AUTHORIZATION TO DISCHARGE UNDER THE
ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
FOR
Non-contact Cooling Water

FINAL GENERAL PERMIT NUMBER

AKG250000

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 *et seq*., as amended by the Water Quality Act of 1987, P.L. 100-4, the permit is issued under provisions of Alaska Statutes 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations.

Owners and operators of non-contact cooling water facilities, except those facilities excluded from coverage in Part 1 of this Alaska Pollutant Discharge Elimination System (APDES) permit, are authorized to discharge to waters of the United States (U.S.), in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

A COPY OF THIS GENERAL PERMIT

MUST BE KEPT AT THE SITE WHERE DISCHARGES OCCUR.

The permit shall become effective **September 1, 2025**.

The permit and the authorization to discharge shall expire at midnight on **August 31, 2030**.

The permittee shall reapply for a permit reissuance on or before **March 5, 2030**, 180 days before the expiration of this permit.

	July 23, 2025
Signature	Date
James Rypkema	Program Manager
Printed Name	Title

TABLE OF CONTENTS

TABLES

APPENDICES AND ATTACHMENTS

SCHEDULE OF SUBMISSIONS

The Schedule of Submissions summarizes some of the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (the Department or DEC) during the term of the permit. The permittee is responsible for all submissions and activities even if they are not summarized in Table 1 below.

Table 1 - Schedule of Submissions

Location of Requirement	Submittal	Frequency	Due Date	Submit to [a]
Appendix A Section 3.2	Discharge Monitoring Report (DMR)	As required	Must be submitted electronically through the NetDMR system on or before the 15th day of the following month	NetDMR
Permit Section 1.2.1 & 1.4	Notice of Intent (NOI) for new, modified, or recommencing facility	As required	30 days prior to expected discharge date	Permitting
Appendix A, Section 1.3	NOI for continued authorization to discharge	1/ permit cycle	180 days prior to the expiration of the general permit	Permitting
Permit Section 2.2	Biocides and Metallic Cooling Water Additives Approval Request	As required	At least 60 days prior to new use or change of use	Permitting
Appendix A Section 3.4	Oral notification of noncompliance	As necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of the noncompliance event	Compliance
Appendix A Section 3.4	Written notice of noncompliance	As necessary	Within five days after the permittee becomes aware of the circumstances	Compliance
Appendix A Section 3.5	Other Noncompliance Reporting	As required	At the time the permittee submits DMR's under Appendix A, Section 3.2	Compliance
a) See Appendix A, Section 1.1 for Permitting and Compliance contact information and addresses				

1.0 PERMIT COVERAGE

1.1 Coverage and Eligibility

1.1.1 Subject to the restrictions and conditions of this general permit, discharge of non-contact cooling water, defrost water, heat pump transfer water, and cooling tower blowdown from facilities with design intake and discharge flow of less than 2.0 million gallons per day (gpd) to fresh or marine surface water are eligible for coverage under this general permit.

1.1.2 The DEC will determine eligible discharges not included in Permit Section 1.1.1 on a case by case basis.

1.2 Obtaining Authorization

1.2.1 Authorization to discharge under this Alaska Pollutant Discharge Elimination System (APDES) general permit requires the responsible party of the facility seeking authorization to submit a completed NOI to DEC in accordance with the requirements listed herein (Section 1.4) and 18 Alaska Administrative Code (AAC) 83.210.

1.2.2 The discharger must receive written notification of authorization from DEC that coverage has been granted and that a specific authorization number has been assigned to the operation prior to discharging.

1.2.3 The facilities listed in Appendix D are authorized to discharge under the conditions of this general permit upon receipt of written notification of authorization from DEC.

1.2.4 DEC may notify a discharger if their discharge is covered by this APDES general permit, even if the discharger has not submitted a NOI [18 AAC 83.210(h)].

1.2.5 Permittees that already have separate APDES coverage for the type of discharge covered by the Non-contact Cooling Water General Permit need not apply for coverage under the Non-contact Cooling Water General Permit (i.e., dual permit coverage for the same type of discharge is not required).

1.3 Exclusions

1.3.1 This permit only covers the wastewater discharges described in the permit. This general permit does not authorize discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants that are not part of the normal operation of the facility as disclosed in the NOI.

1.3.2 DEC reserves the right to determine if any facility is eligible for coverage under this general permit and may require any permittee authorized by the permit to apply for and obtain an individual APDES permit (18 AAC 83.215).

1.3.3 Dischargers meeting any of the following conditions will be excluded from coverage under this general permit.

1.3.3.1 Facilities with design intake and discharge flow greater than 2.0 mgd

1.3.3.2 A total maximum daily load (TMDL) has been approved for the receiving water where the pollutant of concern is present in the discharge and the requirements of the permit are inadequate to provide sufficient reduction of the listed pollutant.

1.3.3.3 The receiving water is listed on the CWA Section 303(d) list as impaired for failure to meet a water quality standard and the facility discharges a pollutant that causes or contributes to the impairment.

