



**AUTHORIZATION TO DISCHARGE UNDER THE
ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
FOR MECHANICAL PLACER MINERS**

GENERAL PERMIT NUMBER AKG370000

Authorization Number: [#]

**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.

Owners and operators of facilities engaged in the processing of placer gold, as defined in Part 1.0 of this Alaska Pollutant Discharge Elimination System (APDES) permit, are authorized to discharge to waters of the United States, only in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

A COPY OF THIS GENERAL PERMIT MUST BE KEPT AT THE SITE WHERE DISCHARGES OCCUR.

[PERMITTEE NAME]

[RECEIVING WATER]

This permit is effective **August 1, 2015**.

This permit and the authorization to discharge shall expire at midnight on **July 31, 2020**.

The permittee shall reapply for a permit reissuance on or before **May 2, 2020**, 90 days before the expiration of this permit, if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signature

Wade Strickland

Printed Name

Date

Program Manager

Title

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SCHEDULE OF SUBMISSIONS

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

Permit Part	Submittal or Completion	Frequency	Due Date	Submit To
1.5.2	Notice of Intent (NOI) for a new, recommencing, or expanding operation	As necessary	60 days prior to discharge	DEC Permitting Program ^a
1.5.5	NOI for a currently authorized operation for coverage under a reissued general permit	1/permit cycle	90 days before expiration of this general permit	
3.4	Total Maximum Daily Load Requirements	As specified within the permit authorization	As specified within the permit authorization	DEC as specified within the permit authorization
4.1	Daily Inspection Records	Daily	Retained on site	DEC upon request
4.2	Annual Report	1/year	January 31 of the next year	DEC Compliance Program ^b
4.3	Spill Report	As necessary	Upon discovery	DEC spill response team ^c
Appendix A, 3.4	Oral notification of noncompliance	As necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	DEC non-compliance reporting hotline ^d
	Written documentation of noncompliance	As necessary	Within five days after the permittee becomes aware of the circumstances	DEC Compliance Program ^b

Notes:

- a. Permitting address: Department of Environmental Conservation, Division of Water, Wastewater Discharge Authorization Program, 610 University Avenue, Fairbanks, Alaska 99709 (an Annual Placer Mining Application submitted to the Alaska Department of Natural Resources will be accepted as an NOI if all the required information is provided).
- b. Compliance address: Department of Environmental Conservation, Division of Water, Compliance Program, 555 Cordova Street, Anchorage, Alaska 99501.
- c. Spill reporting hotline: 1-907-451-2121 (within normal business hours) or 1-800-478-9300 (outside normal business hours).
- d. Non-compliance reporting hotline for oral notifications: 1-907-269-4114 (from Alaska) or 1-877-569-4114 (toll free nationwide).

1.0 PERMIT COVERAGE

1.1 Coverage and Eligibility

- 1.1.1 **This permit provides statewide coverage** for discharges to fresh waters of the U.S. within Alaska. The coverage area is subject to restrictions under Part 1.3.
- 1.1.2 **Facilities with coverage under the 2012 Mechanical Placer Miners General Permit** are eligible for coverage under this general permit. See Part 1.5 for Notice of Intent (NOI) requirements.
- 1.1.3 **New or recommencing facilities** that meet the criteria for coverage under this permit will be granted coverage upon completion of NOI requirements outlined in Part 1.5.
- 1.1.4 **Facilities that plan to expand or move their outfalls** must notify the Department of any substantial changes. At the Department's request, an amended NOI detailing the changes may be required.

1.2 Authorized Placer Mining Operations

- 1.2.1 This permit authorizes discharges of process wastewater, dewatering water, and drainage waters from open-cut mines and mechanical dredges that process gold placer ores and rely on beneficiation processes based on gravity separation.
- 1.2.2 Authorization to discharge requires written notification from the Department that coverage has been granted.

1.3 Limitations on Coverage

- 1.3.1 The following discharges are not authorized under this permit:
 - 1.3.1.1 Discharges from beneficiation processes using mercury amalgamation, cyanidation, froth floatation, heap leaching, or vat leaching;
 - 1.3.1.2 Discharges that contain water used for hydraulicking;
 - 1.3.1.3 Discharges from mechanical dredges located in open waters, such as major rivers; or
 - 1.3.1.4 Discharges into marine waters, Tier 3 waters, or waters designated as wild under the Wild and Scenic Rivers Act.
- 1.3.2 Discharges from facilities located in National Park System Units (i.e., Parks and Preserves), National Monuments, National Sanctuaries, National Wildlife Refuges, National Conservation Areas, National Wilderness Areas, National Critical Habitat Areas are not authorized unless the Department receives written approval or a statement of non-objection from the lead federal agency with jurisdiction over the area.
- 1.3.3 Discharges containing flocculants, coagulants, or dye from dye tests require written approval from the Department and may require submittal of additional information prior to authorization.

