



ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

GENERAL PERMIT - TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT (ANC-GP)

Permit Number: AKR061000

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations. Operators of storm water discharges associated with air transportation industrial activity located in the area known as

TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT

are authorized to discharge from the Ted Stevens Anchorage International Airport at 5000 West International Airport Road, Anchorage, Alaska at the following location(s):

Outfall	Receiving Water or Body	Latitude	Longitude
001A	Lake Spenard	61°10' 30''	-149°57' 08''
002B	Lake Hood	61°10' 43''	-149°58' 30''
003C	Lake Hood	61°10' 53''	-149°58' 42''
004D	Knik Arm/ Cook Inlet	61°11' 58''	-149°59' 29''
005E	Unnamed Creek	61°10' 22''	-150°02' 57''

In accordance with the discharge point(s) effluent limitations, monitoring requirements, and other conditions set forth herein:

- This permit shall become effective 11/1/2019
- This permit and the authorization to discharge shall expire at midnight, 10/31/2024

Signature

Gene McCabe

Printed Name

September 25, 2019

Date

Program Manager

Title

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SCHEDULE OF SUBMISSIONS

The Schedule of Submissions summarizes some of the required submissions and activities the permittees must complete and/or submit to the Alaska Department of Environmental Conservation (DEC) during the term of this permit. The Airport Authority and co-permittee are responsible for all submissions and activities even if they are not summarized below.

Table 1: Schedule of Submissions

Permit Part	Submittal or Completion	Frequency	Due Date	Submit to ^a
1.3	No Exposure Certification	Once, depending on facility status	Once every five years	Permitting Program
2.1.3, 2.2	Storm Water Pollution Prevention Plan (SWPPP)	Once at beginning of coverage	At filing of Notice of Intent	Permitting Program
2.1.5, 2.2	Notice of Intent (NOI)	Once at beginning of coverage	Once per permit cycle	Permitting Program
2.6	NOI Modification	As needed	As needed	Permitting Program
3.2, 10.1	Discharge Monitoring Report (DMR)	Monthly	Must be submitted electronically through the eDMR system, no later than the 15th day of the following month after the Airport Authority has received the complete laboratory results for all monitored outfalls and receiving water for the reporting period	Compliance and Enforcement Program
3.5	Whole Effluent Toxicity Testing	Once per year	Testing in April	Compliance and Enforcement Program
4.4	Snow Storage Site Plans	Once	One year after the permit effective date	Permitting Program
6.2	Adaptive Management Plan	Once then as needed	September 1, 2020	Compliance and Enforcement Program
6.3	Adaptive Management Plan Annual Report	Annually	With the Annual Report in September	Compliance and Enforcement Program
8.1	Quality Assurance Project Plan (QAPP)	1/permit cycle	Within 120 Days after the effective date of the permit	Permitting Program
9.3	Reports of compliance or noncompliance with a Compliance Schedule	As needed	The Report must be submitted no later than 14 days following each schedule date	Compliance and Enforcement Program
9.5.1	Oral notification of noncompliance	As necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance and Enforcement Program
9.5.2	Written documentation of noncompliance	As necessary	Within 5 days after the permittee becomes aware of the circumstances	Compliance and Enforcement Program
10.2	Annual Report	Annually	Due September 1 st	Compliance and Enforcement Program
Note: See Appendix A, Part 1.1 for addresses.				

1.0 COVERAGE UNDER THIS PERMIT

1.1 Permit Area

This general permit covers areas at Ted Stevens Anchorage International Airport (ANC) within the jurisdiction of the Municipality of Anchorage, contributing to discharges from the Airport's separate storm sewer system. Separate storm sewer system means a conveyance or system of conveyances including storm sewers, roads with drainage systems, roadways, catch basins, oil/water separators, curbs, gutters, ditches, constructed channels, snow disposal areas, or storm drains. See Permit Part 1.2.8 for exclusions from coverage under this permit.

1.2 Eligibility

1.2.1 Facilities Covered. For this permit, the Department of Transportation & Public Facilities, Alaska International Airport System, Ted Stevens Anchorage International Airport is considered the Airport Authority. Airport tenants with industrial activities associated with commercial air transportation at ANC, are considered to be co-permittees, and are regulated under this permit. Appendix - D provides an initial list of co-permittees based on Notice of Intents (NOI) submitted under the 2015 Multi-Section General Permit (MSGP). To be eligible for coverage under this permit permittees covered by the MSGP must submit a new NOI and a revised Storm Water Pollution Prevention Plan (SWPPP).

1.2.1.1 A tenant must be permitted if they meet the following two permitting criteria:

1.2.1.1.1 The tenant is in the air transportation business with a Standard Industrial Classification (SIC) code of 4512, 4513, 4522, or 4581; and

1.2.1.1.2 The tenant is an operator of an industrial activity defined as vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations, or anti-icing or deicing.

1.2.2 Allowable Storm Water Discharges. Unless otherwise made ineligible under Permit Part 1.2.4, the following discharges are eligible for coverage under this permit:

1.2.2.1 Storm water discharges associated with industrial activity for any primary industrial activity and co-located industrial activity, as defined in Appendix - C;

1.2.2.2 Discharges that are not otherwise required to obtain a Alaska Pollutant Discharge Elimination System (APDES) permit authorization but are comingled with discharges that are authorized under this permit;

1.2.2.3 During the effective period of this permit, the Airport Authority and co-permittees are authorized to discharge pollutants from Outfalls 001A, 002B, 003C, 004D, and 005E specified herein to Lake Spenard, Lake Hood, Knik Arm, and an unnamed creek, within the limits and subject to conditions set forth herein. This permit authorizes discharge of only those pollutants resulting from facility processes, waste streams, and operations clearly identified in the permit application process; and

1.2.2.4 Discharges at ANC subject to the national storm water-specific effluent limitations guidelines found in 40 CFR Part 449 Subpart A.

1.2.3 Allowable Non-Storm Water Discharges. The following are the non-storm water discharges authorized under this permit, provided the non-storm water component of the Airport Authority and co-permittees discharge is in compliance with Permit Part 4.2.9:

- 1.2.3.1 Discharges from fire-fighting activities;
- 1.2.3.2 Fire hydrant flushings;
- 1.2.3.3 Potable water, including water line flushings;
- 1.2.3.4 Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- 1.2.3.5 Irrigation drainage;
- 1.2.3.6 Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- 1.2.3.7 Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits or any other toxic or hazardous materials (unless cleaned up using dry clean-up methods). The Airport Authority or co-permittee is prohibited from directing any authorized pavement wash waters directly into any surface water or storm drain inlet unless the Airport Authority or co-permittee has implemented appropriate control measures that meet the non-numeric effluent limits in Permit Part 4.0. Where appropriate control measures are not in place, wash water runoff must first undergo treatment prior to discharge such as filtration, detention, or settlement;
- 1.2.3.8 Routine external building washdown / power washwater that does not use detergents or hazardous cleaning products, (such as those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols);
- 1.2.3.9 Individual private aircraft washing that does not use detergents or hazardous cleaning products;
- 1.2.3.10 Uncontaminated ground water or spring water;
- 1.2.3.11 Foundation or footing drains where flows are not contaminated with process materials;
- 1.2.3.12 Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains); and,
- 1.2.3.13 Discharges of storm water listed above in Permit Parts 1.2.2 or authorized non-storm water discharges in Part 1.2.3, commingled with a discharge authorized by a different APDES permit and/or a discharge that does not require APDES permit authorization.

1.2.4 Limitations on Coverage

- 1.2.4.1 Storm water discharges that are mixed with non-storm water, other than those non-storm water discharges listed in Permit Part 1.2.3, are not eligible for coverage under this permit.
- 1.2.4.2 Storm water discharges associated with construction activity disturbing one acre or more, or that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more, are not eligible for coverage under this permit. Those storm water discharges are to be covered under the APDES General Permit for Discharges from Large and Small Construction Activities (Construction General Permit).

- 1.2.4.3 This permit authorizes storm water discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, paint, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

- 1.2.4.4 This permit does not authorize the discharge of aircraft, ground vehicle, glycol recovery vehicles, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate APDES permit(s).

Note that a discharge resulting from snowmelt is not a dry weather discharge.

- 1.2.4.5 Unless the airport tenant within the Airport boundary received written notification from DEC specifically allowing the airport tenant to remain covered by the Multi-Sector General Permit, the airport tenant must apply for coverage under this permit.

- 1.2.4.6 **Eligibility for New Dischargers: Based on Water Quality Standards.** A new discharger (as defined in Appendix - C), is not eligible for coverage under this permit for discharges that DEC, prior to authorization under this permit, determines will not meet any Water Quality Standards (WQS). Where such a determination is made prior to authorization, DEC may notify that applicant that an individual or other general permit APDES application is necessary. However, DEC may authorize coverage under this permit after the applicant has included appropriate controls and implementation procedures designed to ensure the discharge meets WQS. In the absence of information demonstrating otherwise, DEC expects compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 4.0, will meet WQS.

- 1.2.4.7 **New Discharges to Water Quality Impaired Waters.**¹ If the co-permittee is a new discharger they are not eligible for coverage under this permit to discharge to an “impaired water”, as defined in Appendix - C unless they:

- Prevent all exposure to storm water of the pollutant(s) for which the waterbody is impaired, and retain documentation of procedures taken to prevent exposure onsite with the SWPPP; or
- Prior to submitting the co-permittee’s NOI, provide to DEC technical information or other documentation that the pollutant(s) for which the waterbody is impaired is not present at the site, and retain documentation of this finding with their SWPPP; or
- Prior to submitting the co-permittee’s NOI, provide to DEC data or other technical documentation to support a conclusion that the discharge is not expected to cause or contribute to an exceedance of a WQS, and retain such data onsite

¹ The project will be considered to discharge to an impaired water if the first water of the U.S. to which the discharge enters is identified by the Department pursuant to Section 303(d) of the CWA as not meeting a WQS, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which the discharge is the waterbody that receives the storm water discharge from the storm sewer system.

with the SWPPP. To do this, the co-permittee must provide data and other technical information to the Department sufficient to demonstrate:

- For discharges to waters without an Environmental Protection Agency (EPA) approved or established Total Maximum Daily Load (TMDL), that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
- For discharges to waters with an EPA approved or established TMDL, that there are sufficient remaining wasteload allocations in an EPA approved or established TMDL to allow the permittees discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with WQS. The co-permittee must also evaluate the recommendations in the Implementation Section of the EPA approved or established TMDL and incorporate applicable measures into their operations.

A co-permittee is eligible under Part 1.2.4.7 if they receive an affirmative determination from the Department that their discharge will not contribute to the existing impairment, in which case the permittee must maintain such determination onsite with the SWPPP.

1.2.5 Individual Responsibilities. The Airport Authority, as the owner and manager of the airport, shall act as the airport representative. The Airport Authority and each airport tenant identified as a co-permittee are individually responsible for:

- 1.2.5.1 Compliance with permit conditions relating to discharges from the separate storm sewer system where it is the operator. A co-permittee is responsible for storm water pipes on their leasehold that are under the co-permittees operational control and that discharge into the airport storm water system.
- 1.2.5.2 SWPPP implementation on portions of the separate storm sewer system where it is operator.
- 1.2.5.3 Collection of monitoring data required in Permit Part 3.2. Agreements may be established between the Airport Authority and co-permittees to consolidate monitoring responsibilities, while maintaining the Airport Authority as the lead entity in charge of the monitoring.
- 1.2.5.4 Compliance with annual reporting requirements as specified in Permit Part 10.2 Annual Report relating to the portions of the airport's separate storm sewer system for areas where it is the operator.

1.2.6 Joint Responsibilities. The Airport Authority and co-permittees (as individual operators) are responsible for implementing their individual SWPPP and assigned portions of the comprehensive Adaptive Management Plan (AMP)(Part 6.0) and operators must ensure that their individual activities do not render another operators storm water controls ineffective. In addition, the standard permit conditions found in Appendix A apply to each individual operator, including Part 1.2 Duty to Comply (which states, in part, "A permittee [each individual operator] shall comply with all conditions of the permittee's APDES permit.") For multiple operators at this airport this means that each individual operator remains responsible for ensuring all requirements of its own ANC-GP are met regardless of whether the comprehensive AMP allocates the actual implementation of any of those

responsibilities to another operator. That is, the failure of the operator allocated responsibility in the AMP to implement an ANC-GP requirement on behalf of operators does not negate the other operators' ultimate liability.

1.2.7 Program Resources. The Airport Authority and co-permittees shall provide adequate finances, staff, equipment, and support capabilities to implement this permit, their SWPPP, and the Adaptive Management Plan.

1.2.8 Exclusions. Excluded from coverage under this permit are the following:

Areas located on Ted Stevens Anchorage International Airport property, which are segregated from the industrial activities associated with the airport, such as office building, parking lots, lawns, and undeveloped areas, may not need to be permitted. The exclusion status shall be revoked if storm water runoff from areas normally excluded mix or comeingle with storm water drainage from pollution sources covered under the storm water pollution prevention plan, prior to discharging from the permitted area.

1.3 Conditional Exclusion for No Exposure

If the co-permittee is covered by this permit, and becomes eligible for a no exposure exclusion from permitting under 40 CFR 122.26(g), the co-permittee may file a No Exposure Certification. The co-permittee is no longer required to have a permit upon submission of a complete and accurate no exposure certification to DEC. If the co-permittee is no longer required to have permit coverage because of a no exposure exclusion and has submitted a No Exposure Certification form to DEC, they are not required to submit a Notice of Termination (NOT). The co-permittee must submit a No Exposure Certification to DEC once every five years from the initial date of filing.

2.0 AUTHORIZATION UNDER THIS PERMIT

2.1 How to Obtain Authorization

To obtain authorization under this permit, the Airport Authority and co-permittee must:

- 2.1.1 Be located within the Airport boundaries;
- 2.1.2 Meet the Part 1.2 eligibility requirements;
- 2.1.3 Develop a SWPPP according to the requirements in Permit Part 5.0. The Airport Authority and co-permittee must submit a copy of the SWPPP to DEC as specified in Part 10.6;
- 2.1.4 Select, design, install, implement, and maintain control measures in accordance with Permit Part 4.0 to meet numeric and non-numeric effluent limits;
- 2.1.5 Submit a complete and accurate NOI (included in Appendix - E of this permit) to the address listed in Appendix - A Part 1.1.1 (*Note: DEC has presently not developed an eNOI for this permit. Until such time when an eNOI is available, a paper NOI must be submitted with the SWPPP. The SWPPP may be submitted as a PDF attachment to an email.*);
- 2.1.6 Pay the general permit authorization fee in accordance with a negotiated fee with the Department. Existing MSGP permittees when transferring permit coverage to this permit do not need to pay two permit authorization fees in one calendar year.;
- 2.1.7 Late NOIs will be accepted but authorization to discharge will not be retroactive; and

- 2.1.8 If the information on the NOI is incorrect or missing, the NOI will be deemed incomplete and permit authorization will not be granted. A complete NOI shall include all the information requested in the NOI form provided in Appendix - E.