1.3.3.4 Facilities that use source water from contaminated sites (i.e. contaminated groundwater).

1.3.4 The use of biocides or metallic cooling water additives, with the exception of chlorine, are prohibited under the general permit unless prior notification has been given and DEC has granted approval for their use. See Permit Section 2.2. for further details.

1.4 Notice of Intent Requirements

1.4.1 New dischargers or those facilities that are requesting a modification to an existing authorization under this APDES general permit must submit a NOI to DEC at least 30 days before the date on which the discharge is to commence. The NOI can be submitted through the Electronic Data Management System Customer Portal (EDMS) at: https://dec.alaska.gov/Applications/Water/EDMS/ncore/external/home or found at http://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic and submitted to the DEC address located at Appendix A, Section 1.1.

1.4.2 New dischargers or those facilities that are requesting a modification for a new or expanded discharge as defined under 18 AAC 70.990 to an existing authorization under this APDES general permit, must complete and submit antidegradation Form 2G to the Department with the NOI. Form 2G can be submitted through EDMS at: https://dec.alaska.gov/Applications/Water/EDMS/ncore/external/home or found at: http://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic.

1.4.3 If a new or modified mixing zone is requested, Form 2M must also be submitted with the NOI unless the facility is listed in Appendix D (See Permit Section 1.4.1). Form 2M can be submitted through EDMS at: https://dec.alaska.gov/Applications/Water/EDMS/ncore/external/home or found at: http://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic.

1.4.4 New or modified mixing zones that have not been previously publicly noticed will be public noticed in accordance with 18 AAC 83.120.

1.4.5 The NOI must be signed by the responsible party in accordance with Signatory Requirements in Appendix A, Section 1.12 and submitted to the DEC address located in Appendix A, Section 1.1.1.

1.4.6 The NOI is determined to be complete upon issuance of a new authorization or reissuance of an existing authorization.

1.4.7 Facilities that discharge to a stormwater collection system must demonstrate that the discharge from the facility will either meet water quality criteria at the point of discharge prior to entering the stormwater collection system, or that water quality criteria will be met prior to entering the receiving waterbody. This may be accomplished with calculations and/or monitoring results.

2.0 LIMITATIONS AND MONITORING REQUIREMENTS

2.1 Effluent Limits and Monitoring Requirements

2.1.1 The permittee must monitor the effluent in accordance with the requirements of 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.

2.1.2 The discharge shall not cause contamination of surface or ground waters, and shall not cause a violation of the Alaska Water Quality Standards (WQS) 18 AAC 70, unless allowed in this permit through exceptions to the standards or in a compliance schedule (18 AAC 70.200 – 70.240 and 18 AAC 70.910).

2.1.3 The permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into receiving waters.

2.1.4 For all effluent monitoring, the permittee must use a sufficiently sensitive Environmental Protection Agency (EPA) approved test method that quantifies the level of pollutants to a level lower than applicable limits or water quality standards or use the most sensitive test method available, per Title 40 Code of Federal Regulations (CFR) §136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), adopted by reference at 18 AAC 83.010(f).

2.1.5 For purposes of reporting on the discharge monitoring report (DMR) for a single sample, if a value is less than the method detection limit (MDL), the permittee must report "less than (<) {numeric value of MDL}" and if a value is less than the minimum level (ML) [also called a reporting limit (RL), practical quantification limit (PQL), or limit of quantitation (LOQ)] the permittee must report "less than (<) {numeric value of RL}."

2.1.6 For purposes of calculating monthly averages, zero may be assigned for values less than the MDL and the numeric value of the MDL may be assigned for values between the MDL and the ML. If the average value is less than the MDL, the permittee must report "less than (<) {numeric value of MDL}" and if the average value is less than the ML, the permittee must report "less than (<) {numeric value of ML}." If a value is equal to or greater than the ML, the permittee must report and use the actual value.

2.1.7 Permittees have the option of taking more frequent samples than are required under the permit. These samples must be used for averaging if they are conducted using the Department-approved test methods (generally found in 18 AAC 70 and 40 CFR §136) and if the method detection limit (MDL) is less than the effluent limit.

2.1.8 DMRs must be submitted electronically through the NetDMR system (see Permit Section 3.1 for details). If discharge does not occur during a month in which discharge typically occurs, the permittee must submit a DMR indicating "no discharge."

2.1.9 DEC may require additional effluent or ambient receiving waterbody monitoring for site specific purposes related to, but not limited to: application requirements, the protection of State WQS, gathering data to support TMDL development, evaluation of receiving waterbody impairments, verification of mixing zone sizes, or evaluation of effects on threatened or endangered species. Likewise, monitoring frequency may be adjusted for site-specific purposes. The permittee will be notified of any additional or site-specific monitoring when issued written authorization to discharge under this general permit.

2.1.10 Permittees may submit a written request that monitoring frequencies be reduced or eliminated for parameters without associated effluent limits after two years of monitoring and reporting if results indicate no detections above applicable water quality criteria. Monitoring reductions may only occur with DEC's written approval.