1.4 Operations Requiring an Individual Permit

As detailed in 18 AAC 83.215, the Department may terminate or revoke a permittee's coverage under this permit and require the permittee to obtain an APDES individual permit. If an individual permit is required, the Department will provide written notification and include a deadline for submission of an individual permit application. If the permittee fails to submit an application by the date in the notification, then coverage under this general permit is automatically terminated at the submittal deadline.

1.5 Notification Requirements

- 1.5.1 Permittees eligible for coverage under the administratively extended 2012 permit are automatically covered under this permit. Automatic authorizations include any turbidity modifications authorized under the 2012 permit (Appendix D).
- 1.5.2 Applicants that are not covered under Part 1.5.1 must submit NOIs 60 days prior to discharge, unless the Department allows for a shorter notice. Information required for a complete NOI is in Appendix F.
- 1.5.3 The NOI shall be signed by the owner, operator, or other signatory authority as described in Appendix A, Part 1.12.
- 1.5.4 An Application for Permits to Mine in Alaska (APMA) submitted to the Alaska Department of Natural Resources (DNR) will be accepted as an NOI if all the required information is provided. An applicant who does not use the APMA process must submit a complete NOI to DEC at the address in Appendix A, Part 1.1.1.
- 1.5.5 Permittees wishing to continue coverage after the expiration date of this permit must submit new NOIs at least 90 days prior to the permit expiration, as described in Appendix A, Part 1.3, in order for the conditions of the expired permit to continue in force until the effective date of a new permit.

2.0 LIMITATIONS AND MONITORING REQUIREMENTS

2.1 Standard Discharges

2.1.1 The permittee shall not discharge wastewater to receiving waters except in compliance with the following effluent limitations:

2.1.1.1 Effluent discharges are prohibited when new water is entering the plant site and shall not occur as a result of the new water.

2.1.1.2 The volume of process wastewater which may be discharged shall not exceed the volume of infiltration, drainage and mine drainage waters which are in excess of the make-up water required for operation of the beneficiation process.

2.1.1.3 Facilities must meet the limits and monitoring requirements in Table 2.

Effluent Characteristic	Instantaneous Maximum	Units	Monitoring		Sample Type
			Location	Frequency	
Settleable Solids	0.2	ml/L	Effluent	Daily	Grab
Turbidity	5 NTUs above natural conditions	NTU	Effluent	Three times per week	Grab
			Upstream ^b	Three times per week	Grab
Arsenic	10	µg/L	Effluent ^c	Once per season	Grab
Flow ^d	-	gpm	Effluent	Daily	Instantaneous

Notes:

- See Parts 2.1.2 - 2.1.3 and 2.2 - 2.4 for additional provisions.
- Permittees with modified turbidity limits (Part 2.2) are not required to take upstream turbidity samples, unless required within the permit authorization.
- An upstream arsenic sample is encouraged and may be collected and submitted on a voluntary basis.
- A good faith effort must be made to estimate the flow rate of any seepage discharging to the receiving water and include that rate as a portion of the total effluent flow.

2.1.2 Monitoring shall be conducted in accordance with the following provisions:

2.1.2.1 All samples must be taken concurrently, or within a reasonable time frame of each other, and during sluicing when the operation has reached equilibrium. For example, samples should be taken when sluice paydirt loading and effluent discharge are constant.

2.1.2.2 Effluent characteristics with a monitoring frequency of "three times per week" must be sampled on either the first or second discharge day of the week with subsequent samples taken every other day thereafter until three samples are collected.