2.2 Submission Deadlines

- 2.2.1 The Airport Authority and a co-permittee permitted under the MSGP shall continue to operate under the MSGP while they revise their SWPPP to comply with this permit and submit the SWPPP and a new NOI no later than 120 calendar days after the effective date of this permit. The Airport Authority and co-permittee shall continue to operate under the MSGP until they are granted an authorization to operate under this permit.

2.3 Date of Authorization to Begin Coverage

The Airport Authority and co-permittees are authorized to discharge industrial storm water under the terms and conditions of this permit upon the date specified in the DEC authorization letter; which is posted to DEC's APDES website (dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx).

2.4 Continuation of Expired General Permit

- 2.4.1 If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 18 AAC 83.155 and remain in force and effect for discharges that were covered prior to expiration. The Airport Authority and co-permittees are required to abide by all limitations, monitoring, and reporting included herein if the permit enters administrative extension until such time a permit is reissued authorizing the discharge or an NOT is submitted by the co-permittee. If the Airport Authority or co-permittees are authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of:
- 2.4.1.1 Authorization for coverage under a reissued permit or a replacement of this permit following an Airport Authority or co-permittee's timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit;
 - 2.4.1.2 Submittal of a NOT;
 - 2.4.1.3 Issuance or denial of an individual permit for the facility's discharges; or
 - 2.4.1.4 A formal decision by DEC not to reissue this general permit or not cover a particular discharger previously covered by the general permit, at which time DEC will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

2.5 Permit Compliance

Any noncompliance with any of the requirements of this permit constitutes a violation of the CWA. As detailed in Permit Part 9.0 (Corrective Actions), failure to take any required corrective actions constitute an independent, additional violation of this permit and the CWA. Any actions and time periods specified for remedying noncompliance do not absolve parties of the initial underlying noncompliance. Where corrective action is prompted by an event that does not itself constitute permit noncompliance, there is no permit violation provided the permittee takes the required corrective action within the relevant deadlines established in Permit Part 9.4.

2.6 Submittal of Modification to Original NOI

- 2.6.1 For an existing co-permittee, if any of the information supplied on the NOI form changes such as name of receiving waterbody, acreage of industrial area exposed to storm water, and facility contact information; the co-permittee must submit an NOI Modification form within thirty (30) calendar days after the change. See Appendix - E for the modification form.
- 2.6.2 At facilities where there is a transfer of ownership and/or a new operator takes over operational control at an existing facility, the new operator shall submit an NOI no later than 30 calendar days after a change in owner/operator. The previous owner/operator must submit a NOT no later than 30 calendar days after DEC authorization of the new operator. The new operator does not need to pay a permit authorization fee if the previous operator has paid for the year in which the transfer occurs.

3.0 COMPLIANCE WITH STANDARDS AND LIMITS

3.1 Requirements for all Facilities

- 3.1.1 The Airport Authority and co-permittees must select, install, implement and maintain control measures (described in Permit Part 4.0) at the facility or site of industrial activity that minimize pollutants in the discharge as necessary to meet WQS (18 AAC 70) at the point of discharge into a receiving waterbody. The Airport Authority and co-permittee must comply with all permit conditions with respect to installation and maintenance of control measures, storm water pollution prevention plan, adaptive management plan, inspections, monitoring, corrective actions, reporting and recordkeeping.
- 3.1.2 At any time after authorization, upon a DEC determination that the Airport Authority's or co-permittee's storm water discharges will cause, have a reasonable potential to cause, or contribute to an excursion above any WQS or effluent limit (Permit Part 3.2), DEC may require the Airport Authority or co-permittee to:
 - 3.1.2.1 Take corrective actions and modify storm water controls in accordance with Permit Part 9.0 to adequately address the identified water quality concerns;

- 3.1.2.2 Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining WQS; or
- 3.1.2.3 Minimize discharges of storm water from the facility or activity, and implement corrective actions
- 3.1.3 All written responses required under Permit Part 3.1 must include a signed certification consistent with Appendix - A, Part 1.12.

3.2 Effluent Limits and Monitoring

- 3.2.1 The Airport Authority and co-permittees must limit and monitor discharges from Outfalls 001A, 002B, 003C, and 005E as specified in Table 2; and Outfall 004D specified in Table 3. All values represent maximum effluent limits, unless otherwise indicated. The Airport Authority and co-permittees must comply with effluent limitations in the table(s) at all times unless otherwise indicated, regardless of monitoring frequency or reporting required by other provisions of this permit. The point of compliance with the effluent limits in Table 3 is at the edge of the mixing zone, not the end of pipe.

Table 2: Outfall 001A, 002B, 003C, 005E: Effluent Limits and Monitoring Requirements is located on the following page.)

Table 2: Outfall 001A, 002B, 003C, 005E: Effluent Limits and Monitoring Requirements

Parameter ^a	Effluent Limits					Monitoring Requirements		
	Daily Minimum	Monthly Average	Weekly Average	Daily Maximum	Units ^a	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	—	Report	—	Report	gpd	Effluent	1/month	Estimated
Biochemical Oxygen Demand (BOD ₅)	—	—	—	Report	mg/L	Effluent	1/Month	Grab
Chemical Oxygen Demand (COD)	—	—	—	Report	mg/L	Effluent	1/Month	Grab
Sheen	—	—	—	No Presence	—	Effluent	1/Month	Visual
Total Aqueous Hydrocarbons (TAqH) ^b	—	—	—	Report	µg/L	Effluent	1/Month	Grab
Total Aromatic Hydrocarbons (TAH) ^b	—	—	—	Report	µg/L	Effluent	1/Month	Grab
pH	6.5	—	—	8.5	SU	Effluent	1/Month	Grab
Temperature	—	—	—	Report	° C	Effluent	1/Month	Grab
Dissolved Oxygen	5.0	—	—	17	mg/L	Effluent	1/month	Grab
Residues ^c	Residues may not, alone or in combination with other substances or wastes, make the water unfit or unsafe for the use, or cause acute or chronic problem levels as determined by bioassay or other appropriate methods. Residues may not, alone or in combination with other substances, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.					Effluent	1/Month	Visual
Ethylene Glycol	—	—	—	Report	mg/L	Effluent	1/Month (Nov-May)	Grab
Propylene Glycol	—	—	—	Report	mg/L	Effluent	1/ Month (Nov-May)	Grab

Notes:

- a. See Appendix C - Definitions
- b. TAH and TAqH shall only be monitored if a visual sheen is detected. Samples to determine concentrations of TAH and TAqH must be collected in marine and fresh waters below the surface and away from any observable sheen; concentrations of TAqH must be determined and summed using a combination of: (A) EPA Method 602 (plus xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH; and (B) EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed in EPA Method 610; use of an alternative method requires department approval; the EPA methods referred to in this note may be found in Appendix A of 40 C.F.R. §136, Appendix A, as revised as of July 1, 2003 and adopted by reference.
- c. See 18 AAC 70.20(b)(8)(C) (2003).

Table 3: Outfall 004D: Effluent Limits and Monitoring Requirements

Parameter ^a	Effluent Limits					Monitoring Requirements		
	Daily Minimum	Monthly Average	Weekly Average	Daily Maximum	Units ^a	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow	—	Report	—	Report	gpd	Effluent	1/month	Continuous
Biochemical Oxygen Demand (BOD ₅)	—	—	—	Report	mg/L	Effluent	1/Month	Grab
Chemical Oxygen Demand (COD)	—	—	—	Report	mg/L	Effluent	1/Month	Grab
Sheen	—	—	—	No presence	—	Effluent	1/Month	Visual
Total Aqueous Hydrocarbons (TAqH) ^b	—	—	—	Report	µg/L	Effluent	1/Month	Grab
Total Aromatic Hydrocarbons (TAH) ^b	—	—	—	Report	µg/L	Effluent	1/Month	Grab
pH	6.5	—	—	8.5	SU	Effluent	1/Month	Grab
Temperature	—	—	—	Report	° C	Effluent	1/Month	Grab
Dissolved Oxygen	6.0	—	—	17	mg/L	Effluent	1/Month	Grab
Residues ^c	Residues may not, alone or in combination with other substances or wastes, make the water unfit or unsafe for the use, or cause acute or chronic problem levels as determined by bioassay or other appropriate methods. Residues may not, alone or in combination with other substances, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.					Effluent	1/Week (March 1 to May 31 and 1/Month (June 1 to February 28))	Visual
Ethylene Glycol	—	—	—	Report	mg/L	Effluent	1/Month (Nov-May)	Grab
Propylene Glycol	—	—	—	Report	mg/L	Effluent	1/Month (Nov-May)	Grab

Notes:

- See Appendix C - Definitions
- TAH and TAqH shall only be monitored if a visual sheen is detected. Samples to determine concentrations of TAH and TAqH must be collected in marine and fresh waters below the surface and away from any observable sheen; concentrations of TAqH must be determined and summed using a combination of: (A) EPA Method 602 (plus xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH; and (B) EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed in EPA Method 610; use of an alternative method requires department approval; the EPA methods referred to in this note may be found in Appendix A of 40 C.F.R. §136, Appendix A, as revised as of July 1, 2003 and adopted by reference.
- See Permit Part 9.3 Schedule of Compliance: see 18 AAC 70.20(b)(20)(C) (2003).

- 3.2.2 Discharge shall not cause contamination of surface or ground waters, and shall not cause or contribute to a violation of Alaska Water Quality Criteria found in 18 AAC 70 except if excursions are authorized in accordance with applicable provisions in 18 AAC 70.200 – 70.270 (e.g., variance, mixing zone).
- 3.2.3 The Airport Authority must collect effluent samples from the effluent stream after the last treatment unit before discharge into receiving waters.
- 3.2.4 For all effluent and receiving water monitoring, the Airport Authority must use a sufficiently sensitive EPA approved test method that quantifies the 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).
- 3.2.5 For purposes of reporting on the discharge monitoring report (DMR) for a single sample, if a value is less than the MDL, the permittee must report “less than (numeric value of MDL)” and if a value is less than a minimum level (ML), the permittee must report “less than (numeric value of ML).”
- 3.2.6 For purposes of calculating a monthly average, 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).” If the average 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. The resulting average value must be compared to the compliance level in assessing compliance.
- 3.2.7 Permittee has the option of taking more frequent samples than are required in 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 [adopted by reference in 18 AAC 83.010]) and if the MDLs are less than the effluent limits.
- 3.2.8 This permit authorizes storm water discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations (including pavement deicing). *Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.*
- 3.2.9 This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate APDES permit(s). *Note that a discharge resulting from snowmelt is not a dry weather discharge.*

3.3 Water Quality-Based Effluent Limitations

3.3.1 Water Quality Standards (WQS)

- 3.3.1.1 The Airport Authority and co-permittees discharges must be controlled as necessary to meet a WQS (18 AAC 70) in relation to the pollutants of concern.

- 3.3.1.2 If at any time the Airport Authority or co-permittee becomes aware, or DEC determines, that the Airport Authority's or co-permittee's discharge causes or contributes to an exceedance of a WQS in the effluent, the Airport Authority or co-permittees must take corrective action as required in Permit Part 9.1 document the corrective actions as required in Permit Parts 5.11 and 9.5 and report the corrective actions to DEC as required in Part 10.2. Co-permittees must participate in corrective action for the WQS exceedances from basins in which they have industrial activity (such as aircraft deicing).
- 3.3.1.3 DEC may impose additional permit stipulations on a site-specific basis, if information in a permittees NOI, required reports, or from other sources indicates that their discharges are not controlled as necessary to meet a WQS in the receiving water.

3.3.2 Discharges to Water Quality Impaired Waters.²

- 3.3.2.1 ***Existing Discharge to an Impaired Water with an EPA Approved or Established TMDL.*** If the Airport Authority or co-permittee discharges to an impaired water with an EPA approved or established TMDL, DEC will inform the Airport Authority or co-permittee if any additional limits or controls are necessary for their discharge to be consistent with the assumptions of any available wasteload allocation in the TMDL, or if coverage under an individual permit is necessary.
- 3.3.2.2 ***Existing Discharge to an Impaired Water without an EPA Approved or Established TMDL.*** If the Airport Authority or a co-permittee discharges to an impaired water without an EPA approved or established TMDL, it is required to comply with Permit Part 3.3.1. Note that this provision also applies to situations where DEC determines that the Airport Authority's or a co-permittees discharge is not controlled as necessary to meet WQS in a downstream water segment, even if their discharge is to a receiving water that is not specifically identified on a Section 303(d) list.
- 3.3.2.3 ***New Discharge to an Impaired Water.*** If the Airport Authority's or co-permittee's authorization to discharge under this permit relied on Permit Part 1.2.4.7 for a new discharge to an impaired water, the Airport Authority or co-permittee must implement and maintain any control measures or conditions at the facility that enabled the Airport Authority to become eligible under Permit Part 1.2.4.7, and modify such measures or conditions as necessary pursuant to any Permit Part 9.0 corrective actions. The Airport Authority is also required to comply with Permit Part 3.3.1.

3.4 Mixing Zones

- 3.4.1 In accordance with state regulations at 18 AAC 70.240, as amended through June 26, 2003, a mixing zone is authorized in Knik Arm for the discharge from Outfall 004D.

² The project will be considered to discharge to an impaired water if the first water of the U.S. to which the discharge enters is identified by the Department pursuant to Section 303(d) of the CWA as not meeting an WQS, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which the discharge is the waterbody that receives the storm water discharge from the storm sewer system.

- 3.4.2 Until such time as the Airport Authority completes modifications to the Outfall 004D, as described in Permit Part 9.3, the mixing zone authorized is defined for the chronic mixing zone as the length is 109 meters and width of 55 meters with a dilution factor of 5.1. The chronic mixing zone is authorized for dissolved oxygen, color, and pH. The acute mixing zone is defined as the rectangle with a length of 7.4 meters and a width of 5.8 meters extending perpendicular from shore with a dilution factor of 1.6. The acute mixing zone is authorized for dissolved oxygen, color and pH. The area extends from the marine bottom to the surface of the water and is oriented with the tidal flow. The point of compliance with the effluent limits is at the edge of the mixing zone, not the end of pipe.