Table 2 - Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits				Monitoring Requirements	
	Units [a]	Daily Minimum	Monthly Average	Daily Maximum	Sample Frequency	Sample Type
Flow	mgd	N/A	N/A	See below [b]	Continuous	Measured
pH	SU	6.5	N/A	8.5	1/Month	Grab
Temperature	˚ C	N/A	N/A	13 (fresh) 15 (marine)	1/Month	Grab
Total Residual Chlorine (TRC) [c, d]	mg/L	N/A	0.011 (fresh) 0.0075 (marine)	0.019 (fresh) 0.013 (marine)	1/Month	Grab
Arsenic, total recoverable	µg/L	N/A	36 (marine)	10 (fresh) 69 (marine)	1/Quarter	24-hour composite [e]
Copper, total recoverable	µg/L	N/A	N/A	Report	1/Quarter	24-hour composite
Zinc, total recoverable	µg/L	N/A	N/A	Report	1/Quarter	24-hour composite

Footnotes:

a. mgd = million gallons per day, SU = standard units, ˚ C = degrees Celsius, mg/L = milligrams per liter, µg/L = micrograms per liter
b. A facility specific flow limitation not to exceed 2.0 mgd shall be included as a part of the authorization to discharge.
c. TRC monitoring requirements are only applicable to non-contact cooling water discharges where: (1) a treatment additive that contains chlorine or chlorine compounds is used; or (2) the source water of non-contact cooling water is chlorinated.
d. The TRC effluent limits are not quantifiable using EPA-approved analytical methods. DEC will use the minimum level of 0.1 mg/L as the compliance evaluation level for this parameter.
e. See Appendix C for a definition.

2.2 Biocides and Metallic Cooling Water Additives

2.2.1 The use of biocides or metallic cooling water additives, with the exception of chlorine, are prohibited under the general permit unless prior notification has been given in the NOI and DEC has the opportunity to evaluate the information specified below in Permit Part 2.2.2.1.

2.2.2 Prior to initiating use of biocides or metallic cooling water additives, the permittee must receive written approval from DEC. If the permittee decides to change or begin using any biocide or water additive post permit authorization, the permittee must notify DEC at least 60 days prior to anticipated use and submit the information specified in Permit Part 2.2.2.1 to allow time for DEC to evaluate and assess the permittee's continued eligibility for coverage under the general permit.

2.2.2.1 The following shall be submitted to DEC for evaluation:

2.2.2.1.1 A description of the chemical or nonchemical treatment to be employed and its purpose;

2.2.2.1.2 The name and manufacturer of each additive used;

2.2.2.1.3 A list of active ingredients and percentage of composition;

2.2.2.1.4 Material Safety Data Sheets;

2.2.2.1.5 A proposed schedule and quantity of chemical usage, and provide an engineering analysis, or a technical evaluation of the active ingredients, to determine the concentration in the discharge; and

2.2.2.1.6 Available aquatic toxicity information for each additive proposed for use.

2.3 Whole Effluent Toxicity (WET)

2.3.1 Chronic toxicity monitoring requirements only apply to those facilities in which DEC has granted approval for a facility to use biocides or metallic cooling water additives. (See Permit Section 2.2, above).

2.3.2 For discharges to marine waters, the presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA/600/R/95-136, August 1995). For discharges to fresh waters, the presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition (EPA/821-R-02-013, October 2002).

2.3.3 DEC will include specific WET testing requirements for facilities that have DEC approval to use biocides or metallic cooling water additives in the individual authorization to discharge.

2.3.4 If, after four consecutive sample results indicating no toxicity, the permittee may submit a request to DEC to suspend toxicity monitoring. The permittee may suspend toxicity monitoring only after receiving written approval from DEC.

2.4 Mixing Zones

2.4.1 In accordance with 18 AAC 70.240, DEC may authorize a mixing zone. Permittees may request modifications to applicable pollutant effluent limits pursuant to 18 AAC 70.240. Form 2M must be completed and submitted to the Department for this purpose. Form 2M can be found at: http://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic.

2.4.2 DEC will approve modified effluent limits and a mixing zone if the modified limits and resulting mixing zone are consistent with the Clean Water Act and the mixing zone criteria at 18 AAC 70.240. The burden of proof for justifying a mixing zone rests with the applicant. See Appendix A of the fact sheet for the mixing zone criteria.

2.4.3 For permittees authorized a mixing zone, the point of compliance with applicable water quality standards is at the boundary of the authorized mixing zone. When a mixing zone boundary meets a shoreline, DEC may require additional monitoring in the permittee's authorization to discharge.

2.5 Quality Assurance Project Plan (QAPP)

2.5.1 Permittees must develop and implement a QAPP for all monitoring required by this permit. The QAPP must be developed and implemented within 180 days of receiving authorization under this general permit. Any existing QAPP may be modified under this section.

2.5.2 The QAPP must be designed to assist in planning for the collection and analysis of all samples in support of the permit and in explaining data anomalies whenever they occur.

2.5.3 Permittees may use either the generic DEC QAPP or develop a facility-specific QAPP. Some facility specific information is still required in order to complete the QAPP when using the generic DEC QAPP. A generic DEC QAPP is located at http://dec.alaska.gov/water/water-quality/quality-assurance/.

