



## Alaska Department of Environmental Conservation

### Division of Water

## AUTHORIZATION TO DISCHARGE

### AUTHORIZATION TO DISCHARGE UNDER THE ALASKA POLLUTANT ELIMINATION SYSTEM (APDES) FOR WASTEWATER DISCHARGES FROM DRINKING WATER TREATMENT FACILITIES

**FACILITY ASSIGNED AUTHORIZATION NUMBER: AKG380005**

**GENERAL PERMIT NUMBER: AKG380000**

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 AKG380000 and any site specific requirements listed in this authorization.

The authorization effective date is **March 9, 2016**

The authorization to discharge shall expire at midnight, **June 30, 2019**

The permittee shall reapply for a permit reissuance on or before **January 1, 2019**, 180 days before the expiration of this permit.

### SECTION 1 – RESPONSIBLE PARTY INFORMATION

Issued to: City and Borough of Juneau  
Samantha Stoughterger – Waste & Wastewater Utility Superintendent  
155 South Seward Street  
Juneau, AK 99801

### SECTION 2 – FACILITY INFORMATION

Facility Name: Salmon Creek Water Filtration Plant  
Facility Location: Three mile Egan Drive; Juneau, AK  
Latitude: 59° 19' 31.40" North Longitude: 134° 27' 50.64" West  
Type of Facility: Membrane Drinking Water Treatment Backwash  
Raw Water Source: Surface Water from Salmon Creek  
Waterbody Discharged To: Gastineau Channel - Marine Receiving Waters  
Design Capacity Flow: 0.080 million gallons per day; 80,000 gallons per day

## SECTION 3 – EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effluent Compliance Point: After the last treatment unit before discharge into receiving waters and before any mixing occurs with the storm water stream. The permittee must monitor the discharge as specified in Tables A, B, and C.

Table A summarizes effluent limits and monitoring requirements applicable when the effluent discharge is a result of the reverse flow/air scrub cleaning of the membranes. Table B summarizes effluent limits and monitoring requirements applicable when the effluent discharge is a result of the enhanced flux maintenance process. Table C summarizes effluent limits and monitoring requirements applicable when the effluent discharge is a result of the chemical clean-in-place process.

**Table A: Outfall 001A - Reverse Flow/Air Scrub Cleaning Process Effluent Limits and Monitoring Requirements**

Effluent Parameter	Daily Minimum Limit	Monthly Average Limit	Daily Maximum Limit	Units <sup>a</sup>	Sample Frequency	Sample Type
Total Discharge Flow	-----	Report	Report	mgd	Continuous <sup>b</sup>	Recorded
Temperature	-----	Report	Report	°C	1/Month	Grab
Turbidity	-----	Report	Report	NTU	1/Month	Grab
Arsenic <sup>c</sup>	-----	Report	10	µg/L	1/Month	Grab
Copper <sup>c</sup>	-----	Report	Report	µg/L	2/Year <sup>d</sup>	Grab
Iron <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Lead <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Magnesium <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Manganese <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Zinc <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Chloride	-----	Report	Report	mg/L	2/Year	Grab
Sulfates	-----	Report	Report	mg/L	2/Year	Grab

Footnotes:

- a. mgd – million gallons per day; °C – degrees Celsius; NTU – nephelometric turbidity units; µg/L – micrograms per liter; mg/L – milligrams per liter
- b. Discharge flow volume must be monitored and reported monthly regardless of which membrane cleaning process is used.
- c. All metal concentrations shall be reported as total recoverable metal.
- d. Twice per year consists of one sample taken in the summer months (May 1 through September 30) and one sample taken in the winter months (October 1 through April 30).

**Table B: Outfall 001B - Enhanced Flux Maintenance Cleaning Process Effluent Limits and Monitoring Requirements**

Effluent Parameter	Daily Minimum Limit	Monthly Average Limit	Daily Maximum Limit	Units	Sample Frequency	Sample Type
pH	6.5	Report	8.5	SU <sup>a</sup>	1/Month	Grab
Total Ammonia, as N	-----	Report	Report	mg/L	1/Month	Grab
Total Residual Chlorine	-----	0.0075 <sup>b</sup>	Report	mg/L	1/Month	Grab
Arsenic <sup>c</sup>	-----	Report	10	µg/L	2/Year <sup>d</sup>	Grab
Copper <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Iron <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Lead <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Magnesium <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Manganese <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Zinc <sup>c</sup>	-----	Report	Report	µg/L	2/Year	Grab
Chloride	-----	Report	Report	mg/L	2/Year	Grab
Sulfates	-----	Report	Report	mg/L	2/Year	Grab
Salinity	-----	Report	Report	ppt <sup>e</sup>	2/Year	Grab

Footnotes:

- SU – standard pH units
- Compliance with the limits for total residual chlorine cannot be determined using EPA-approved analytical methods. DEC will use 0.1 mg/L as the compliance limit for this parameter.
- All metal concentrations shall be reported as total recoverable metal.
- Twice per year consists of one sample taken in the summer months (May 1 through September 30) and one sample taken in the winter months (October 1 through April 30).
- ppt – parts per thousand

**Table C: Outfall 001C - Chemical Clean-in-Place Cleaning Process Effluent Limits and Monitoring Requirements**

Effluent Parameter	Daily Minimum Limit	Monthly Average Limit	Daily Maximum Limit	Units	Sample Frequency	Sample Type
pH	6.5	Report	8.5	SU	1/Year <sup>a</sup>	Grab
Total Ammonia, as N	-----	Report	Report	mg/L	1/Year	Grab
Total Residual Chlorine	-----	0.0075 <sup>b</sup>	Report	mg/L	1/Year	Grab
Arsenic <sup>c</sup>	-----	Report	10	µg/L	1/Year	Grab
Copper <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab
Iron <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab
Lead <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab

Magnesium <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab
Manganese <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab
Zinc <sup>c</sup>	-----	Report	Report	µg/L	1/Year	Grab
Chloride	-----	Report	Report	mg/L	1/Year	Grab
Sulfates	-----	Report	Report	mg/L	1/Year	Grab
Salinity	-----	Report	Report	ppt	1/Year	Grab

Footnotes:

- a. Samples should be taken in alternating seasons, one year during the summer months (May 1 through September 30) and the next year during the winter months (October 1 through April 30).
- b. Compliance with the limits for total residual chlorine cannot be determined using EPA-approved analytical methods. DEC will use 0.1 mg/L as the compliance limit for this parameter.
- c. All metal concentrations shall be reported as total recoverable metal.

**SECTION 4 – MIXING ZONE**

No mixing zone is authorized, effluent limits are required to be met at the end of the pipe.

If you have any technical questions regarding this authorization of the requirements of the general permit, please contact either Sally Wanstall at [sally.wanstall@alaska.gov](mailto:sally.wanstall@alaska.gov) or 907-465-5216.

**SECTION 5 – CERTIFICATION/SIGNATURE**

March 9, 2016

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Earl L. Crapps

Section Manager

Domestic & Industrial Utilities

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

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Title