- 2.1.2.3 Settleable solids monitoring may be reduced to three times per week if ten consecutive samples, collected per requirements in Table 2, meet permit limits. The three times per week schedule becomes effective retroactively starting with the week the tenth sample was collected in. The original schedule must be resumed if a settleable solids sample exceeds the permit limit or the treatment system changes substantially.
 - 2.1.2.4 Collection and analyses of samples for monitoring purposes must be conducted as required in Appendix A, Parts 1.11.4 (Monitoring Procedures) and 3.1 (Representative Sampling); and Appendix E (Sampling Protocol).
 - 2.1.2.5 If a sample is not collected due to safety concerns or a situation beyond the permittee's control, the circumstances must be documented and another sample must be collected as soon as conditions allow.
- 2.1.3 Settleable solids limits and monitoring are not required for open-cut mines or beneficiation processes that process less than 1,500 cubic yards (cu yd) of ore per year; or mechanical dredges that process less than 50,000 cu yd of ore per year. Annual processing volume is based on the most current NOI. If the processing volume at any time exceeds that in the NOI, the settleable solids requirements under Table 2 become effective and continue until either an Annual Report indicates the volume was not exceeded or the Department grants written approval based on a new or amended NOI and mine plan. Permittees with turbidity modifications (Part 2.2) are subject to settleable solids requirements under Table 2 and Part 2.1.2.3, regardless of processing volume.

2.2 Designated Mixing Zones

- 2.2.1 Upon application, DEC may authorize a mixing zone and modified turbidity limit, provided that the applicant, upon request, provides all available evidence reasonably necessary to assist in the mixing zone authorization and the mixing zone is consistent with 18 AAC 70.240 - 18 AAC 70.270 (as amended through June 26, 2003).
- 2.2.2 Pending a decision on the modified turbidity limit, the limits in Table 2 apply.
- 2.2.3 Upon authorization of a mixing zone, the discharge shall not exceed the modified turbidity limit provided in the authorization.
- 2.2.4 The discharge shall not exceed the flow limit provided in the mixing zone authorization unless the exceedance, together with any associated monitoring data, is reported per Appendix A, Part 3.0 and any of the following requirements apply:
 - 2.2.4.1 The discharge flow rate and turbidity do not increase the effluent turbidity load as determined by the equation $(\text{measured turbidity}) \times (\text{measured flow}) \leq (\text{modified turbidity limit}) \times (\text{flow limit})$;
 - 2.2.4.2 Turbidity measurements of the effluent and upstream receiving water indicate that the discharge does not exceed the water quality standard for turbidity at the outfall; or

- 2.2.4.3 The permittee submits turbidity and flow measurements, including seepage estimates, for the effluent and upstream receiving water taken during the period of the high discharge rate; and the results show that the discharge did not cause the water quality standard for turbidity to be exceeded at the mixing zone boundary. The modeled 7Q10 low flow and a turbidity of zero NTU may be accepted in lieu of upstream receiving water values under this scenario.
- 2.2.5 A permittee with an authorized mixing zone must place a marker on the shoreline at the downstream mixing zone boundary and maintain access for visual monitoring. If reasonable access cannot be provided, DEC may modify the mixing zone length to reflect the nearest access point, provided the modification is consistent with 18 AAC 70.255 (as amended through June 26, 2003).
- 2.2.6 The Department reserves the right to terminate or modify a mixing zone authorization at any time if the Department finds that available evidence reasonably demonstrates that the mixing zone has a significant unforeseen adverse environmental effect or the permittee fails to comply with associated permit provisions, including fee requirements.

2.3 Reclassified Waterbodies

A discharger on a waterbody reclassified in the Alaska Water Quality Standards [18 AAC 70.230(e)] may be granted a modified turbidity limit or arsenic limit based on the most stringent criterion applicable to the reclassified waterbody. DEC may authorize a mixing zone and turbidity modification in such a waterbody, provided the authorization is consistent with 18 AAC 70.240 - 18 AAC 70.270 (as amended through June 26, 2003).

2.4 Storm Exemptions

- 2.4.1 If, as a result of rainfall or snowmelt, an overflow or discharge of effluent occurs, the permittee may qualify for a temporary exemption from the limits and monitoring requirements for settleable solids and flow, and monitoring requirements for all other parameters, in Table 2 if the following conditions are met:
- 2.4.1.1 The treatment system is designed, constructed, and maintained to contain the maximum volume of untreated process wastewater which would be discharged, stored, contained, and used or recycled by the beneficiation process into the treatment system during a 4-hour operating period without an increase in volume from precipitation or infiltration, plus the maximum volume of water runoff, including contributions from the plant site, resulting from a 5-year, 6-hour precipitation event;
- 2.4.1.2 The permittee is in compliance with the best management practices in Part 3.2 and related permit provisions;
- 2.4.1.3 The permittee, upon discovery, immediately ceases any operations, including sluicing, that contribute sediment to the discharge and takes all reasonable steps to maintain treatment of the wastewater and to minimize the amount of overflow; and
- 2.4.1.4 The permittee complies with the notification requirements of Appendix A, Part 3.4.