2.5.4 Throughout all sample collection and analysis activities, the permittee must use the EPA-approved quality assurance/quality control and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5, March 2001) at https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5, December 2002) at https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf. . The QAPP must be prepared in the format which is specified in these documents.

2.5.5 At a minimum, a facility-specific QAPP must include the following:

2.5.5.1 Details on 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;

2.5.5.2 Maps indicating the location of each sampling point;

2.5.5.3 Qualification and training of personnel; and

2.5.5.4 Name, address and telephone number of all laboratories used by or proposed to be used by the permittee.

2.5.6 Permittees must amend the facility-specific QAPP whenever sample collection, sample analysis, or other procedure addressed by the QAPP is modified.

2.5.7 An electronic or physical copy of the QAPP must be kept on site and made available to DEC upon request.

2.6 Best Management Practices Plan (BMP)

2.6.1 Within 180 days of the effective date of authorization to discharge, the permittee shall develop and implement a BMP Plan. Any existing BMP Plan that the permittee has for a facility previously authorized under this general permit may be modified under this section.

2.6.2 The BMP Plan should be consistent with the general guidance contained in *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004, October 1993) or any subsequent revision to this guidance document.

2.6.3 The BMP Plan must be consistent with the following objectives:

2.6.3.1 The appropriateness and priorities of controls in the BMP Plan must reflect identified potential sources of pollutants at the facility.

2.6.3.2 BMP Plan elements must be developed in accordance with good engineering practices.

2.6.3.3 The quantity of pollutants and the toxicity of effluent generated, discharged or potentially discharged at the facility must be minimized by the permittee to the extent feasible by managing each wastestream in the most appropriate manner;

2.6.3.4 The permittee must ensure proper operation and maintenance of 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.

2.6.3.5 Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the U.S. due to equipment failure or improper operation. The examination must include all normal operations and ancillary activities including material storage areas, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, or drainage from raw material storage.

2.6.4 The BMP Plan must establish specific BMPs or other measures to achieve the objectives listed in Permit Section 2.6.3 including the following specific requirement:

2.6.4.1 The permittee must ensure that proper neutralization, solids settling, and/or erosion control measures are put in place.

2.6.5 BMP Plan Modification

2.6.5.1 The permittee must amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to receiving waters.

2.6.5.2 The permittee must amend the BMP Plan whenever it is found to be ineffective in achieving the objective of preventing and minimizing the generation and the potential for the release of pollutants to receiving waters.

2.6.5.3 Any changes to the BMP Plan must be consistent with the objectives and specific BMPs listed in Permit Sections 2.6.3 and 2.6.4, above.

2.6.6 The permittee must review the BMP annually. Electronic or paper documentation of annual review by the permittee must be retained onsite for the duration of the permit and made available to DEC upon request.

2.6.7 The BMP Plan (electronic or paper) shall be maintained onsite and made available to DEC upon request.

3.0 GENERAL PROVISIONS

3.1 Compliance Schedules

Per 18 AAC 70.910 the Department has the authority to issue schedules in permits, certifications, or approvals.

3.2 Electronic Reporting (E-reporting) Rule

3.2.1 E-reporting Rule for DMR's (Phase 1)

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://cdx.epa.gov//. DMR's 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 zones receiving water data, etc.), shall be included as an attachment to the NetDMR submittal. DEC has established an e-Reporting Information website at: https://dec.alaska.gov/water/compliance/electronic-reporting-rule that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at https://usepa.servicenowservices.com/oeca_icis?id=netdmr_homepage.

3.2.2 E-Reporting Rule for Other Reports (Phase II)

Phase II of the E-Reporting rule will integrate electronic reporting for all other reports required by the Permit (e.g., Annual Reports and Certifications) and implementation is expected to begin December 2025. Permittees should monitor DEC's E-Reporting Information website located at https://dec.alaska.gov/water/compliance/electronic-reporting-rule for updates on Phase II of the E-Reporting Rule and will be notified when they must begin submitting all other reports electronically. Until such time, other reports required by the Permit may be submitted in accordance with Appendix A-Standard Conditions.

Appendix A – Standard Conditions: APDES Permit Nondomestic Discharges

TABLE OF CONTENTS

Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-3487
Email: DEC.Water.WQPermit@alaska.gov

1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program 555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

1.6.1 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.

1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;

1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;

1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and

1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:

1.11.2.1 All calibration and maintenance records,

1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,

1.11.2.3 All reports required by a permit,

1.11.2.4 Records of all data used to complete the application for a permit,

1.11.2.5 Field logbooks or visual monitoring logbooks,

1.11.2.6 Quality assurance chain of custody forms,

1.11.2.7 Copies of discharge monitoring reports, and

1.11.2.8 A copy of this APDES permit.

1.11.3 Records of monitoring information must include:

1.11.3.1 The date, exact place, and time of any sampling or measurement;

1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);

1.11.3.3 The date(s) and time any analysis was performed;

1.11.3.4 The name(s) of any individual(s) who performed any analysis;

1.11.3.5 Any analytical technique or method used; and

1.11.3.6 The results of the analysis.

1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2) and (c)(3), and AS 46.03.790(g).