3.5 Whole Effluent Toxicity (WET) Monitoring Requirements

3.5.1 Marine WET Monitoring Requirements – Outfall 004D

- 3.5.1.1 The Airport Authority shall conduct chronic toxicity tests on effluent samples from Outfall 004D once per year for the permit term. Testing shall be conducted in accordance with Parts 3.5.1, and 3.5.3 through 3.5.4.
- 3.5.1.2 Toxicity testing must be performed on a four hour composite sample (consisting of four distinct grab samples once an hour composited into one sample) of effluent once during each year of the permit, sampled during spring breakup, (typically the spring high flow), which typically occurs during the period April 7 to April 21. Additionally, a split of the composite sample collected must be analyzed for the chemical and physical parameters required in Table 3. Samples for toxicity testing should be of adequate size to accommodate the split sample.
- 3.5.1.3 A minimum of two test species with approved test protocols shall be used. The following invertebrate and vertebrate species are to be used:
- Vertebrate (survival and growth): *Atherinops affinis* (topsmelt minnow). In the event that topsmelt is not available, *Menidia beryllina* (Inland Silverside) may be used as a substitute. Each WET report shall document the species used in testing.
 - Invertebrate: For larval development tests, the Airport Authority must use bivalve species *Crassostrea gigas* (pacific oyster) or *Mytilus spp.* (Mussel).
- 3.5.1.4 For the bivalve and primary fish species *Atherinops affinis*, the presence of chronic toxicity must be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136) in accordance with 18 AAC 70.030. For the alternate fish marine species *Menidia beryllina*, *USEPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 3rd Edition (EPA-821-R-02-014) must be used (or as updated or superseded during the permit term).

- 3.5.1.5 Both the no observed effect concentration (NOEC) and 25% inhibition concentration (IC₂₅) or effective concentration (EC₂₅), must be provided in the full WET report. The chronic toxicity results reported with the DMR must use chronic toxicity units (TU_c), where $TU_c = 100/IC_{25}$, $100/EC_{25}$ or $100/NOEC$. If the endpoint is estimated to be above the highest dilution, the Airport Authority must indicate this with the DMR by reporting a less than value for TU_c, IC₂₅ or EC₂₅ with one based on the NOEC during evaluation of data during the next permit reissuance. Although acute WET monitoring is not required, the Airport Authority must estimate an NOEC for acute toxicity based on observations of total mortality recorded for chronic tests and include this information in the WET report.
- 3.5.1.6 The Airport Authority shall use the critical life stage toxicity tests specified in Table 4 to measure chronic toxicity (TU_c).

Table 4: Approved Whole Effluent Toxicity Tests and Species – Marine Water

Species	Test
Pacific oyster (<i>Crassostrea gigas</i>) or mussel (<i>Mytilus spp.</i>)	Shell Development
Topsmelt (<i>Atherinops affinis</i>)	Larval Growth and Survival

- 3.5.1.7 If the Airport Authority proposes an alternative species to be used for chronic toxicity testing, the Airport Authority shall perform screening first and provide the results of the screening to DEC for review and written approval prior to implementing the use of the new test species.
- 3.5.1.8 Toxicity testing on each organism must include a series of five test dilutions and a control. The dilution series shall consist of effluent concentrations of 78.4%, 39.2%, 19.6%, 9.8%, 4.9%, and a control for sample events.

3.5.2 Freshwater WET Monitoring Requirements – Outfall 002B

- 3.5.2.1 The Airport Authority shall conduct chronic toxicity tests on effluent samples from Outfall 002B once per year for the permit term. Testing shall be conducted in accordance with Parts 3.5.2 through 3.5.4.
- 3.5.2.2 Toxicity testing must be performed on a four hour composite sample (consisting of four distinct grab samples once an hour composited into one sample) of effluent once during each year of the permit, sampled during spring breakup, (typically the spring high flow), which typically occurs during the period April 7 to April 21. Additionally, a split of the composite sample collected must be analyzed for the chemical and physical parameters required in Table 2. Samples for toxicity testing should be of adequate size to accommodate the spilt sample.
- 3.5.2.3 Toxicity test results shall be reported according to the guidance and must include all relevant test information described for report preparation in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, October 2002*, EPA-821-R-02-013 in accordance with with 18 AAC 70.030 (or as updated or superseded during the permit term).
- 3.5.2.4 Results must be reported the same as in Section 3.5.1.5 above.

- 3.5.2.5 A minimum of two test species with approved test protocols shall be used. The test species shall include fathead minnow (*Pimephales promelas*) and water flea (*Ceriodaphnia dubia*). The Airport Authority shall use the critical life stage toxicity tests specified in Table 5 to measure chronic toxicity (TUc).

Table 5: Approved Whole Effluent Toxicity Tests and Species – Freshwater

Species	Test
Fathead Minnow (<i>Pimephales promelas</i>)	Larval Growth & Survival
Water Flea (<i>Ceriodaphnia dubia</i>)	Survival and Reproduction

- 3.5.2.6 If the Airport Authority proposes an alternative species to be used for chronic toxicity testing, the Airport Authority shall perform screening first and provide the results of the screening to DEC for review and written approval prior to implementing the use of the new test species.
- 3.5.2.7 Toxicity testing on each organism must include a series of five test dilutions and a control. This dilution series shall consist of effluent concentrations of 100%, 50%, 25%, 12.5%, 6.25%, and a control.

3.5.3 Quality Assurance

- 3.5.3.1 All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 3rd Edition (EPA-821-R-02-014), *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136), or *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, 4th Edition, October 2002, EPA-821-R-02-013 (or as updated or superseded during the permit term) and the individual test protocol. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be implemented:
- 3.5.3.1.1 The Airport Authority shall make every effort to have the toxicity tests initiated within thirty-six hours of the end of sample collection. If this is not possible, the Airport Authority must document that the delivery time cannot be met and submit the documentation with the sample results. In no case should more than seventy-two hours elapse between the end of sample collection and use of the sample. The sample must be held at 0-6 °C.
- 3.5.3.1.2 If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.
- 3.5.3.1.3 If either one of the reference toxicant tests or the effluent tests does not meet all test acceptability criteria as specified in the test methods manual, the Airport Authority must re-sample and re-test within 14 days of receipt of the test results. A corrective action form does not need to be submitted to DEC.

- 3.5.3.1.4 Control and lab dilution water must be collected from the receiving water or lab water, as appropriate and as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water, must also be used. Receiving water may be used as control and dilution water upon notification and written approval of DEC. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

3.5.4 Reporting

- 3.5.4.1 The Airport Authority shall submit a full report of chronic WET test results with the monthly DMR following the receipt of the test results.
- 3.5.4.2 The toxicity test report must include all relevant information outlined in USEPA *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, Third Edition (EPA-821-R-02-014). For the bivalve species, chronic toxicity must be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136).

3.6 Receiving Water Monitoring

The Airport Authority must conduct receiving water monitoring. Receiving water monitoring must start May 2020 after the effective date of the permit and continue for four summers (May to September). The program must meet the following requirements:

- 3.6.1 Monitoring stations must be established in Lake Hood of receiving water at the following locations:
- 3.6.1.1 Approximately 200 feet north of Outfall 002B
 - 3.6.1.2 Approximately 100 feet off the western end of Gull Island, and
 - 3.6.1.3 Approximately 100 feet off the eastern end of Gull Island.
- 3.6.2 The sampling for receiving water must be collected within two weeks of sampling the effluent from Outfall 002B.
- 3.6.3 Samples must be analyzed for the parameters listed in Table 6.

Table 6: Ambient Monitoring Requirements for Lake Hood

Parameter ^a	Units	Sampling Frequency	Sample Type
BOD ₅	mg/L	Two/Year (May-September) ^b	Grab
COD	mg/L	Two/Year (May-September) ^b	Grab
Dissolved Oxygen	mg/L	Two/Year (May-September) ^b	In-Situ
Temperature	°C	Two/Year (May-September) ^b	In-Situ
pH	SU	Two/Year (May-September) ^b	In-Situ
Sheen	—	Two/Year (May-September) ^b	Visual
Turbidity	NTU	Two/Year (May-September) ^b	Grab
Notes:			
a. The Airport Authority 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 Title 40 Code of Federal Regulations (CFR) Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants), adopted by reference at 18 AAC 83.010(f) test method available.			
b. Two per year (May to September) means a sample must be taken twice per year during the months May to September, a minimum of 60 days apart.			

- 3.6.4 Quality assurance/quality control (QA/QC) plans for all the monitoring must be documented in the Quality Assurance Project Plan (QAPP) required under Part 8.1, “Quality Assurance Project Plan”.
- 3.6.5 Lake water monitoring results must be submitted to DEC with the Airport Authority Annual Report. At a minimum, the report must include:
 - 3.6.5.1 Sample location
 - 3.6.5.2 Dates of sample collection and analyses;
 - 3.6.5.3 Results of sample analyses; and
 - 3.6.5.4 Relevant QA/QC information.
 - 3.6.5.5 All lake monitoring results must be included in an Annual Water Quality Monitoring Summary report and submitted with the Annual Report (detailed in Part 10.2). The report must include a presentation of the analytical results and an evaluation of the results. The evaluation must include a comparison of monitoring results (to show any differences) and a comparison of monitoring results for each station over time (to show any trends). The Annual Report may reference the monthly reports for QA/QC information.

4.0 CONTROL MEASURES

The Airport Authority and co-permittees must select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Permit Part 4.1, and meet the non-numeric effluent limits in Permit Part 4.2. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. Note that the Airport Authority and co-permittee may deviate from such manufacturer’s specifications where the Airport Authority and co-permittee provides justification for such deviation and includes documentation of their rationale in the part of the SWPPP that describes the control measures, consistent with Permit Part 4.2. If the Airport Authority and co-permittee finds that their control measures are not achieving their intended effect of minimizing pollutant discharges, the Airport Authority or co-permittee must modify these control measures in accordance with the corrective action requirements set forth in Permit Part 9.1. Regulated storm water discharges from the Airport Authority and co-permittees facility and activity include storm water run-on that commingles with storm water discharges associated with industrial activity at the permittees facility.

In the technology-based limits included in Permit Part 4.2, the term “minimize” means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically achievable and achievable in light of best industry practice.

4.1 Control Measure Selection and Design Considerations

The Airport Authority and co-permittees must use the following considerations when selecting and designing control measures:

- 4.1.1 Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;

- 4.1.2 Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in the storm water discharge;
- 4.1.3 Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- 4.1.4 Minimizing impervious areas at the co-permittees facility and infiltrating runoff onsite (including bioretention cells, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;
- 4.1.5 Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- 4.1.6 Avoiding the placement of snow with deicing chemicals on top of storm drain inlets;
- 4.1.7 Conserving and/or restoring of riparian buffers will help protect lakes and streams from storm water runoff and improve water quality; and
- 4.1.8 Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

4.2 Non-Numeric Technology-Based Effluent Limits

The Airport Authority and co-permittees must also:

4.2.1 Minimize Exposure

The Airport Authority and co-permittees must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, the Airport Authority and co-permittees should pay particular attention to the following:

- 4.2.1.1 Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- 4.2.1.2 Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to designated protected areas);
- 4.2.1.3 Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants (spills and leaks of aircraft deicing fluids are not authorized discharges under the permit);
- 4.2.1.4 Use industrial strength drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- 4.2.1.5 Use spill/overfill protection equipment on tanks and dispensing systems;
- 4.2.1.6 Drain fluids from equipment and vehicles that will be decommissioned or will remain unused for extended periods of time (longer than twelve months);

- 4.2.1.7 Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- 4.2.1.8 Ensure that all washwater, with the exception of discharges from pavement wash water and routine building washdown described in Part 1.2.3.7 and 1.2.3.8 drains to a sanitary sewer, sump, or other proper collection system (i.e., not the storm water drainage system).

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate APDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

- 4.2.2 **Good Housekeeping.** The Airport Authority and co-permittees must keep clean all exposed areas that are potential sources of pollutants, including but not limited to: using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in containers in accordance with manufactures recommendation. Designate areas for: washing of equipment and vehicles and wheel wash-down (in accordance with Part 1.2.3.7); fueling and maintenance areas; staging and material storage areas; washout of applicators/containers used for paint, concrete, and other materials; fertilizers or pesticide use; and storage, handling, and disposal of construction waste.

- 4.2.2.1 *Aircraft, Ground Vehicle and Equipment Maintenance Areas.* Minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Implement the following practices (or their equivalents), as applicable: performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.
- 4.2.2.2 *Aircraft, Ground Vehicle and Equipment Cleaning Areas.* Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of storm water runoff from cleaning areas.
- 4.2.2.3 *Aircraft, Ground Vehicle and Equipment Storage Areas.* Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of storm water runoff from these storage areas. Implement the following control measures, including any Best Management Practices (BMPs) (or their equivalents), as applicable: store aircraft and ground vehicles indoors; use industrial strength drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.
- 4.2.2.4 *Material Storage Areas.* Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels with the material they contain (e.g., “used oil,” “Contaminated Jet A,” etc.). Minimize contamination of precipitation/runoff from these areas. Implement the following control measures (or their equivalents): store materials indoors; store waste materials in a centralized location; and install berms/dikes around storage areas.

- 4.2.2.5 *Airport Fuel System and Fueling Areas.* Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Implement the following control measures (or their equivalents): implement spill and overfill practices (e.g., placing absorptive materials beneath aircraft during fueling operations); use only dry cleanup methods; and collect storm water runoff.
- 4.2.2.6 *Source Reduction.* Minimize, and where feasible eliminate, the use of glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol or propylene glycol for pavement deicing include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.
- 4.2.2.7 *Runway, Taxiways, and Parking Apron Deicing Operation:* Minimize contamination of storm water runoff from runways, taxiways, and parking aprons as a result of deicing operations.
- 4.2.2.7.1 Evaluate whether over-application of pavement deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety (reported in the Annual Report, Permit Part 10.2).
- 4.2.2.7.2 Implement these control measure options (or their equivalents), as applicable: metered application of chemicals; pre-wetting dry chemical constituents prior to application; install a runway ice detection system; implement anti-icing operations as a preventive measure against ice buildup.
- 4.2.2.8 *Aircraft Deicing Operations.* Minimize contamination of storm water runoff from aircraft deicing operations.
- 4.2.2.8.1 Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety.
- 4.2.2.8.1.1 This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the Airport Authority).
- 4.2.2.8.1.2 Evaluate using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals (reported in the Annual Report, Permit Part 10.2).
- 4.2.2.8.1.3 Evaluate the following control measure options (or their equivalents), as applicable, for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, open-ended deicing hangers(s) with targeted infrared wave equipment, hangar storage, and aircraft covers. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.
- 4.2.2.8.2 Co-permittees using more than 30,000 gallons of glycol annually, measured as undiluted product, shall use only deicing trucks specifically designed for reducing glycol usage that are equipped with two or more of the following glycol usage reduction tools: forced air; proportional mix nozzles; low flow nozzles; or any other Federal Aviation Administration (FAA) or Airport Authority approved glycol usage reduction tool.

