit.

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

Issued to: City of Shageluk

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

Facility Name: Shageluk Sewage Lagoon

Facility Location: Shageluk

Type of Facility: Class A  
2-cell non-aerated lagoon, no disinfection

Outfall Location: Latitude: 62.8242° North Longitude: 159.5320° West

Waterbody Discharged to: Innoko River

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

Effluent Compliance Point: at the point of discharge from the lagoon, prior to discharge into Innoko River

Effluent Parameter	Units <sup>a</sup>	Minimum Daily Limit	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Sample Location	Sample Frequency	Sample Type
Flow	gpd	Report dates of discharge, gallons and hours discharged per day <sup>b</sup>			360,000	effluent	daily during discharge	measured or estimated
pH	s.u.	6.5	N/A	N/A	8.5	effluent	2/discharge event <sup>c</sup>	grab
Dissolved Oxygen	mg/L	7	N/A	N/A	17	effluent	upon request by DEC	grab
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	N/A	45	65	N/A	influent and effluent <sup>e</sup>	2/discharge event <sup>c</sup>	grab or composite <sup>f</sup>
	lbs/day <sup>d</sup>	N/A	135	195	N/A			
Total Suspended Solids (TSS)	mg/L	N/A	70	N/A	N/A	influent and effluent <sup>e</sup>	2/discharge event <sup>c</sup>	grab or composite <sup>f</sup>
	lbs/day <sup>d</sup>	N/A	210	N/A	N/A			
BOD <sub>5</sub> minimum percent removal: 65%			TSS minimum percent removal: 65%			influent and effluent	1/discharge event	calculated <sup>g</sup>
Fecal Coliform Bacteria (FC) <sup>h</sup>	FC/100 mL	N/A	200	N/A	800	effluent	2/discharge event <sup>c</sup>	grab
Lagoon Inspection	See part 3.3 of general permit AKG573000						weekly	visual

Footnotes:

- a. gpd (gallons per day), lbs (pounds), L (liter), mg (milligram), mL (milliliter), s.u. (standard pH units)
- b. Submit discharge flow log with the DMR associated with the discharge event. See part 3.1.6 of AKG573000.
- c. Twice per discharge event means once at the beginning or middle, and once near the end of the discharge event.
- d. lbs/day = [(BOD or TSS concentration in mg/L) x (facility design flow in gpd) x (conversion factor of 8.34)/1,000,000]
- e. Report average monthly influent concentration on discharge monitoring report.
- f. See Appendix C of AKG573000 permit for a definition.
- g. Minimum % Removal = [(monthly average influent concentration in mg/L - monthly average effluent concentration in mg/L) / (monthly average influent concentration in mg/L)] x 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. Influent and effluent samples must be taken over approximately the same time period.
- h. For more than one sample, FC and enterococci average 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  $(100 \times 200 \times 300)^{1/3} = 181$ .

**SECTION 4 – MIXING ZONE AUTHORIZATION**

Mixing Zone Authorization: A mixing zone is authorized for fecal coliform bacteria. The mixing zone size is defined as the area within the rectangle 26 meters length by 7.5 meters wide downstream of the outfall.

**SECTION 5 – DEC PERMITTING AND COMPLIANCE STAFF CONTACTS**

If you have any technical questions regarding this authorization or the requirements of the general permit, please contact Mike Martz at (907) 269-8198 or [Michael.martz@alaska.gov](mailto:Michael.martz@alaska.gov)

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) 269-4597.

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 AKG573000. The required written follow-up notification can be provided via fax, email, or U.S. Postal Service.

Toll Free Nationwide: 1-877-569-4114  
Anchorage or International: 1-907-269-4114  
The Compliance fax number is: 1-907-269-4604  
Emails can be sent to:  
[dec-wqreporting@alaska.gov](mailto:dec-wqreporting@alaska.gov)

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

**SECTION 6 – CERTIFICATION/SIGNATURE**

**DRAFT**

**DRAFT**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Earl L. Crapps

Section Manager

Domestic & Industrial Utilities

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title