1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:

1.12.2.1 For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:

1.12.2.1.1 A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

1.12.2.1.2 The manager of one of more manufacturing, production, or operating facilities, if

1.12.2.1.2.1 The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

1.12.2.1.2.2 The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

1.12.2.1.2.3 Authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively, shall sign the application.

1.12.2.3 For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means:

1.12.2.3.1 The chief executive officer of the agency; or

1.12.2.3.2 A senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1.12.3.1 The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and

1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.

1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.

1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13 Proprietary or Confidential Information

1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words “confidential business information” on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.

1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.

1.13.3 A permittee’s claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (https://dnr.alaska.gov/parks/oha/index.htm), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:

2.1.1.1 The alteration or addition may make the facility a "new source" under one or more of the criteria in 18 AAC 83.990(44); or

2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.

2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.

2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

2.2.1 A permittee shall give seven days' notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.

2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.

2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.

2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.

2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.

2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.

2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

2.6.3.1 Does not cause an effluent limitation to be exceeded, and

2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.

2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;

2.7.2.2 The permitted facility was at the time being properly operated;

2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and

2.7.2.4 The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.

2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:

2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.1.1 One hundred micrograms per liter (100 μg/L);

2.8.1.1.2 Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;

2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.1.4 The level established by the Department in accordance with 18 AAC 83.445.

2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.2.1 Five hundred micrograms per liter (500 μg/L);

2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;

2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.2.4 The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the EPA discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

3.2.1 Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must submit reports monthly postmarked by the 15th day of the following month.

3.2.2 The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signature Requirement and Penalties. All signed and certified legible original DMRs and all other documents and reports must be submitted to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

3.2.3 If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signature Requirement and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR required by Appendix A, Part 3.2. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1 A report must be made:

3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and

3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

3.4.2 A report must include the following information:

3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;

3.4.2.2 The period of noncompliance, including exact dates and times;

3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and

3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3 An event that must be reported within 24 hours includes:

3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).

3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).

3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.

3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.

3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:

3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance;

3.4.5.2 The written report includes all the information required under Appendix A, Part 3.4.2;

3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;

3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and

3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.

3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

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.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

4.1.2 Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;

4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and

4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.

4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);

4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);

4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);

4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or

4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than $10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) $200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).

APPENDIX B - Acronyms

The following acronyms are common terms that may be found in an Alaska Pollutant Discharge Elimination System (APDES) permit.

18 AAC 15	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 15: Administrative Procedures
18 AAC 70	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 70: Water Quality Standards
18 AAC 72	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 72: Wastewater Disposal
18 AAC 83	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 83: Alaska Pollutant Discharge Elimination System

All chapters of Alaska Administrative Code, Title 18 are available at DEC Regulations webpage https://dec.alaska.gov/commish/regulations/

40 CFR	Code of Federal Regulations Title 40: Protection of Environment
AAC	Alaska Administrative Code
ADEC or DEC	Alaska Department of Environmental Conservation
APDES	Alaska Pollutant Discharge Elimination System
ADF&G	Alaska Department of Fish and Game
AS	Alaska Statutes
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at https://www.akleg.gov/basis/statutes.asp#46
AML	Average Monthly Limit
BMP	Best Management Practices
BTA	Best Technology Available
º C	Degrees Celsius
Cd	Aquatic life criteria that cannot be exceed downstream
Ce	Concentration of pollutant in effluent
Cu	Upstream background concentration of pollutant
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CV	Coefficient of Variation
CWA	Clean Water Act
D	Dilution Factor
DMR	Discharge Monitoring Report

APPENDIX B - Acronyms

EFH	Essential Fish Habitat
EIA	Environmental Impact Analysis
ELG	Effluent Limit Guidelines
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
fps	Feet per second
ft	Feet
gpd	Gallons per day
gpm	Gallons per minute
ICIS	Integrated Compliance Information System
L	Liter
lb	Pound
LC	Lethal Concentration
MDL	Maximum Daily Limit
MDL	Method Detection Limit
MEC	Maximum Expected Concentration
mg/L	Milligrams per Liter
mgd	Million gallons per day
ML	Minimum Level
MOC	Maximum Observed Concentration
n	Sample size
NMFS	National Marine Fisheries Service
NOEC	No observed effect concentration
NPDES	National Pollutant Discharge Elimination System
N/A	Not Applicable
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
Q_d	Receiving Waterbody Flow Rate = Qe + Qu
Q_e	Effluent Flow
Q_u	Receiving Waterbody Flow

APPENDIX B - Acronyms

RP	Reasonable Potential
RPA	Reasonable Potential Analysis
RPM	Reasonable Potential Multiplier
s.u.	Standard Units
TBEL	Technology-Based Effluent Limit
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solids
TU_a	Acute Toxic Units
TU_c	Chronic Toxic Units
μ	Mean
μg/L	Micrograms per Liter
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
UPS	Upstream
WET	Whole Effluent Toxicity
WLA	Waste Load Allocation
WQBEL	Water-Quality Based Effluent Limit
WQS	Water Quality Standards
z	Z test value or z score
σ	Standard deviation

APPENDIX C - Definitions

The following are common definitions of terms associated with APDES permits. Not all the terms listed may appear in a permit. Consult the footnote references for a complete list of terms and definitions.