- 4.2.2.8.3 The use of aircraft deicing fluid (ADF) is restricted as follows to reduce the toxicity of the storm water discharge and enable the potential for more cost effective treatment and/or recycling of glycol in storm water.
- 4.2.2.8.3.1 Co-permittees using 30,000 gallons or less of glycol annually, measured as undiluted product (a) use only propylene glycol, or (b) use ethylene glycol only in areas geographically isolated from other co-permittees as approved by the Airport Authority (reported in the Annual Report, Permit Part 10.2).
- 4.2.2.8.3.2 Co-permittees using more than 30,000 gallons of glycol annually, measured as undiluted product (a) use only propylene glycol, or (b) use ethylene glycol only in areas geographically isolated from other co-permittees as approved by the Airport Authority and collect and properly dispose of, off airport property, 40 % of the glycol used (reported in the Annual Report, Permit Part 10.2).
- 4.2.2.9 *Management of Runoff.* Where deicing operations occur the Airport Authority and co-permittees must, to the extent practicable:
- 4.2.2.9.1 Document in their SWPPP implementation of a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site.
- 4.2.2.9.2 Deicing operations should be developed with an emphasis on using a combination of the control measures listed below to contain, capture, and reuse deicing materials. Applicable practices include, but are not limited to:
- 4.2.2.9.2.1 Where practicable, use a standardized deicing pad to limit the extent of deicing fluid following application, or where impracticable, use vacuum/collection trucks (glycol recovery vehicles).
- 4.2.2.9.2.2 Evaluate the feasibility of recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of storm water contamination.
- 4.2.2.9.2.3 Used deicing fluid should be recycled whenever practicable or disposed of by a means other than discharge to the land.
- 4.2.2.10 *Deicing Season.* The permit assumes the seasonal timeframe (e.g., October – May) during which deicing activities typically occur at the facility, though deicing may occur anytime of the year. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season.
- 4.2.2.11 *Facility-wide Deicing Committee.* The purpose of the committee is to use continuous improvement techniques to improve efficiency in the use of deicing equipment, within the bounds of FAA aircraft safety considerations.
- 4.2.2.11.1 The Airport Authority shall coordinate and staff a committee consisting of co-permittees whose focus is the discussion of coordination and improvement of individual and facility-wide pavement and aircraft deicing practices. co-permittees shall contribute staff time in their areas of expertise.

- 4.2.2.11.2 The committee shall meet at least twice a year to discuss, at a minimum, good housekeeping measure Permit Parts 4.2.2.1 through Part 4.2.2.9 and the Adaptive Management Plan (Permit Part 6.0). Meeting summaries shall be submitted with the Airport Authority annual report (Permit Part 10.2).
- 4.2.3 **Maintenance.** The Airport Authority and co-permittees must regularly inspect, test, maintain, and repair all industrial equipment and systems for pavement and aircraft deicing to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharged to receiving waters and document in the SWPPP. The Airport Authority and co-permittees must maintain all control measures that are used to achieve the effluent limits required by this permit in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If the Airport Authority or co-permittee finds that their control measures need to be replaced or repaired, they must make the necessary repairs or modifications as expeditiously as practicable but within 14 days and document in the SWPPP.
- 4.2.4 **Spill Prevention and Response Procedures.** The Airport Authority and co-permittees must minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. This permit does not authorize the discharge of leaks, spills or other releases. At a minimum, the Airport Authority and co-permittees must implement:
- 4.2.4.1 Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
 - 4.2.4.2 Procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
 - 4.2.4.3 Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. One of these individuals should be a member of the Airport Authority or co-permittees storm water pollution prevention team (see Permit Part 5.5.2); and
 - 4.2.4.4 Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, AS 75.300 and 18 AAC 75 Article 3 occurs, the permittee must notify the National Response Center (NRC) at (800) 424-8802 during normal business hours and call the nearest DEC Area Response Team Office – Central (Anchorage) 269-3063. Outside of normal business hours, the Airport Authority or co-permittee must call (800) 478-9300 as soon as the Airport Authority or co-permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be posted in locations that are readily accessible and available.

- 4.2.4.5 The Airport Authority or co-permittees must provide a description of the release, the circumstances leading to the release, and the date of the release to the nearest DEC Area Response Team Office, in accordance to AS 75.300 (See Permit Part 4.2.4.4 and Appendix A). The Airport Authority or co-permittee must also implement measures to prevent the reoccurrence of such releases and to respond to such releases.

4.2.5 Erosion and Sediment Controls

- 4.2.5.1 Construction Activity that disturbs less than one acre of ground the Airport Authority or co-permittee must stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions the Airport Authority or co-permittee must take to meet this limit, the Airport Authority or co-permittee must place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, the Airport Authority and co-permittees are encouraged to consult with EPA's internet-based resources relating to BMPs for erosion and sedimentation, including the, *National Menu of Stormwater BMPs* (www.epa.gov/npdes/stormwater/menuofbmps), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (www.epa.gov/owow/nps/urbanmm/index.html), and any similar publications such as the *Alaska Storm Water Guide* (dec.alaska.gov/water/wastewater/stormwater/guidance/).
- 4.2.5.2 Construction Activity that disturbs one acre or more of ground shall be covered by a permit authorization from the most recent APDES Construction General Permit. They must also comply with the Municipality of Anchorage Municipal Separate Storm Sewer System Permit construction requirement.
- 4.2.6 **Management of Runoff.** The Airport Authority and co-permittees must divert, infiltrate, reuse, contain, or otherwise reduce storm water runoff, to minimize pollutants in their discharges. In selecting, designing, installing, and implementing appropriate control measures, the Airport Authority and co-permittees are encouraged to consult with EPA's internet-based resources relating to runoff management, including the sector-specific *Industrial Storm Water Fact Sheet Series*, (www.epa.gov/npdes/stormwater/msgp/), *National Menu of Storm Water BMPs* (www.epa.gov/npdes/stormwater/menuofbmps/), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (www.epa.gov/owow/nps/urbanmm/index.html), and any similar publications.
- 4.2.7 **Salt Storage Piles or Piles Containing Salt.** The Airport Authority and co-permittees must enclose or cover storage piles of salt (NaCl), sand or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. The Airport Authority and co-permittees must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

- 4.2.8 **Employee Training.** The Airport Authority and co-permittees must train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of the permit (e.g., inspectors, maintenance personnel), including all members of the Airport Authority's or co-permittee's Pollution Prevention Team. Training must cover both the specific control measures used to achieve the effluent limits in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Training shall be conducted at least annually (or more often if employee turnover is high) (or at the start of the deicing season) and documented in the SWPPP. Documentation to include: sign-in list, agenda, and brief summary of training.
- 4.2.9 **Non-Storm Water Discharges.** The Airport Authority and co-permittees must eliminate non-storm water discharges not authorized by an APDES permit. See Permit Part 1.2.3 for a list of non-storm water discharges authorized by this permit.
- 4.2.10 **Waste, Garbage and Floatable Debris.** The Airport Authority and co-permittees must ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

4.3 Urea Prohibition

The Airport Authority and co-permittees shall certify annually they do not use airfield, taxiway or apron deicing products that contain urea, in accordance with 40 CFR Part 449.10. This certification shall be included with the annual report Permit Part 10.2.

4.4 Snow Storage Site Retrofit

The Airport Authority and/or co-permittee must retrofit the snow storage site located to the east and adjacent to the FedEx facility. For acceptable design criteria for the snow storage site, see DEC Snow Disposal Site Guidance (dec.alaska.gov/water/wastewater/stormwater/resources/). The retrofit must comply with applicable FAA flight safety and airport regulations. The plans for construction must be submitted for plan review to DEC (Address given in Appendix - A Part 1.1.1) using the Permanent Storm Water Management Control Plan Review Checklist (see dec.alaska.gov/water/wastewater/stormwater/planreviews/) no later than one year after the effective date of the permit. The Snow Storage Site shall be constructed and operational no later than two years after the effective date of the permit.

4.5 Plan Approval for Permanent Storm Water Management Controls

For the Airport Authority and co-permittees who construct or install any part of a permanent storm water management control shall submit a copy of the engineering plans to DEC for review at the address in Appendix - A Part 1.1.1 and pay an engineering plan review fee (see 18 AAC 72.600 and 18 AAC 72.955). Engineering plan approval must be obtained from DEC prior to construction. All permanent storm water treatment devices shall receive engineering plan approval per 18 AAC 72.600. *(For the purposes of Part 4.5 "permanent storm water treatment device" means a treatment device with a design life longer than two years.)*

5.0 STORM WATER POLLUTION PREVENTION PLAN

5.1 Purpose

The purpose of the Storm Water Pollution Prevention Plan (SWPPP) is to plan, develop, describe and document procedures the Airport Authority and each co-permittees must implement to prevent or minimize the generation and the potential for release of pollutants from the facility to the waters of the U.S. through normal and ancillary activities.

5.2 Elements of Storm Water Pollution Prevention Plan

5.2.1 For coverage under this permit, the SWPPP must contain all of the following elements:

- 5.2.1.1 Storm water pollution prevention team (see Part 5.5.2);
- 5.2.1.2 Site description (see Part 5.5.3);
- 5.2.1.3 Summary of potential pollutant sources (see Part 5.5.4);
- 5.2.1.4 Description of control measures (see Part 5.5.5);
- 5.2.1.5 Schedules and procedures (see Part 5.5.6); and
- 5.2.1.6 Signature requirements (see Part 5.5.7).

5.2.2 Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) developed for a National Environmental Performance Track facility, copies of the relevant portions of those documents must be kept with the SWPPP.

5.3 Development and Implementation Schedule

- 5.3.1 The Airport Authority and each co-permittee must develop and implement a SWPPP which achieves the objectives and the specific requirements listed below.
- 5.3.2 The Airport Authority must submit their NOI and SWPPP to DEC signifying that the SWPPP has been developed and implemented within 120 days of the effective date of the permit. Any existing SWPPP may be modified for compliance with this Part.
- 5.3.3 The Airport Authority must implement provisions of the SWPPP as conditions of this permit within 120 days of the effective date of this permit.
- 5.3.4 Co-permittees must submit their NOI to DEC signifying that the SWPPP has been developed and implemented within 120 days of the effective date of this permit.
- 5.3.5 The co-permittees SWPPP must be coordinated with and consistent with the Airport Authority SWPPP. Any existing co-permittee SWPPPs may be modified for compliance with this Part.
- 5.3.6 The co-permittee must implement provisions of the SWPPP as conditions of this permit within 120 days of the effective date of this permit.

5.4 Objectives

The Airport Authority and co-permittees must develop and amend their individual SWPPPs consistent with the following objectives for the control of pollutants.

- 5.4.1 The number and quantity of pollutants and the toxicity of effluent generated, discharged, or potentially discharged at the facility or site of industrial activity (e.g., aircraft deicing) must be minimized by the co-permittee by managing each waste stream in the most appropriate manner.
- 5.4.2 Under the SWPPP, and especially within any standard operating procedures in the SWPPP, the Airport Authority and co-permittee must ensure proper operation and maintenance of water management and wastewater treatment systems. SWPPP elements must be developed in accordance with good engineering practices.
- 5.4.3 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, improper operation, natural phenomena such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage. This examination must be reported in the comprehensive site inspection (Part 7.3)

5.5 Contents of SWPPP

5.5.1 Co-Permittee

Identify the Airport Authority or co-permittee for the portion of the facility or site of industrial activity.

5.5.2 Storm Water Pollution Prevention Team

Identify the staff members (by name or title) that comprise the Airport Authority or co-permittees's storm water pollution prevention team as well as their individual responsibilities. The storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the Airport Authority's or co-permittee's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and the SWPPP.

5.5.3 Site Description

The SWPPP must include the following:

- 5.5.3.1 Activities at the Facility.
- 5.5.3.2 Provide a description of the nature of the industrial activities at the facility or elsewhere on airport property.
- 5.5.3.3 General location map.
- 5.5.3.4 Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters for the storm water discharges.
- 5.5.3.5 Site map. Provide a map showing:
 - 5.5.3.5.1 The size of the property in acres;
 - 5.5.3.5.2 The location and extent of significant structures and impervious surfaces;

- 5.5.3.5.3 Directions of storm water flow (*use arrows*);
- 5.5.3.5.4 Locations of all existing structural control measures;
- 5.5.3.5.5 Locations of all receiving waters in the immediate vicinity of the permittees facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them;
- 5.5.3.5.6 Locations of all storm water conveyances including ditches, pipes, and swales;
- 5.5.3.5.7 Locations of potential pollutant sources identified under Part 5.5.4.2 (*including areas where aircraft deicing fluid is applied to aircraft*);
- 5.5.3.5.8 Locations where significant spills or leaks identified under Part 5.5.4.3 have occurred;
- 5.5.3.5.9 Locations of all storm water monitoring points;
- 5.5.3.5.10 Municipal separate storm sewer systems, where the facilities storm water discharges to them;
- 5.5.3.5.11 Locations and descriptions of all non-storm water discharges identified under Part 4.2.9;
- 5.5.3.5.12 Locations of the following activities where such activities are exposed to precipitation:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas;
 - locations used for the treatment, storage, or disposal of wastes;
 - liquid storage tanks;
 - processing and storage areas;
 - immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 - transfer areas for substances in bulk; and
 - machinery;
- 5.5.3.5.13 Locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants; and
- 5.5.3.5.14 The Airport Authority and co-permittees must document in their individual SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- 5.5.3.5.15 Location of existing public water system (PWS) drinking water protection areas (DWPA) for PWS sources (e.g., springs, wells, or surface water intakes). The DWPA's can be found using the interactive web map application, "Alaska DEC Drinking Water Protection Areas", located at dec.alaska.gov/das/GIS/apps.htm.

5.5.4 Summary of Potential Pollutant Sources

The Airport Authority and co-permittees must document areas at their facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

- 5.5.4.1 *Activities in the Area.* A list of the industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; pavement deicing, aircraft deicing).
- 5.5.4.2 *Pollutants.* A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, deicing fluids, and cleaning solvents) associated with each identified activity. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the date the permittee prepared or amended the SWPPP. In the Airport Authority or co-permittees inventory of exposed materials, describe in the SWPPP the potential for the following activities and facility areas to contribute pollutants to storm water discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If the Airport Authority or co-permittee uses deicing chemicals, they must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities. This includes all deicing chemicals, not just glycols and potassium acetate, because large quantities of these other chemicals can still have an adverse impact on receiving waters. Co-permittees that conduct deicing operations must provide the above information to the Airport Authority for inclusion with any comprehensive airport reporting in the Adaptive Management Plan (Part 6.3) and inclusion in the co-permittees Annual Report (Part 10.2)
- 5.5.4.3 *Spills and Leaks.* The Airport Authority and co-permittees must document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The permittee must document all significant spills and leaks³ of oil or toxic or hazardous pollutants that occurred in the three years prior to the date the Airport Authority and co-permittee prepared the SWPPP for this permit term. Specifically, include spills or leaks that occurred in areas exposed to storm water or that drained to a storm water conveyance. The spill or leak history must be maintained in the SWPPP throughout this permit term. The permit term goes from the permit effective date to the permit expiration date.

³ Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, 40 CFR 302, Alaska Statute 46.04 and Section 18 AAC Chapter 75 (i.e. 18 AAC 75.300) relating to spills or other releases of oils or hazardous substances. (See 4.2.4)

- 5.5.4.4 *Non-Storm Water Discharges.* The Airport Authority and co-permittees must document that they have evaluated for the presence of non-storm water discharges and that all unauthorized discharges have been eliminated. Documentation of the evaluation must include:
- The date of any evaluation;
 - A description of the evaluation criteria used;
 - A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
 - The different types of non-storm water discharge(s) and source locations; and
 - The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an APDES permit application was submitted for an unauthorized cooling water discharge.
- 5.5.4.5 *Salt Storage.* The Airport Authority or co-permittee must document the location of any storage piles containing salt (NaCl) or other pellet chemicals used for deicing or other commercial or industrial purposes.
- 5.5.4.6 *Sampling Data.* The Airport Authority must summarize all storm water discharge sampling data collected at their facility during the previous permit term. Co-permittees must maintain a copy of the data summary in their SWPPP.
- 5.5.4.7 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in the SWPPP, a copy of the APDES permit issued for vehicle/equipment washwater or, if an APDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, include a copy in the SWPPP. In any case, if the permittee is subject to another permit, describe the control measures for implementing all non-storm water discharge permit conditions or pretreatment requirements in the SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the SWPPP.

5.5.5 Description of Control Measures

- 5.5.5.1 *Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits.* The Airport Authority and co-permittee must document the location and type of control measures installed and implemented at the facility and activity to achieve the non-numeric effluent limits in Part 4.2, the effluent limitations guidelines-based limits in Part 3.2 the water quality-based effluent limits in Part 3.2, and describe how the permittee addressed the control measure selection and design considerations in Part 4.1. This documentation must describe how the control measures at the facility address both the pollutant sources identified in Part 5.5.4, and any storm water run-on that commingles with any discharges covered under this permit.
- 5.5.5.2 *Documentation of Control Measures Used for Management of Runoff.* Document in the SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow. (*Contaminated snow is snow containing pavement or aircraft deicing chemicals.*)

5.5.6 Schedules and Procedures

5.5.6.1 *Pertaining to Control Measures Used to Comply with the Effluent Limits in Permit Part 4.0.* The following must be documented in the SWPPP:

- Good Housekeeping (See Permit Part 4.2.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers; and operation of aircraft deicing equipment;
- Maintenance (See Permit Part 4.2.3) – Preventative maintenance procedures, including routine inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;
- Spill Prevention and Response Procedures (See Permit Part 4.2.4) – Procedures for preventing and responding to spills and leaks. The Airport Authority and co-permittee may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an APDES permit for the facility, provided that the permittee keeps a copy of that other plan onsite and makes it available for review consistent with Permit Part 5.10; and
- Employee Training (Permit Part 4.2.8) – A schedule for all types of necessary training.

5.5.6.2 *Pertaining to Monitoring and Inspection.* The Airport Authority must document in their SWPPP procedures for conducting the analytical monitoring specified by this permit, where applicable to the facility, including:

- Effluent limitations guidelines monitoring (see Permit Part 3.2); and

For the monitoring, the SWPPP must document:

- Locations where samples are collected;
- Parameters for sampling and the frequency of sampling for each parameter;
- Schedules for monitoring at the facility;
- Any numeric control values (effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
- Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data, as specified in Permit Part 8.2.

The Airport Authority and co-permittees must document in their SWPPP their procedures for performing, as appropriate, the three types of inspections specified by this permit, including:

- Routine facility inspections (see Permit Part 7.1);

- Quarterly visual assessment of storm water discharges (*Airport Authority only*) (see Permit Part 7.2); and
- Comprehensive site inspections (see Permit Part 7.3).

For each type of inspection performed, the SWPPP must identify:

- Person(s) or positions of person(s) responsible for inspection;
- Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular storm water runoff discharges; and
- Specific items to be covered by the inspection, including schedules for specific outfalls.

5.5.7 Signature Requirements. The Airport Authority and co-permittee must sign and date their SWPPP in accordance with Appendix A, Subsection 1.12, including the date of signature.

5.5.8 Review and Certification. The Airport Authority and co-permittees individual SWPPP must be reviewed and certified as follows:

5.5.8.1 Annual review by the individual facility manager and SWPPP Team.

5.5.8.2 Certified statement the above reviews were completed and the SWPPP fulfills the requirements set forth in this permit. The statement must be certified by the dated signatures of each SWPPP Team member. The statement must be submitted with the Annual Report to DEC on or before September 1 of each year of operation under this permit.

5.6 Inspections

5.6.1 The Airport Authority and co-permittee's individual SWPPP must document the procedures for performing individual facility inspections specified by this permit in Permit Part 6.0, and where necessary, taking corrective actions, in accordance with Permit Part 8.0. At a minimum the SWPPP must document the following:

5.6.1.1 Person(s) or position of person(s) responsible for conducting facility inspections;

5.6.1.2 Schedules to be followed for conducting inspections;

5.6.1.3 Any inspection checklist or form that will be used; and

5.6.1.4 How conditions that require corrective action will be addressed.

5.6.2 A record of each inspection and of any corrective actions taken in accordance with Permit Parts 6.0 and 9.0 must be retained with the SWPPP for at least three (3) years from the date permit coverage expires or is terminated.

5.7 Monitoring

- 5.7.1 The Airport Authority individual SWPPP must document the procedures for performing facility monitoring specified by this permit in Permit Part 8.0, and where necessary, taking corrective actions, in accordance with Permit Part 9.0. At a minimum, the SWPPP must document the following:
- 5.7.1.1 Person(s) or position of person(s) responsible for conducting facility monitoring;
 - 5.7.1.2 Schedules to be followed for conducting monitoring;
 - 5.7.1.3 Any monitoring checklist or form that will be used; and
 - 5.7.1.4 How conditions that require corrective action will be addressed.
- 5.7.2 A record of each monitoring event and of any corrective actions taken in accordance with Permit Parts 8.0 and 9.0 must be retained with the SWPPP for at least three (3) years from the date permit coverage expires or is terminated.

5.8 Documentation of Permit Eligibility Related to a Total Maximum Daily Load

The Airport Authority's individual SWPPP must include documentation supporting determination of permit eligibility with regards to waters that have an EPA-established or approved TMDL. See Permit Part 3.3.2 for additional information to determine permit eligibility related to a TMDL. The SWPPP must include the following:

- 5.8.1 Identification of whether the discharge is identified, either specifically or generally, in an EPA – established or approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge;
- 5.8.2 Summaries of consultation with state or federal TMDL authorities on consistency of SWPPP conditions with the approved TMDL; and
- 5.8.3 Measures taken by the Airport Authority to ensure that the discharge of pollutants from the facility is consistent with the assumptions and requirements of the EPA – established or approved TMDL, including any specific wasteload or load allocation that has been established that would apply to the discharge.

5.9 Maintaining an Updated SWPPP

- 5.9.1 The Airport Authority and co-permittees must modify their individual SWPPP whenever necessary to address any of the conditions for corrective action in Permit Part 9.1 and to ensure that they do not reoccur, or to reflect changes implemented when a review following the conditions in Permit Part 9.2 indicates that changes to the control measures are necessary to meet the effluent limits in this permit. Changes to the SWPPP document must be made in accordance with the corrective action deadlines in Permit Parts 9.4 and 9.5, and must be signed and dated in accordance with Appendix A, Subsection 1.12.

- 5.9.2 The Airport Authority and co-permittees must modify their individual SWPPP if inspections or investigations by facility staff or by state, federal, local or tribal officials determine that SWPPP modifications are necessary for compliance with this permit.
- 5.9.3 The Airport Authority and co-permittees must modify their individual SWPPP to reflect any revisions to applicable state, federal, local or tribal law or regulations that affect the control measures implemented at the facility.
- 5.9.4 The Airport Authority and co-permittees must keep a log showing dates, name of person authorizing the change, and a brief summary of changes for all significant SWPPP modifications (e.g., adding a new control measure, changes in facility layout or design, or significant storm events that cause for replacement of control measures).
- 5.9.5 The Airport Authority and co-permittees must amend their individual SWPPP within 30 calendar days whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to waters of the U.S., or if the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the SWPPP, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. The SWPPP must be updated at least annually.

5.10 SWPPP Availability The Airport Authority and co-permittees must retain a copy of their current SWPPP required by this permit at the facility, and it must be immediately available to DEC or EPA at the time of an onsite inspection or upon request. If the facility is inactive the SWPPP must be retained at a readily available location or the office of the co-permittee. DEC may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within DEC and EPA. DEC encourages permittees to post their SWPPP online and provide the website address on the NOI (the SWPPP does not need to be reposted on the internet each time it is updated).

5.11 Additional Documentation Requirements The Airport Authority and co-permittees are required to keep up-to-date copies of the following inspection, monitoring, corrective action, additional documentation, and certification records with their individual SWPPP:

- 5.11.1 A copy of the NOI submitted to DEC along with any correspondence exchanged between the permittee and DEC specific to coverage under this permit;
- 5.11.2 A copy of the acknowledgment letter the permittee receives from DEC assigning the permittees permit tracking number;
- 5.11.3 A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);

- 5.11.4 Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through storm water or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Part 4.2.4);
- 5.11.5 Records of employee training, including date training received (see Part 4.2.8);
- 5.11.6 Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 4.2.3);
- 5.11.7 Log of SWPPP modifications;
- 5.11.8 All inspection reports, including the Routine Facility Inspection Reports (see Permit Part 7.1), the Quarterly Visual Assessment Reports (see Permit Part 7.2), and the Comprehensive Site Inspection Reports (see Permit Part 7.3);
- 5.11.9 Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of discharge from a measurable storm event) (see Permit Parts 8.2.1, 8.2.4, and 8.3.2.1);
- 5.11.10 Description of any corrective action taken at the permittees site shall be listed in a corrective action log, including compliance event and dates when problems were discovered and modifications occurred (see Part 9.5);
- 5.11.11 Documentation of any effluent limitation exceedances and how they were responded to, including any corrective action; and
- 5.11.12 Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the permittee discharges directly to impaired waters, and that such pollutants were not detected in their discharge or were solely attributable to natural background sources (see Part 8.3.2.2).

6.0 ADAPTIVE MANAGEMENT PLAN

The Airport Authority, in coordination with co-permittees and the Facility-wide Deicing Committee, (Permit Part 4.2.2.11) shall develop, implement, and amend the Adaptive Management Plan that achieves the purpose, goal, objectives, and specific requirements listed below.

6.1 Background

- 6.1.1 *Purpose.* The purpose of the Adaptive Management Plan is to coordinate activities among the Airport Authority and co-permittees to use a structured, iterative, and learning-based process to monitor aircraft deicing operations of the airport; and provide feedback for making operational and monitoring improvements related to those operations to improve water quality. The SWPPPs developed by the Airport Authority and co-permittees serve to manage the individual activities. The one Airport-wide Adaptive Management Plan serves to coordinate and integrate the individual co-permittee activities carried out by the individual SWPPP activities into an organized whole system approach.
- 6.1.2 *Goal and Objectives.* Within the constraints of FAA flight safety requirements the goal of the Adaptive Management Plan is to maximize the efficiency of aircraft deicing operations, including source reduction techniques, to improve water quality. The objectives of the Adaptive Management Plan are to coordinate, monitor, and implement source reduction techniques and to provide feedback to the Airport Authority, co-permittees and DEC on managing aircraft deicing and source reduction under co-permittees control.
- 6.1.3 *Development and Implementation Schedule.* The Adaptive Management Plan is developed in a Setup Phase (Permit Part 6.2) and implemented in an Iteration Phase (Permit Part 6.3). Both Phases include consideration of FAA requirements for flight safety, the Airport operations, experience and knowledge of the Airport Authority and co-permittees, standard industry practices (Fact Sheets for ACRP Report 14), and concern for water quality discharges. For the purpose of this Plan “aircraft deicing fluid” refers to both Type I “aircraft deicing fluid” and Type IV “anti-icing fluid;” however, blend to temperature technologies only apply to Type I fluids. Only co-permittees that apply more than 1,000 gallons of glycol annually, measured as undiluted product, shall comply with the Adaptive Management Plan. The Airport Authority shall submit the Adaptive Management Plan (Permit Part 6.2) by September 1, 2020. The Adaptive Management Plan shall come into effect the first full deicing season after the effective date of the permit. The Airport Authority shall submit one electronic copy (in PDF format) to the DEC – Compliance and Enforcement Program (submit to address in Appendix - A Part 1.1.2). The Airport Authority and co-permittees shall implement provisions of the Adaptive Management Plan (Permit Part 6.3) as conditions of this permit during the subsequent deicing seasons to the end of the permit.

6.2 Setup Phase

- 6.2.1 *Develop Adaptive Management Plan.* The Adaptive Management Plan shall include, at a minimum, the following elements:
- 6.2.1.1 Adopt the purpose, goals, and objectives for the system of aircraft deicing-runoff management, including source reduction, described above;
 - 6.2.1.2 Identify co-permittees involved in aircraft deicing;
 - 6.2.1.3 Delineate drainage patterns and basins that discharge to the five permitted outfalls within the Airport boundary;
 - 6.2.1.4 Identify and inventory potential sources of aircraft deicing fluid and historic location of deicer application to aircraft in the drainage basins;

- 6.2.1.5 Develop assumptions which define conditions under which subsequent deicing years are compared. Assumptions shall be established for each drainage basin to reflect basin-specific conditions;
- 6.2.1.6 Describe data to be collected by the co-permittees and method of analysis to evaluate the management of aircraft deicing fluid and the performance of source reduction technologies;
- 6.2.1.7 Describe source reduction technologies deployed by individual drainage basin;
- 6.2.1.8 Describe and provide an analysis of current aircraft deicing fluid usage, operations, and runoff management for each co-permittee;
- 6.2.1.9 Develop a workplan and schedule to evaluate the feasibility of recycling spent aircraft deicing fluid for reuse as aircraft deicing fluid at the airport. The workplan and schedule must be submitted to DEC – Compliance and Enforcement Program prior to starting the analysis (one electronic copy submitted to Appendix - A Part 1.1.2) A report describing the results of the analysis shall be submitted with the Airport Authority's fourth year annual report; and
- 6.2.1.10 Describe methods for recordkeeping and reporting results of management of aircraft deicing fluid and source reduction efforts.