- 2.4.2 Operations ceased under Part 2.4.1.3 may resume once the discharge stops or the permittee begins routine sampling according to Table 2 and confirms the discharge complies with all permit limits for settleable solids, turbidity, and flow (Parts 2.1 – 2.2).
- 2.4.3 Regardless of any exemptions under this section, a permittee on a waterbody listed as impaired for sediment or turbidity on the currently approved *Alaska's Integrated Water Quality Monitoring and Assessment Report* must monitor for settleable solids, turbidity, and flow during the discharge per the schedule in Table 2. An impaired waters list is available at dec.alaska.gov/water/wqsar/index.htm.
- 2.4.4 The storm exemption provides an affirmative defense to an enforcement action. Therefore, the permittee has the burden of demonstrating that the above conditions have been met. Burden of proof may include photographic evidence, site inspection records, precipitation data, or similar documentation.

3.0 SPECIAL CONDITIONS

3.1 Inspection Program

- 3.1.1 The permittee shall institute a comprehensive inspection program to facilitate proper operation and maintenance of the recycle system and the wastewater treatment system. A daily visual inspection of the site must be conducted while on site during the mining season, and include the following:
 - 3.1.1.1 An evaluation of the condition of all water control devices such as diversion structures and berms and all solids retention structures including, but not limited to, berms, dikes, pond structures, and dams;
 - 3.1.1.2 An assessment of the presence of sediment buildup within the settling ponds;
 - 3.1.1.3 An examination of all ponds for the occurrence of short circuiting; and
 - 3.1.1.4 Visual monitoring for turbidity upstream of the mine site and at either a point immediately downstream of the mine site or the mixing zone boundary if a mixing zone is authorized.
- 3.1.2 If, during a daily visual inspection, the receiving water downcurrent of the operation appears more turbid than upstream, the permittee must take measures to determine the source and ensure compliance with discharge limits (Parts 2.1 – 2.2) and best management practices (Part 3.2).
- 3.1.3 The permittee must complete detailed records, in accordance with Appendix A, Part 1.11, of observations resulting from the daily inspection.

3.2 Best Management Practices

- 3.2.1 The flow of surface waters into the plant site shall be interrupted and these waters diverted around and away from incursion into the plant site.
- 3.2.2 Drainage waters within the plant site must be collected in treatment ponds or otherwise prevented from discharging pollutants into waters of the U.S.
- 3.2.3 Berms, including any pond walls, dikes, low dams, and similar water retention structures shall be constructed in a manner such that they are reasonably expected to reject the passage of water.
- 3.2.4 Measures shall be taken to assure that pollutant materials removed from the process water and wastewater streams will be retained in storage areas and not discharged or released to the waters of the U.S.
- 3.2.5 The amount of new water allowed to enter the plant site for use in material processing shall be limited to the minimum amount required as makeup water for processing operations.
- 3.2.6 All water control devices such as diversion structures and berms and all solids retention structures such as berms, dikes, pond structures, and dams shall be reasonably maintained to continue their effectiveness and to protect from failure.
- 3.2.7 Discharges must be controlled through a pipe, weir, constructed ditch, or similar conveyance that allows for a reasonable estimation of flow rate. Discharge from seepage must be controlled and minimized to the greatest extent practicable.

- 3.2.8 Discharges must be managed to prevent resuspension of sediments, excessive erosion of the streambank or streambed, or downstream flooding.
- 3.2.9 The permittee shall take whatever reasonable steps are appropriate to ensure that, after the mining season, all unreclaimed mine areas, including ponds, are in a condition that will not cause degradation to the receiving waters over those resulting from natural causes.
- 3.2.10 Petroleum products must be properly managed during storage, refueling, and operation to prevent spillage into surface waters or groundwater. Any spills must be cleaned up using materials, such as sorbent pads and booms, and reported, per Part 4.3.

3.3 Separation Requirements

Discharge under this permit may not occur:

- 3.3.1 Within 300 feet of the discharge point of any other actively discharging placer mine; or
- 3.3.2 Within the mixing boundary, or 300 feet of the downstream mixing zone boundary, of any upstream placer mine that is actively discharging.

3.4 Total Maximum Daily Load Requirements

If the permittee discharges to a waterbody with an established Total Maximum Daily Load (TMDL) for sediment or turbidity, the permittee must implement measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the approved TMDL, including ensuring that the discharge does not exceed specific wasteload allocations that would apply to the discharge. The Department will include any applicable TMDL requirements in the permit authorization. If the Department determines that the TMDL cannot be properly administered under this permit, coverage under an individual permit (Part 1.4) will be required.