Administrator [a]	Means the Administrator of the EPA or an authorized representative.
Alaska Pollutant Discharge Elimination System (APDES) [a]	Means the state's program, approved by EPA under 33 U.S.C. 1342(b), for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under 33 U.S.C. 1317, 1328, 1342, and 1345.
Aquaculture [b]	Means the cultivation of aquatic plants or animals for human use or consumption.
Average	Means an arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities.
Average Monthly Limit	Means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured for that month.
Bypass [a]	Means the intentional diversion of waste streams from any portion of a treatment facility.
Clean Water Act (CWA) [a]	Means the federal law codified at 33 U.S.C. 1251-1387, also referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.
Commissioner [a]	Means the commissioner of the Alaska Department of Environmental Conservation or the commissioner's designee.
Composite Samples	Composite samples must consist of at least eight equal volume grab samples. 24 hour composite sample means a combination of at least eight discrete samples of equal volume collected at equal time intervals over a 24-hour period at the same location. A "flow proportional composite" sample means a combination of at least eight discrete samples collected at equal time intervals over a 24-hour period with each sample volume proportioned according to the flow volume. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
Criterion [b]	Means a set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety. A criterion might be a narrative statement instead of a numerical concentration or limit.

a) See 18 AAC 83
b) See 18 AAC 70.990
c) See 40 CFR Part 136
d) See EPA Technical Support Document
e) See Standard Methods for the Examination of Water and Wastewater 18th Edition
f) See EPA Permit Writers Manual

APPENDIX C - Definitions

Daily Discharge [a]	Means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants measured in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with a limitation expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.
Department [a]	Means the Alaska Department of Environmental Conservation.
Design Flow [a]	Means the wastewater flow rate that the plant was designed to handle.
Director [a]	Means the commissioner or the commissioner’s designee assigned to administer the APDES program or a portion of it, unless the context identifies an EPA director.
Discharge [a]	When used without qualification, discharge means the discharge of a pollutant.
Discharge of a Pollutant [a]	Means any addition of any pollutant or combination of pollutants to waters of the United States from any point source or to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation. Discharge includes any addition of pollutants into waters of the United States from surface runoff that is collected or channeled by humans; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works; discharges through pipes, sewers, or other conveyances leading into privately owned treatment works; and does not include an addition of pollutants by any indirect discharger.
Effluent [b]	Means the segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment.
Final Approval to Operate	Means the approval that the Department issues after it has reviewed and approved the construction and operation of the engineered wastewater treatment works plans submitted to the Department in accordance with 18 AAC 72.215 through 18 AAC 72.280 or as amended.
Grab Sample	Means a single instantaneous sample collected at a particular place and time that represents the composition of wastewater only at that time and place.
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works.
Lethal Concentration 50% (LC_{50})	Means the toxicant concentration that would cause death in 50% of the test organisms.
Maximum Daily Limit [a]	Means the highest allowable “daily discharge”.

a) See 18 AAC 83
b) See 18 AAC 70.990
c) See 40 CFR Part 136
d) See EPA Technical Support Document
e) See Standard Methods for the Examination of Water and Wastewater 18th Edition
f) See EPA Permit Writers Manual

APPENDIX C - Definitions

Mean [b]	Means the average of values obtained over a specified period and, for fecal coliform analysis, is computed as a geometric mean.
Measured	Means the actual volume of wastewater discharged using appropriate mechanical or electronic equipment to provide a totalized reading. Measure does not provide a recorded measurement of instantaneous rates.
Method Detection Limit (MDL) [c]	Means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
Micrograms per Liter (µg/L) [b]	Means the concentration at which one millionth of a gram (10-6 g) is found in a volume of one liter.
Milligrams per Liter (mg/L) [b]	Means the concentration at which one thousandth of a gram (10-3 g) is found in a volume of one liter. It is approximately equal to the unit "parts per million (ppm)," formerly of common use.
Minimum Level (ML) [d]	Means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed. This level is used as the compliance level if the effluent limit is below it.
Mixing Zone [b]	Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water.
Month	Means the time period from the 1st of a calendar month to the last day in the month.
Monthly Average	Means the average of daily discharges over a monitoring month calculated as the sum of all daily discharges measured during a monitoring month divided by the number of daily discharges measured during that month.
No Observed Effect Concentration (NOEC) [e]	Means the highest concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation. NOEC is determined using hypothesis testing.
Permittee	Means a company, organization, association, entity, or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring, and reporting as required by the permit.
pH [f]	Means a measure of the hydrogen ion concentration of water or wastewater; expressed as the negative log of the hydrogen ion concentration in mg/L. A pH of 7 is neutral. A pH less than 7 is acidic, and a pH greater than 7 is basic.