6.3 Iteration Phase

- 6.3.1 *Implement Adaptive Management Plan.* The Adaptive Management Plan developed in Permit Part 6.2 is applied in the Iteration Phase (Permit Part 6.3) in the following four step process carried out by each co-permittee during each deicing season and reported to the Airport Authority at the end of each deicing season for inclusion into the Annual Adaptive Management Plan Report.
 - 6.3.1.1 *Monitor Source Reduction.* Each co-permittee that applies aircraft deicing fluid shall measure the amount according to data developed in Permit Part 6.2.1.6.
 - 6.3.1.2 *Monitor Performance.* The Airport Authority and co-permittees shall review monitoring results from the outfalls and evaluate their individual and collective impact for each basin to the water quality at the outfall.
 - 6.3.1.3 *Evaluate Performance.* Performance of the source reduction technologies developed by each co-permittee shall be evaluated by the Facility-wide Deicing Committee. Changes from season-to-season will be evaluated to identify implementation issues or conditions which limit the performance of source-reduction technologies.
 - 6.3.1.4 *Adjust Source Reduction Methods.* The co-permittees shall adjust implementation of source reduction technologies to improve source reduction performance consistent with FAA flight safety requirements and other relevant considerations for the identification of Best Available Technology.
 - 6.3.1.5 *Report Results.* Two months after the end of the deicing season (September 1st) the Airport Authority shall provide a summary report to DEC – Compliance and Enforcement Program with the Annual Report (one electronic copy submitted to Appendix - A Part 1.1.2.). The summary report shall include:
 - 6.3.1.5.1 Aircraft deicing fluid chemical characteristics, storage, handling, safety, and spill controls;

- 6.3.1.5.2 Aircraft deicing fluid (Type I and IV) usage by co-permittee and drainage basin;
 - 6.3.1.5.3 A graphical chart of annual aircraft deicing fluid usage by each co-permittee. Using data co-permittees have already provided to the Airport Authority, the report shall include the charts of the previous five years of annual data on aircraft deicing fluid usage, starting with the winter of 2013-2014 through 2017-2018. Each year the new annual graph will be added and the oldest year will be dropped off.
 - 6.3.1.5.4 Source reduction technologies deployed within each drainage basin;
 - 6.3.1.5.5 Estimate of applied loads of BOD₅, COD, and glycols and, amounts collected and treated within each drainage basin. Estimate discharged load to each outfall. This assessment must be on a mass basis (lb./day);
 - 6.3.1.5.6 Estimate of BOD₅ and COD removed or avoided by source reduction methods during the deicing season;
 - 6.3.1.5.7 Narrative and graphical description of weather during the deicing season and how it affected source reduction performance.
 - 6.3.1.5.8 An assessment, as data becomes available, addressing source reduction performance over the preceding five deicing seasons and describe the source reduction performance over time; and
 - 6.3.1.5.9 Identification of potential improvements, if any that are consistent with FAA flight safety requirements, in the implementation of aircraft deicing fluid management and source reduction technologies for consideration and implementation during the next deicing season.
- 6.3.2 *Revise Adaptive Management Plan.* Based on the experience of implementing the Plan through a deicing season (July 1 to June 30) revise the Adaptive Management Plan based on results of Permit Part 6.3.1.5. Submit revised Plan to DEC – Compliance and Enforcement Program (one electronic copy submitted to Appendix - A Part 1.1.2) with the summary report.
- 6.3.3 *Documentation.* The Airport Authority and co-permittees shall maintain a copy of the Adaptive Management Plan at each facility.

7.0 INSPECTIONS

7.1 Routine Facility Inspections

- 7.1.1 The Airport Authority and co-permittees shall conduct routine facility inspections of all areas of their facility and locations where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with Permit Part 4.0.
 - 7.1.1.1 Routine facility inspections shall be conducted at least monthly during the deicing season (October to May) as may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to storm water.
 - 7.1.1.2 Perform these inspections during periods when the facility is in operation, specifically deicing operations. The relevant inspection schedule shall be specified in their facility SWPPP.

- 7.1.1.3 The routine inspections shall be performed by qualified personnel with at least one member of the storm water pollution prevention team participating.
- 7.1.2 The Airport Authority and co-permittees shall document their findings of each routine facility inspection performed and maintain this documentation onsite with their facility SWPPP. The routine facility inspection findings are not required to be submitted to DEC, unless specifically requested to do so. At a minimum the documentation of each routine facility inspection shall include:
 - 7.1.2.1 The inspection date and time;
 - 7.1.2.2 The name(s) and signature(s) of the inspector(s) and certified in accordance with Permit Appendix - A Part 1.12;
 - 7.1.2.3 Weather information and a description of any discharges occurring at the time of the inspection;
 - 7.1.2.4 Any previously unidentified discharges of pollutants from the site;
 - 7.1.2.5 Any control measures needing maintenance or repairs;
 - 7.1.2.6 Any failed control measures that need replacement;
 - 7.1.2.7 Any incidents of noncompliance observed; and
 - 7.1.2.8 Any additional control measures needed to comply with the permit requirements.
- 7.1.3 Any corrective action required as a result of a routine facility inspection shall be performed consistent with Permit Part 9.0.

7.2 Quarterly Visual Assessment of Storm Water Discharges

- 7.2.1 Once each calendar quarter the Airport Authority shall collect a storm water sample from each outfall that requires sampling under this permit and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. The visual assessment shall be made:
 - 7.2.1.1 Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area.
 - 7.2.1.2 On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon as possible after the first 30 minutes and shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from the site;
 - 7.2.1.3 For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72 –hour (3-day)) storm interval does not apply if it is documented that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. If it is not possible to collect the sample on discharges that occur at least 72 hours (3 days) from the previous discharge, the sample shall be collected as close to this storm interval;
 - 7.2.1.4 At least one quarterly visual assessment shall capture snowmelt discharge; and

- 7.2.1.5 For the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.
- 7.2.1.6 The Airport Authority shall document the results of the visual assessments and maintain this documentation onsite with their SWPPP. The visual assessment findings are not required to be submitted to DEC, unless specifically requested to do so. At a minimum, the documentation of the visual assessment shall include:
 - 7.2.1.6.1 Sample location(s);
 - 7.2.1.6.2 Sample collection date and time, and visual assessment date and time for each sample;
 - 7.2.1.6.3 Personnel collecting the sample and performing visual assessment, and their signatures;
 - 7.2.1.6.4 Nature of discharge (i.e. runoff or snowmelt);
 - 7.2.1.6.5 Results of observations of the storm water discharge;
 - 7.2.1.6.6 Probable sources of any observed storm water contamination;
 - 7.2.1.6.7 If applicable, why it was not possible to take samples within the first 30 minutes and/or from a 72 hour (3 day) storm interval; and
 - 7.2.1.6.8 Quarterly Visual Assessment Documentation must be signed and certified in accordance with Permit Appendix - A, Subsection 1.12 of the permit.
- 7.2.1.7 Any corrective action required as a result of a quarterly visual assessment shall be performed consistent with Permit Part 9.0 of this permit.

7.2.2 Exceptions to Quarterly Visual Assessments

- 7.2.2.1 Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, the Airport Authority must take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included with the SWPPP records as described in Permit Part 5.11.8. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.
- 7.2.2.2 Climates with Irregular Storm Water Runoff: Since the Airport is located in an area where freezing conditions exist that prevent runoff from occurring for extended periods, then the samples for the quarterly visual assessments may be distributed during seasons when precipitation runoff occurs. (See Permit Part 8.2.4.)

7.3 Comprehensive Site Inspections

- 7.3.1 The Airport Authority and co-permittees shall conduct annual comprehensive site inspections while they are covered under this permit. The annual period to conduct the comprehensive site inspections begins July 1 to June 30. In the event permit coverage is administratively continued after the expiration date of this permit, inspections shall continue annually until the next permit is issued.

- 7.3.2 Comprehensive site inspections shall be conducted by qualified personnel with at least one member of the storm water pollution prevention team participating in the comprehensive site inspections.
- 7.3.3 Conduct the Comprehensive Site Inspection during periods of actual deicing operations, if practicable. If not practical during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.
- 7.3.4 The comprehensive site inspections shall address and cover all areas of the facility affected by the requirements of this permit, including the areas identified in the SWPPP as potential pollutant sources where industrial materials or activities are exposed to storm water, any areas where control measures are used to comply with the control measures Permit Part 4.0, and areas where spills and leaks have occurred in the past 3 years.
- 7.3.5 The inspections shall also include a review of monitoring data collected in accordance with Permit Part 7.1 and 7.2. Inspectors shall consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors shall examine the following:
 - 7.3.5.1 Industrial materials (e.g. deicing fluid), residues, or trash that may have or could have come into contact with storm water;
 - 7.3.5.2 Leaks or spills from industrial equipment, drums, tanks, and other containers;
 - 7.3.5.3 Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
 - 7.3.5.4 Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
 - 7.3.5.5 Control measures needing replacement, maintenance, or repair.
- 7.3.6 Comprehensive Site Inspection Documentation.
 - 7.3.6.1 Storm water control measures required by this permit shall be observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations shall be inspected. The annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.
 - 7.3.6.2 The Airport Authority and co-permittees shall document the findings of each comprehensive site inspection they conduct and maintain this documentation onsite with the SWPPP. In addition, this documentation shall be included in an annual report as required in Permit Part 10.2. At a minimum, the documentation of the comprehensive site inspection shall include the following:
 - 7.3.6.2.1 The date of the inspection;
 - 7.3.6.2.2 The name(s) and title(s) of the personnel making the inspection;
 - 7.3.6.2.3 Findings from the examination of areas of the facility identified in Permit Part 7.3.4;
 - 7.3.6.2.4 All observations relating to the implementation of the control measures including:
 - 7.3.6.2.4.1 Previously unidentified discharges from the site;

- 7.3.6.2.4.2 Previously unidentified pollutants in existing discharges;
 - 7.3.6.2.4.3 Evidence of, or the potential for, pollutants entering the drainage system;
 - 7.3.6.2.4.4 Evidence of pollutants discharging to receiving waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring, and
 - 7.3.6.2.4.5 Additional control measures needed to address any conditions requiring corrective action identified during the inspection.
 - 7.3.6.2.5 Any required revisions to the SWPPP resulting from the inspection;
 - 7.3.6.2.6 Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
 - 7.3.6.2.7 A statement signed and certified in accordance with Permit Appendix - A Part 1.12.
- 7.3.7 Any corrective action required as a result of the comprehensive site inspection shall be performed consistent with Permit Part 9.0.

8.0 MONITORING

8.1 Quality Assurance Project Plan

- 8.1.1 Within 120 calendar days of the effective date of the final permit, the Airport Authority must develop and implement a Quality Assurance Project Plan (QAPP) for all monitoring required by this permit. Any existing QAPP may be modified under this Part.
- 8.1.2 The QAPP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and to help explain data anomalies whenever they occur.
- 8.1.3 The Airport Authority may use either the generic DEC QAPP or develop a facility-specific QAPP. Some facility specific information is required to complete the QAPP when using the generic DEC QAPP. A generic DEC QAPP is located at dec.alaska.gov/water/water-quality/quality-assurance/
- 8.1.4 The Airport Authority must submit a paper and electronic copy (PDF) to DEC – Compliance and Enforcement Program (Permit Appendix - A Part 1.1.2) when the QAPP has been completed and implemented and within 120 calendar days of the effective date of the final permit. The QAPP shall be maintained on site and made available to DEC upon request.
- 8.1.5 Throughout all sample collection and analysis activities, the Airport Authority must use DEC-approved QA/QC and chain-of-custody procedures, as described in the *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5, March 2001) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5, December 2002). The QAPP must be prepared in the format specified in these documents.

8.1.6 At a minimum, a QAPP must include:

- 8.1.6.1 Details on number of samples, type of sample containers, preservation of samples, sample collection techniques, 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;
- 8.1.6.2 Maps indicating the location of each sampling point;
- 8.1.6.3 Qualification and training of personnel; and
- 8.1.6.4 Name, address, and telephone number of all laboratories used by or proposed to be used by the Airport Authority.

8.1.7 The Airport Authority must amend the QAPP whenever sample collection, sample analysis, or other procedure addressed by the QAPP are modified. The amendment must be kept with the QAPP maintained on-site and does not need to be submitted to DEC.

8.2 Monitoring Procedures

8.2.1 Monitored Outfalls

Applicable monitoring requirements apply to each outfall authorized by this permit. The Airport Authority is required to monitor each outfall covered by a numeric effluent limit as identified in Permit Part 3.2 and receiving water monitoring Permit Part 3.6.

8.2.2 Commingled Discharges

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams.

8.2.3 Adverse Weather Conditions

When adverse weather conditions as described in Permit Part 7.2.2 prevent the collection of samples according to the relevant monitoring schedule, the permittee must take a substitute sample during the next monthly sampling date. Adverse weather does not exempt the Airport Authority from having to file a monitoring report in accordance with their sampling schedule. The permittee must report any failure to monitor as specified in Permit Part 10.1 indicating the basis for not sampling during the usual reporting period.

8.2.4 Monitoring Periods

Monitoring requirements in this permit begin in the first full quarter following either October 1, 2019 or the permittees date of discharge authorization, whichever date comes later. If the permittees monitoring is required on a quarterly basis (e.g., monitoring), the permittee must monitor at least once in each of the following three-month intervals:

- **Quarter 1:** July 1 – September 30;
- **Quarter 2:** October 1 – December 31;
- **Quarter 3:** January 1 – March 31;
- **Quarter 4:** April 1 – June 30.

For example, if permit coverage was obtained on September 23, 2019, then the permittees first monitoring quarter is October 1 - December 30, 2019. This monitoring schedule may be modified in accordance with Part 4.0 if the revised schedule is documented with the SWPPP and provided to DEC with the first monitoring report.

8.2.5 Monitoring for Allowable Non-Storm Water Discharges

The Airport Authority is only required to monitor allowable non-storm water discharges (as delineated in Part 1.2.3) when they are commingled with storm water discharges associated with industrial activity.

8.3 Additional Required Monitoring

8.3.1 All required monitoring must be conducted in accordance with the procedures described in Appendix - A, Part 3.0.

8.3.2 Effluent Limitations Monitoring

8.3.2.1 **Monitoring Based on Effluent Limitations Guidelines.** Storm water discharges subject to effluent limitation guidelines 40 CFR 449, Subpart A are authorized for coverage under this permit.

8.3.2.2 **Follow-up Actions if Discharge Exceeds Numeric Effluent Limit.** The Airport Authority must conduct follow-up monitoring within 30 calendar days of implementing corrective action(s) taken pursuant to Permit Part 4.0 in response to exceedance of a numeric effluent limit contained in this permit. Monitoring must be performed for any pollutant(s) that exceeds the effluent limit. If this follow-up monitoring exceeds the applicable effluent limitation, the Airport Authority must:

8.3.2.2.1 *Submit a Noncompliance Notification Form:* The Airport Authority must submit an Noncompliance Notification Form no later than five days after they have received the lab result; and

8.3.2.2.2 *Continue to Monitor:* The Airport Authority must continue to monitor monthly.

8.3.3 Supplemental Monitoring

DEC may notify the Airport Authority or co-permittee of additional discharge monitoring requirements. DEC will evaluate and include in any notification how the determination for additional monitoring is being required. Any such notice will briefly state the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

9.0 CORRECTIVE ACTIONS

9.1 Conditions Requiring Review and Revision to Eliminate Problem

If any of the following conditions occur at their facility or activity, the Airport Authority or co-permittees shall review and revise the selection, design, installation, and implementation of the control measures to ensure that the condition is eliminated and will not be repeated in the future and provide appropriate notification to DEC (See Appendix - A Part 3.0):

- 9.1.1 An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another APDES permit) occurs at the facility;
- 9.1.2 A discharge violates a numeric effluent limit;
- 9.1.3 The Airport Authority or co-permittee becomes aware, or DEC determines, that their control measures are not stringent enough for the discharge to meet applicable water quality standards;
- 9.1.4 An inspection or evaluation of the facility by a DEC official determines that modifications to the control measures are necessary to meet the reasonable effectiveness of the control measures/best management practices or effluent limits in this permit; or
- 9.1.5 The Airport Authority or co-permittee finds in their routine facility inspection, quarterly visual assessment, or comprehensive site inspection that the control measures are not being properly operated and maintained.

9.2 Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, the Airport Authority or co-permittee shall review the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the Permit Part 3.2:

- 9.2.1 Construction or a change in design, operation, or maintenance at the facility significantly changes the nature of the pollutants discharged in storm water from the facility, or significantly increases the quantity of pollutants discharged; or
- 9.2.2 Sampling results exceeds a numeric effluent limit.

9.3 Schedule of Compliance

- 9.3.1 The Airport Authority must complete the tasks and reports listed in Table 7.

Table 7: Tasks Required Under the Schedule of Compliance

Task No.	Due at End of Year ^a	Task Activity
1	2	Design. The Airport Authority is responsible for the project from start to completion. The Airport Authority shall design measures to reduce Residues discharges from outfall 004D to achieve the effluent limits. Deliverable: The Airport Authority must provide design documents for DEC Plan Review. Send to Permitting Program, Appendix - A, Part 1.1.1.
2 ^b	3	Permitting and Funding. The Airport Authority is responsible for all necessary project funding and project permitting. Deliverable: The Airport Authority must obtain necessary permits and project funding
3 ^b	4	Construction. The Airport Authority must construct or adopt measures to reduce Residues discharges from outfall 004D to achieve the effluent limits. Deliverable: The Airport Authority must submit construction completion reports, and/or progress reports if more technically difficult or unknown conditions prevent completion. Send to Compliance and Enforcement Program, Appendix - A, Part 1.1.2
4 ^b	5	Construction completion and operating such that effluent limits are achieved.
Note:		
a. End of year is one year after the effective date of the permit		
b. Tasks scheduled past Year 3 are listed in anticipation of potential unknown conditions.		

- 9.3.2 Task 2 shown above is an estimate of time to obtain permits and funding and depends upon events that cannot be controlled by the Airport Authority or the Department. Pursuant to the Airport Authority's reasonable request, the Department may provide written authorization for a modified scope and/or schedule without reopening the permit.
- 9.3.3 The Airport Authority must submit an Annual Report of Progress that outlines progress made towards reaching the compliance date for construction. The first report is due one year after effective date of permit and annually thereafter, until compliance with the Residues effluent limits is achieved. See also Appendix - A Part 2.4, "Compliance Schedules". At a minimum, the annual report must include:
- 9.3.3.1 An assessment of the previous year of Residues data and comparison to the effluent limits;
 - 9.3.3.2 A report on progress made towards meeting the effluent limits, including the applicable deliverable required under paragraph 9.3.1 (Table 7); and
 - 9.3.3.3 Further actions and milestones targeted for the upcoming year.

9.4 Corrective Action Deadlines

The Airport Authority or co-permittee shall document the discovery of any of the conditions listed in Permit Parts 9.1 and 9.2 within 24 hours of making such discovery at their facility or area of industrial activity. Subsequently, within 5 days of such a discovery, the Airport Authority or co-permittee shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 5 days is detailed in Permit Part 9.5 and Appendix - A Part 3.4. If the permittee determines that changes are necessary following their review, any modifications to the control measures shall be made before the next storm event if possible, or as soon as possible following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting the findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

9.5 Corrective Action Report

- 9.5.1 Within 24 hours of discovery of any condition listed in Permit Part 9.1 and 9.2, the Airport Authority or co-permittee shall file the appropriate report (Appendix - A, Part 3.0). Petroleum and other spills covered by Part 4.2.4 shall follow the reporting schedule of that Part. The report shall document the following information (i.e., questions 3-5 of the Corrective Actions section in the Annual Reporting Form, provided in Appendix - E):
- 9.5.1.1 Identification of the condition prompting the need for corrective action review;
 - 9.5.1.2 Description of the problem identified; and
 - 9.5.1.3 Date the problem was identified.
- 9.5.2 Within 5 days of discovery of any condition listed in Permit Part 9.1 and 9.2, the Airport Authority or co-permittee shall document the following information (i.e., Section III of the Corrective Actions section in the Annual Reporting Form, provided in Appendix - E and Appendix - A Part 3.4):

- 9.5.2.1 Summary of corrective action taken or to be taken (or, for events identified in Permit Part 9.2 where the Airport Authority or co-permittee determines that corrective action is not necessary, the basis for this determination);
 - 9.5.2.2 Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
 - 9.5.2.3 Date corrective action initiated; and
 - 9.5.2.4 Date corrective action completed or expected to be completed.
- 9.5.3 A permittee must submit this documentation in an annual report as required in Permit Part 10.2 and retain a copy onsite with the SWPPP.

9.6 Effect of Corrective Action

If the event prompting the review is a permit violation (non-compliance with an effluent limit), it must be documented using DEC's Noncompliance Notification form (see dec.alaska.gov/water/Compliance/documents/non_compliance_form.pdf). Furthermore, correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation.

10.0 REPORTING AND RECORDKEEPING

10.1 Reporting Monitoring Data to DEC

All monitoring data collected pursuant to Permit Part 3.0 must be submitted to DEC no later than the 15th day of the following month (email date or postmark date) after the Airport Authority has received the complete laboratory results for all monitored outfalls and receiving water (Part 3.6) for the reporting period. Additional e-reporting requirements are identified in Part 10.7.

10.2 Annual Report

The Airport Authority and co-permittees must each submit an annual report to DEC that includes the findings from their Permit Part 7.3 comprehensive site inspection and any corrective action documentation as required in Permit Part 9.0. If corrective action is not yet completed at the time of submission of this annual report, the Airport Authority or co-permittee must describe the status of any outstanding corrective action(s). In addition to the information required in Permit Parts 9.5. (Corrective Action Report) and 7.3.6 (Comprehensive Site Inspection Documentation.). The annual report shall cover the period July 1 through June 30. The annual report shall include one deicing season that consists of an eight-month period from October 1 through May 31. The first and last annual report will cover partial periods. The annual report shall consist of a DEC provided form filled out and a written narrative report submitted no later than two months after the completed deicing season (by September 1). The Airport Authority and co-permittee must include the following information, as applicable, with their individual annual report:

- 10.2.1 Facility name.
- 10.2.2 APDES permit tracking number.
- 10.2.3 Facility physical address.

- 10.2.4 Contact person name, title, and phone number.
- 10.2.5 Site map revisions where necessary to identify any new outfalls, sampling points, structural controls, or other noteworthy changes in the SWPPP.
- 10.2.6 Assessment of the effectiveness of the control measures, and whether any amendments are proposed to the SWPPP to address operational issues.
- 10.2.7 Describe what follow-up was taken in response to any issues identified in the annual inspection and quarterly visual inspections.
- 10.2.8 For the Airport Authority only: A summary of the monitoring data collected from Outfalls 001A, 002B, 003C, 004D, and 005E; and Lakes Hood and Spenard. The Summary must include a presentation of the analytical results and an evaluation of the results. The evaluation must include an electric spreadsheet (Excel) containing all historical data for water quality, a graphical presentation of the data at each outfall and monitoring station, and a comparison of monitoring results for each outfall and station over time. The summary may reference the monthly reports for QA/QC information. The quarterly visual inspection notes do not have to be submitted (retain them in the SWPPP), but in instances where unusual or unexpected observations were noted, summarize what was observed and the suspected cause.
- 10.2.9 Observations on receiving water quality improvements or degradation resulting from airport activities.
- 10.2.10 A statement, signed and certified in accordance with Permit Appendix - A, Part 1.12.
- 10.2.11 DEC requires the Airport Authority and co-permittees to submit this report using the Annual Report provided as Appendix - E and a narrative to answer Permit Part 10.2.1 to 10.2.9.
- 10.2.12 According to the schedule in Table 8: Submission Deadlines for Annual Reports the Airport Authority and co-permittees must submit their Annual Reports to DEC Compliance and Enforcement Program address identified in Permit Appendix - A, Part 1.1.2.

Table 8: Submission Deadlines for Annual Reports

Reporting Period	Submission Deadline
1 st year Annual Report (permit authorization issuance date – June 30, 2020)	September 1, 2020
2 nd year Annual Report (July 1, 2020 – June 30, 2021)	September 1, 2021
3 rd year Annual Report (July 1, 2021 – June 30, 2022)	September 1, 2022
4 th year Annual Report (July 1, 2022 – June 30, 2023)	September 1, 2023
5 th year Annual Report (July 1, 2023 – permit expiration date ¹)	September 1, 2024
Note: 1. Unless the permit is extended to or past June 30, 2024; in that case use June 30, 2024. Subsequent reporting periods will follow similar format for the reporting year with submission deadline of September 1 st of the ending year.	

10.3 Noncompliance Notification for Numeric Effluent Limits

If follow-up monitoring pursuant to Permit Part 8.3.2.2 exceeds a numeric effluent limit, the permittee must submit a Noncompliance Notification Form (see dec.alaska.gov/water/Compliance/permittee.html) to DEC according to Appendix - A Part 3.0. The Airport Authority's report must include the following:

- 10.3.1 APDES permit tracking number;
- 10.3.2 Facility name, physical address and location;
- 10.3.3 Name of receiving water;
- 10.3.4 Monitoring data from this and the preceding monitoring event(s);
- 10.3.5 An explanation of the situation; what the Airport Authority has done and intend to do (should their corrective actions not yet be complete) to correct the violation; and
- 10.3.6 An appropriate contact name and phone number.
- 10.3.7 A list of co-permittees that have industrial activity in the basin discharging to the outfall with the numeric effluent limit exceedance.

10.4 Recordkeeping

The Airport Authority and co-permittees must retain copies of their SWPPP (including any modifications made during the term of this permit), including documentation related to corrective actions taken pursuant to Part 9.4, all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least 3 years from the date that the permittee's coverage under this permit expires or is terminated.

10.5 Request for Submittal of Records

The Department may request copies of all or a portion of the information collected and maintained in the SWPPP. A permittee must provide a response to written request for records to the Department within thirty (30) calendar days of receipt of a written request.

10.6 Addresses for Reports

- 10.6.1 Notice of Intent (NOI), SWPPP's, and Notice of Termination (NOT) must be submitted to the DEC Permitting Program address in Appendix - A, Part 1.1.1.
- 10.6.2 Reports required in Permit Part 6.0, Part 9.0, Part 10.2, must be submitted to the DEC Compliance and Enforcement Program address in Appendix - A, Part 1.1.2.

10.7 Electronic Reporting (E-Reporting) Rule

- 10.7.1 E-Reporting Rule for DMRs (Phase I).

The Airport Authority must submit DMR data electronically through Network Discharge Monitoring Report (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 (cdxnodengn.epa.gov/oeca-netdmr-web/action/login). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Appendix - A – Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g., mixing zone receiving water data, etc.), shall be included as an attachment to the NetDMR submittal. DEC has established a website at 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 netdmr.zendesk.com/home/.

10.7.2 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 2020. Permittees should monitor DEC's E-Reporting Information website (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.

10.8 Identification Sign(s)

The Airport Authority shall post a sign or signs on the shoreline adjacent to the discharge point that indicate the name and contact number for the facility, the permit number, the type of discharge (storm water with deicing fluid), and the approximate location and size of the mixing zone. The sign(s) should inform the public that certain activities, such as harvesting of aquatic life for raw consumption, should not take place in the mixing zone.

10.9 Removed Substances

Collected screenings, grit, solids, scum, and other facility residuals, or other pollutants removed in the course of treatment or control of water and wastewaters shall be disposed of in a Department approved manner and method in accordance with 18 AAC 60, such as to prevent any pollution from such materials from entering navigable waters.

10.10 Standard Conditions Applicable to Recording and Reporting

10.10.1 The permittee must comply with the following recording and reporting requirements, as described in Appendix A, Standard Conditions unless specified in the body of the permit:

10.10.1.1 Retention of Records, Part 1.11.2;

10.10.1.2 Records Contents, Part 1.11.3;

10.10.1.3 Special Reporting Obligations, Part 2.0; and

10.10.1.4 Monitoring, Recording, and Reporting Requirements, Part 3.0.

11.0 TERMINATING COVERAGE

11.1 Submitting a Notice of Termination (NOT)

To terminate permit coverage, a co-permittee must submit a complete and accurate NOT to the address listed in Part 10.6. A co-permittee's authorization to discharge under this permit terminates at midnight of the day the co-permittee is notified by DEC that a complete NOT has been processed. *(If a permittee submits a NOT without meeting one or more of the conditions identified in Part 11.2, then a permittee's NOT is not valid.)* The co-permittee is responsible for meeting the terms of this permit until their authorization is terminated.

11.2 When to Submit a NOT

A co-permittee must submit a NOT within 30 calendar days after one or more of the following conditions have been met:

- 11.2.1 A new owner or operator has taken over responsibility for the facility or activity;
- 11.2.2 The co-permittee has ceased operations at the facility, there are not or no longer will be discharges of storm water associated with industrial activity from the facility, and has already implemented necessary sediment and erosion controls as required by Permit Part 4.2.5; or
- 11.2.3 The co-permittee has obtained coverage under an individual or alternative general permit for all discharges required to be covered by an APDES permit.