a) See 18 AAC 83
b) See 18 AAC 70.990
c) See 40 CFR Part 136
d) See EPA Technical Support Document
e) See Standard Methods for the Examination of Water and Wastewater 18th Edition
f) See EPA Permit Writers Manual

APPENDIX C - Definitions

Pollutant [a]	Means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under 42 U.S.C. 2011), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, or agricultural waste discharged into water.
Priority Pollutants	Means the set of chemical pollutants that EPA regulates and for which EPA has published analytical test methods. A list of the Priority Pollutants can be found in Appendix A to 40 CFR Part 423.
Principal Executive Officer [a]	Means the chief executive officer of the agency or a senior executive officer having responsibility for the overall operations of a principal geographic unit of division of the agency.
Quality Assurance Project Plan (QAPP)	Means a system of procedures, checks, audits, and corrective actions to ensure that all research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.
Quarter	Means the time period of three months based on the calendar year beginning with January.
Receiving Waterbody	Means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea, and Arctic Ocean, in the territorial limits of the state, and all other bodies of surface water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state. (See "Waters of the U.S." at 18 AAC 83.990(77)).
Recorded	Means a permanent record using mechanical or electronic equipment to provide a totalized reading, as well as a record of instantaneous readings.
Report	Report results of analysis.
Reporting Limit	Minimum concentration of a given parameter that can be reliably measured and reported by a laboratory using a particular analytical method. A reporting limit is greater than or equal to a method detection limit and is typically set by a laboratory.
Responsible Corporate Officer [a]	Means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or decision making functions for the corporation. The Responsible Corporate Officer can also be the manager of one or more manufacturing, production, or operating facilities if the requirements of 18 AAC 83.385(a)(1)(B)(i)-(iii) are met.

a) See 18 AAC 83
b) See 18 AAC 70.990
c) See 40 CFR Part 136
d) See EPA Technical Support Document
e) See Standard Methods for the Examination of Water and Wastewater 18th Edition
f) See EPA Permit Writers Manual

APPENDIX C - Definitions

Suspended Solids	Means insoluble solids that either float on the surface of, or are in suspension in, water, wastewater, or other liquids. The quantity of material removed from wastewater in a laboratory test, as prescribed in *Standard Methods for the Examination of Water and Wastewater* and referred to as nonfilterable.
Total Suspended Solids (TSS) [f]	Means a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR Part 136.
Toxic Unit, Chronic (TUc) [e]	Means the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., 100/NOEC).
Twice per year	Means two time periods during the calendar year: October through April and May through September.
Upset [a]	Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
Waters of the United States or Waters of the U.S.	Has the meaning given in 18 AAC 83.990(77).
Water Supply [b]	Means any of the waters of the United States that are designated in 18 AAC 70 to be protected for fresh water or marine water uses. Water supply includes waters used for drinking, culinary, food processing, agricultural, aquacultural, seafood processing, and industrial purposes. Water supply does not necessarily mean that water in a waterbody that is protected as a supply for the uses listed in this paragraph is safe to drink in its natural state.
Week	Means the time period of Sunday through Saturday.

a) See 18 AAC 83
b) See 18 AAC 70.990
c) See 40 CFR Part 136
d) See EPA Technical Support Document
e) See Standard Methods for the Examination of Water and Wastewater 18th Edition
f) See EPA Permit Writers Manual

APPENDIX D. Drinking Water Treatment Facilities

Table 1-Facilities that are Eligible for Reissuance that were Previously Authorized to Discharge under AKG250000

Authorization Number	Facility	Receiving Waterbody	Mixing Zone
AKG250001	Providence Hospital	Storm drain to Chester Creek	Mixing zone not authorized
AKG250002	Westmark Fairbanks Hotel	Storm drain to Chena River	Mixing zone not authorized
AKG250004	University of Alaska Anchorage	Storm drain to South Fork of Chester Creek	Mixing zone not authorized
AKG250005	Alaska Native Medical Center	University Lake	Mixing zone not authorized
AKG250007	Dutch Harbor Powerhouse	Iliuliuk Bay	50 meters long by 4 meters wide. Mixing zone authorized for temperature.
AKG250008	Chena Hot Springs Geothermal Power Plant	Drainage ditches to Monument Creek	Mixing zone not authorized
AKG250009	Z.J Loussac Library	Storm drain to Fish Creek	Mixing zone not authorized
AKG250010	Ruby Investments	Storm drain to Chester Creek	Mixing zone not authorized
AKG250011	Mt. McKinley Princess Wilderness Lodge	Unnamed seasonal creek to the Chulitna River	Mixing zone not authorized

NOTICE OF INTENT (NOI)

APDES GENERAL PERMIT AKG250000

Non-Contact Cooling Water

Please submit this NOI to:

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
DEC.Water.WQPermit@alaska.gov

Submittal of this document constitutes notice that the party identified in Section 3 intends to be covered by the Alaska Pollutant Discharge Elimination System General Permit AKG250000 authorizing discharge of non-contact cooling water into waters of the United States and obligates the permittee to comply with the terms and conditions of the permit. Please provide all information below. Attach supplemental information sheets as appropriate.