APPENDIX A
STANDARD CONDITIONS
APDES PERMIT
NONDOMESTIC DISCHARGES

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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 (<http://www.dnr.state.ak.us/parks/oha/>), 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 or annual report 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 the Alaska Administrative Code database www.akleg.gov/basis/aac.asp#18

40 CFR [Code of Federal Regulations Title 40: Protection of Environment](http://www.akleg.gov/basis/aac.asp#18)

AAC Alaska Administrative Code

ACRP Airport Cooperative Research Program

ADF Aircraft Deicing Fluid

AFBR Anaerobic Fluidized Bed Reactor

Ag Silver

Al Aluminum

AMP Adaptive Management Plan

ANC Ted Stevens Anchorage International Airport

ANC-GP Ted Stevens Anchorage International Airport General Permit

As Arsenic

APDES Alaska Pollutant Discharge Elimination System

AS Alaska Statutes

AS 46.03 Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at
www.legis.state.ak.us/default.htm

BOD₅ Biochemical Oxygen Demand, 5-day

BMP Best Management Practice

Cd Cadmium

CFR Code of Federal Regulations

COD Chemical Oxygen Demand

Cr⁺³ Chromium (III) or Trivalent Chromium

Cr⁺⁶ Chromium (VI) or Hexavalent Chromium

Cu Copper

CWA Clean Water Act

DEC Alaska Department of Environmental Conservation

DMR Discharge Monitoring Report

DO Dissolved Oxygen

EPA U.S. Environmental Protection Agency

FAA Federal Aviation Administration

FC Fecal Coliform Bacteria

Fe Iron

GPD or gpd	Gallons per day
GPY or gpy	Gallons per year
Hg	Mercury
IC ₂₅	Inhibition Concentration 25%
I/I	Infiltration and Inflow
IDRM	Integrated Deicing Runoff Management
LC ₅₀	Lethal Concentration 50%
MDL	Method Detection Limit
mg/L	Milligrams per Liter
MGD or mgd	Million gallons per day
ML	Minimum Level
MLLW	Mean Lower Low Water
MSGP	Multi-Sector General Permit
MZ	Mixing Zone
N/A	Not Applicable
NetDMR	Network Discharge Monitoring Report
Ni	Nickel
NOEC	No Observed Effect Concentration
NOI	Notice of Intent
NOT	Notice of Termination
PDF	Portable Document Format
Pb	Lead
POTW	Publicly Owned Treatment Works
PQL	Practical Quantification Limit
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QC	Quality Control
RL	Reporting Limit
RWC	Receiving Water Concentration
Se	Selenium
SIC	Standard Industrial Classification
SIU	Significant Industrial User
SU	Standard Units
SWPPP	Storm Water Pollution Prevention Plan
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TRC	Total Residual Chlorine
TRE	Toxicity Reduction Evaluation
TSS	Total Suspended Solids
TUc	Toxic Unit, Chronic
µg/L	Micrograms per Liter
U.S.C.	United States Code

WLA	Waste Load Allocation
WET	Whole Effluent Toxicity
WQS	Water Quality Standards
WWTF	Wastewater Treatment Facility
Zn	Zinc

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.

Acton-Level	Means the value of 271 mg/l Chemical Oxygen Demand that may be exceeded by the average of the monthly values collected during the deicing season. If the trigger value is exceeded then certain activities under the Integrated Deicing-Runoff Management Plan must be carried out.
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.
Annual	Means once per calendar year.
Aquaculture ^b	Means the cultivation of aquatic plants or animals for human use or consumption.
Arid Climate	Means areas where annual rainfall averages from 0 to 10 inches.
Average	Means an arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities.
Average Monthly Discharge Limitation ^a	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.
Backwash	Means wash water resulting from the backwashing of a water filter.
Best Management Practices (BMPs) ^a	Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas. See 40 CFR§122.2.
Biochemical Oxygen Demand (BOD) ^c	Means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20° C.
Black Water	Means water that contains animal, human, or food waste.
Boundary ^b	Means line or landmark that serves to clarify, outline, or mark a limit, border, or interface.
Bypass ^a	Means the intentional diversion of waste streams from any portion of a treatment facility.
Chemical Oxygen Demand (COD) ^f	Is used as a measure of the oxygen equivalent of the organic matter content of a sample that is susceptible to oxidation by a strong chemical oxidant.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

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.
Co-Located Industrial Activity	Means Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the storm water regulations at 40 CFR§ 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations.
Color ^b	Means the condition that results in the visual sensations of hue and intensity as measured after turbidity is removed.
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 <i>Standard Methods for the Examination of Water and Wastewater</i> .
Contact Recreation ^b	Means activities in which there is direct and intimate contact with water. Contact recreation includes swimming, diving, and water skiing. Contact recreation does not include wading.
Control Measure	Means any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.
Cooling Water	Means once-through non-contact cooling water.
Co-permittee	Means a permittee to an APDES permit that is only responsible for permit conditions relating to the discharge for which it is operator
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.
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.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

Datum	A datum defines the position of the spheroid, a mathematical representation of the earth, relative to the center of the earth. It provides a frame of reference for measuring locations on the surface of the earth by defining the origin and orientation of latitude and longitude lines.
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." See 40 CFR 122.2.
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.
Discharge-Related Activities	Means activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.
Dissolved Oxygen (DO) ^b	Means the concentration of oxygen in water as determined either by the Winkler (iodometric) method and its modifications or by the membrane electrode method. The oxygen dissolved in water or wastewater and usually expressed in milligrams per liter or percent saturation.
Domestic Wastewater ^c	Means waterborne human wastes or graywater derived from dwellings, commercial buildings, institutions, or similar structures. "Domestic wastewater" includes the contents of individual removable containers used to collect and temporarily store human wastes.
Ecosystem ^b	Means a system made up of a community of animals, plants, and bacteria and the system's interrelated physical and chemical environment.
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.
Excluded area	Means an area not authorized as a receiving water under a permit.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

Existing Discharger	Means an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.
Facility or Activity	Means any APDES “point source” (including land or appurtenances thereto) that is subject to regulation under the APDES program. See 40 CFR§ 122.2.
Fecal Coliform Bacteria (FC) ^b	Bacteria that can ferment lactose at 44.5° + 0.2°C to produce gas in a multiple tube procedure. Fecal coliform bacteria also means all bacteria that produce blue colonies in a membrane filtration procedure within 24 ± 2 hours of incubation at 44.5° + 0.2°C in an M-FC broth.
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.
Flow Estimate	Estimate means a reasonable approximation of the average daily flow based on a water balance, an uncalibrated weir, calculations from the velocity and cross-section of the discharge, intake water meter readings, discharge water meter readings, or any other method approved by the Department.
Geometric Mean	The geometric mean is the N th root of the product of N. All sample results of zero will use a value of 1 for calculation of the geometric mean. Example geometric mean calculation: $\sqrt[4]{12 \times 23 \times 34 \times 990} = 55$.
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.
Gray Water ^b	Means wastewater from a laundry, kitchen, sink, shower, bath, or other domestic source that does not contain excrement, urine, or combined storm water.
Impaired Water	Means “Water Quality Impaired Water” or “Water Quality Limited Segment” of a water is impaired for purposes of this permit if it has been identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called “water quality limited segments” under 40 CFR§ 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.
Industrial Activity	Means – the 10 categories of industrial activities included in the definition of “storm water discharges associated with industrial activity” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).
Industrial Storm Water	Means storm water runoff from industrial activity.
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works.
Inhibition Concentration 25% (IC ₂₅) ^c	Means the point estimate of the toxicant concentration that would cause 25% reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

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Lethal Concentration 50% (LC ₅₀) ^e	Mean the point estimate of the toxicant that would be lethal to 50% of the test organisms during a specific period.
Maximum Daily Discharge Limitation ^a	Means the highest allowable “daily discharge.”
Mean ^b	Means the average of values obtained over a specified period and, for fecal coliform analysis, is computed as a geometric mean.
Mean Lower Low Water ^b (MLLW)	Means the tidal datum plane of the average of the lower of the two low waters of each day, as would be established by the National Geodetic Survey, at any place subject to tidal influence.
Measurable Storm Event	Means a storm event that results in an actual discharge from the facility that follows the preceding measurable storm event by at least 72 hours (3 days). No specific storm magnitude (i.e., 0.1 inches or greater) is specified, only an event which results in a discharge. For snowmelt, an event which some point in time produces a measurable discharge from the facility.
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) ^d	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.
Minimize	Means to reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically achievable and achievable in light of best industry practice.
Minimum Level (ML) ^e	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 (MZ) ^b	Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

Month	Means the time period from the 1 st 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.
New Discharger	Means a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.
No Exposure	Means all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR§ 122.26(g).
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.
Operator	Means any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria: <ul style="list-style-type: none"> a. The entity has operational control over industrial activities, including the ability to modify those activities; or b. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).
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.
Person	Means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.
pH ^g	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.
Point Source	Means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. See 40 CFR§ 122.2.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

Pollutant	Means a dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR § 122.2.
Pollutant of Concern	Means a pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.
Practicable	For the purposes of this permit, means capable of being done after taking into consideration costs, existing technology, standards of construction practice, impacts to water quality, site conditions, and logistics in light of the overall project purpose.
Practical Quantification Limit (PQL) ^g	Means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
Primary Contact Recreation	See Contact Recreation.
Primary Industrial Activity	Means any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.
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.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual

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.
Qualified Personnel	Means those personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the facility, and who can also evaluate the effectiveness of control measures.
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 Water Body	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.
Reportable Quantity Release	Means a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.
Residual Chlorine	Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.
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.
Secondary Recreation ^b	Means activities in which incidental water use can occur. Secondary recreation includes boating, camping, hunting, hiking, wading, and recreational fishing. Secondary contact recreation does not include fish consumption.
Semi-Arid Climate	Means areas where annual rainfall averages from 10 to 20 inches.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

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Settleable Solids ^b	Means solid material of organic or mineral origin that is transported by and deposited from water, as measured by the volumetric Imhoff cone method and at the method detection limits specified in method 2540(F), <i>Standard Methods for the Examination of Water and Wastewater</i> , 18th edition (1992), adopted by reference in 18 AAC 70.020(c)(1).
Severe Property Damage ^a	Means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
Sheen ^b	Means an iridescent appearance on the water surface.
Shellfish ^b	Means a species of crustacean, mollusk, or other aquatic invertebrate with a shell or shell-like exoskeleton in any stage of its life cycle.
Significant Industrial User (SIU) ^g	Means an indirect discharger that is the focus of control efforts under the national pretreatment program; includes all indirect dischargers subject to national categorical pretreatment standards, and all other indirect dischargers that contribute 25,000 gpd or more of process wastewater, or which make up five percent or more of the hydraulic or organic loading to the municipal treatment plant, subject to certain exceptions [40 CFR §403.3(t)].
Significant Materials	Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges. See 40 CFR 122.26(b)(12).
Storm Water	Means storm water runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR § 122.26(b)(13).
Storm Water Discharges Associated with Construction Activity	Means a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).
Storm Water Discharges Associated with Industrial Activity	Means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

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under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

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 <i>Standard Methods for the Examination of Water and Wastewater</i> and referred to as nonfilterable.
Total Aqueous Hydrocarbons (TAqH) ^b	Means those collective dissolved and water-accommodated monoaromatic and polynuclear aromatic petroleum hydrocarbons that are persistent in the water column; "total aqueous hydrocarbons" does not include floating surface oil or grease.
Total Aromatic Hydrocarbons (TAH) ^b	Means the sum of the following volatile monoaromatic hydrocarbon compounds: benzene, ethylbenzene, toluene, and the xylene isomers, commonly called BETX.
Total Suspended Solids (TSS) ^g	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

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

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noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Wastewater Treatment Means any process to which wastewater is subjected in order to remove or alter its objectionable constituents and make it suitable for subsequent use or acceptable for discharge to the environment.

waters of the United States or waters of the U.S. Has the meaning given in 18 AAC 83.990(77).

Water Quality Standards or WQS For the purposes of this permit, means the Alaska Water Quality Standards (18 AAC 70) as approved by U.S. EPA. As defined in 40 CFR § 131.3 water quality standards are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act.

Water Recreation^b See contact recreation or secondary recreation.

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.

Zone of Deposit Means the total area of the bottom in marine or estuarine waters in which ADEC has authorized the deposit of substances in exceedance of the water quality criteria in 18 AAC 70.020(b) and the antidegradation requirement in 18 AAC 70.010(c).

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

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APPENDIX - D List of Permittees based on MSGP NOI

MSGP Permit	Organization	Address	City	State	Zip
AKR06AC69	Ted Stevens AIA	PO Box 196960	Anchorage	AK	99519
AKR06AC16	Alaska Airlines	PO Box 68900 SEAZE	Seattle	WA	98168
AKR06AB87	Delta Airlines	5000 W International Airport Rd	Anchorage	AK	99502
AKR06AD45	Empire Airlines	11559 North Atlas Road	Hayden	ID	83835
AKR06AA30	Guardian Flight	10888 S 300 W	South Jordan	UT	84095
AKR06AD57	Pen Air	6100 Boeing Avenue	Anchorage	AK	99502
AKR06AC46	Ravn Alaska	4700 Old International Airport Rd	Anchorage	AK	99502
AKR06AD37	Ross Aviation	6160 Carl Brady Drive	Anchorage	AK	99502
AKR06AD78	Signature Flight	6231 South Airpark Place	Anchorage	AK	99502
AKR06AB07	Everts Air Cargo	6111 Lockheed Ave	Anchorage	AK	99502
AKR06AB40	FedEx Express	3620 Hacks Cross Rd	Memphis	TN	38125
AKR06AD50	Lynden Air Cargo	6441 South Airpark Place	Anchorage	AK	99502
AKR06AB62	Northern Air Cargo	3900 Old International Airport Rd	Anchorage	AK	99502
AKR06AC47	UPS	4455 7th Ave South	Seattle	WA	98108
AKR06NE-A0112	Cathay Pacific Airways	PO Box 190104	Anchorage	AK	99519
AKR06NE-A0098	China Airlines Ltd	4600 Postmark Drive NB202	Anchorage	AK	99502
AKR06NE-A0105	Japan Airlines	300 Continental Blvd., Suite 400	El Segundo	CA	90245
AKR06NE-A0108	Nippon Cargo Airlines	4600 Postmark Dr. ND112	Anchorage	AK	99502
AKR06AC96	Aircraft Service International Group	PO Box 190246	Anchorage	AK	99519
AKR06AB44	Consolidated Deicing Services	6201 Boeing Ave	Anchorage	AK	99502
AKR06AD56	F & E Ground Services	6300 Boeing Ave., Suite 900	Anchorage	AK	99502
AKR06AD86	Great Circle Flight Service	6121 S Airpark Place #2	Anchorage	AK	99502
AKR06AD87	North Park Fuels	2550 Postmark Drive	Anchorage	AK	99502
AKR06AB14	Pegasus Aviation Services, LLC	3901 Old International Airport Rd	Anchorage	AK	99502
AKR06AD41	Swissport	5011 Aircraft Drive	Anchorage	AK	99502
AKR06NE-A0113	Jet Blue Airways	27-01 Queens Plaza North	Long Island City	NY	11101

APPENDIX - E Forms

The following forms can be accessed at

(<http://dec.alaska.gov/water/wastewater/stormwater/forms/#ANC-GP>):

- Notice of Intent (NOI)
- Notice of Termination
- No Exposure Certification
- Corrective Action Form
- Annual Report Form