Section 1 – Permit Information

Please indicate the coverage requested.

☐ **New Use:** A wastewater discharge that has not been authorized under a previous permit, including new facilities. Complete all Sections except 8.

☐ **Reissuance:** A wastewater discharge that was previously authorized under AKG250000 or a different individual or general permit. Previous permit number: ____________________

Section 2 – Facility Information

Facility Name: ____________________ Phone: ____________

Street/Location: ____________________ Fax: ____________

City (or nearest city): ____________________ State: Alaska Zip: ____________

Raw Water Source: ____________ ☐ Surface Water: ____________ ☐ Groundwater

Discharge flow in gallons per day average daily: ____________ , maximum daily: ____________

Do you discharge fewer than 12 months per year? ☐ Yes*, ☐ No

* If yes, indicate the months you typically discharge. Include partial months:

☐ January	☐ April	☐ July	☐ October
☐ February	☐ May	☐ August	☐ November
☐ March	☐ June	☐ September	☐ December

Section 3 – Responsible Party Information

(Owner/Operator or Person responsible for overall management of the project and discharge)

First Name: ____________ Last Name: ____________ Title: ____________

Mailing Address: ____________ City: ____________ State: ________ Zip: ________

Email: ____________ Phone: ____________ Fax: ____________

Section 4 – On-Site Contact/Operator Information

☐ Check if same as Responsible Party

First Name: ____________ Last Name: ____________ Title: ____________

Mailing Address: ____________ City: ____________ State: ________ Zip: ________

Email: ____________ Phone: ____________ Fax: ____________

Section 5 – Billing Information

☐ Check if same as Responsible Party

First Name: ____________ Last Name: ____________ Title: ____________

Mailing Address: ____________ City: ____________ State: ______ Zip: ______

Email: ____________ Phone: ____________ Fax: ____________

Section 6 - Receiving Water Information

Name of Receiving Waterbody: ____________

Receiving Waterbody Type: ☐ Freshwater, ☐ Marine Water, ☐ Stormwater, collection system that flows to fresh or marine water

Latitude / Longitude of Outfall (use either decimal degrees or degrees, minutes, seconds)

Latitude: ____________ Longitude: ____________ Determined by: ☐ GPS, ☐ Map, ☐ Internet

Do you wish to request a mixing zone? ☐ Yes*, ☐ No,

* If yes, Form 2M must also be submitted with the NOI. Form 2M can be found at: https://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic

☐ Check if Form 2M is included

Section 7 – Additional Information to Include

Check if Included:

☐ **Maps**: A site map showing the location of all facilities associated with the non-contact cooling water facility including the outfall line. Also include a topographic, aerial, or satellite phot showing the general location of the facility and discharge location. (not requried if maps were submitted to DEC with a previous NOI, and there have been no changes to the location since the prior authorization)

☐ **Description of Facility**: Provide a brief description of the non-contact cooling water facility. Indicate if the facility uses chlorine as a disinfectant. Include a schematic flow diagram. For new facilities, if available, please provide monitoring data from the past year.

☐ **Discharges to Stormwater Collection Systems**: Provide documentation that the discharge from the facility will either meet water quality criteria at the point of discharge into the stormwater collection system, or that water quality criteria will be met prior to the discharge entering the receiving waterbody. This may be accomplished with calculations and/or monitoring results.

☐ **Biocides or Metallic Cooling Water Additives**: The use of biocides or metallic cooling water additives, except chlorine, are prohibited under the general permit unless notification has been given and DEC has granted approval for their request. If biocides or metallic cooling water additives are proposed for use at the facility, please submit the following:

1. A description of the chemical or nonchemical treatment to be employed and its purpose; if chemical additives are used, provide the information requested in items 2 – 6 below.
2. Provide the name and manufacturer of each additive used.
3. Provide a list of active ingredients and percentage of composition.
4. Provide Material Safety Data Sheets.
5. Give a proposed schedule and quantity of chemical usage, and provide an engineering analysis, or a technical evaluation of the active ingredients, to determine the concentration in the discharge.
6. Attach available aquatic toxicity information for each additive proposed for use.

Section 8 – For Discharges Previously authorized under AKG250000

Has the quantity or quality of wastewater discharged, as indicated in previous applications changed in any way since the last application was submitted? ☐ Yes, ☐ No

If "Yes", explain:

Has the location of the outfalls(s) as indicated in previous applications, been altered in any way since the last application was submitted? ☐ Yes, ☐ No

If "Yes", explain:

Permit Section 1.4.3 requires an evaluation of the effluent and receiving waterbody, as applicable, collected over the term of the previous authorization to determine the need for a mixing zone, or if the currently authorized mixing zone is properly sized for all parameters. Do you wish to request either a new mixing zone or a modification to an existing mixing zone?

☐ Yes*, ☐ No

If "Yes", Form 2M must be submitted with the NOI. Form 2M may be found at https://dec.alaska.gov/water/wastewater/permit-entry/industrial-or-nondomestic

☐ Check if Form 2M is included

Section 9 – Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Date
Printed Name	Title