4.0 RECORDING AND REPORTING REQUIREMENTS

4.1 Daily Records

The permittee must maintain daily records that include results of the following:

- 4.1.1 Discharge monitoring (Table 2),
- 4.1.2 Information from daily inspections (Part 3.1),
- 4.1.3 Any TMDL monitoring requirements (Part 3.4),
- 4.1.4 Any additional monitoring by the permittee (Appendix A, Part 3.3), and
- 4.1.5 Flocculant, coagulant, or dye usage, including the product name and amount used.

4.2 Annual Report Requirements

An Annual Report must be submitted to the DEC Compliance Program at the address in Appendix A, Part 1.1.2 and received or postmarked no later than January 31 of each calendar year. The Annual Report must include the following:

- 4.2.1 Permittee name and current address;
- 4.2.2 APDES authorization number;
- 4.2.3 Receiving water name;
- 4.2.4 The period of operation or a statement that no mining occurred;
- 4.2.5 Total cubic yards of ore processed;
- 4.2.6 Total acreage disturbed;
- 4.2.7 The number of discharge events, and the duration of each discharge event, or a statement that no discharge to the receiving water occurred;
- 4.2.8 Discharge monitoring results for flow, settleable solids, turbidity, and arsenic (Parts 2.1 – 2.2);
- 4.2.9 Results of any additional discharge monitoring by the permittee (Appendix A, Part 3.3);
- 4.2.10 Records of flocculant, coagulant, or dye usage, including the product name and amount used;
- 4.2.11 Any effluent limitation exceedances and actions taken to return to compliance;
- 4.2.12 Copies of noncompliance reports (Appendix A, Part 3.5).
- 4.2.13 Any spills reported and actions taken to clean up the spill (Part 4.3); and
- 4.2.14 A signed certification statement (Appendix A, Parts 1.12.3 and 1.12.5).

4.3 Spill Reporting

All spills containing fuel, oil, or other hazardous substances must be reported upon discovery to the DEC spill response team at 1-907-451-2121 within normal business hours or 1-800-478-9300 outside normal business hours.

4.4 Standard Conditions Applicable to Recording and Reporting

The permittee must adhere to all standard recording and reporting requirements contained in Appendix A, Standard Conditions, including the following:

- 4.4.1 Retention of Records, Part 1.11.2;
- 4.4.2 Records Contents, Part 1.11.3;
- 4.4.3 Signature Requirement and Penalties, Part 1.12;
- 4.4.4 Special Reporting Obligations, Part 2.0; and
- 4.4.5 Monitoring, Recording, and Reporting Requirements, Part 3.0.

APPENDIX A

STANDARD CONDITIONS

APDES PERMIT

NONDOMESTIC DISCHARGES

September 2011

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 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

Permit related documents 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
610 University Avenue
Fairbanks, Alaska 99709-3643
Telephone (907) 451-2142
Fax (907) 451-2187
Email: dec.water.wqpermit@alaska.gov
Website: dec.alaska.gov/water/wwdp

1.1.2 Compliance and Enforcement Program

Compliance related documents, including Annual Reports, 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
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

The permittee shall summarize monitoring results on the annual report form or approved equivalent. The permittee shall submit its annual report at the interval specified in the permit. The permittee shall sign and certify all annual reports and other reports in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirement and Penalties. The permittee shall submit the legible originals of these documents to the ADEC Compliance and Enforcement Program at the address in Appendix A, Part 1.1.2.

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

7Q10	7-day, 10-year low flow
AAC	Alaska Administrative Code
ADF&G	Alaska Department of Fish and Game
APDES	Alaska Pollutant Discharge Elimination System
APMA	Application for Permits to Mine in Alaska
BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEC	Alaska Department of Environmental Conservation
DNR	Alaska Department of Natural Resources
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
GPM or gpm	Gallons per minute
ml/L	Milliliters per Liter
NOI	Notice of Intent
NTU	Nephelometric Turbidity Unit
µg/L	Micrograms per Liter
U.S.C.	United States Code
USGS	United States Geological Survey

APPENDIX C. DEFINITIONS

5-Year, 6-Hour Rainfall Event	Means the maximum 6-hour precipitation event with a probable recurrence interval of once in 5 years, as defined by the National Weather Service in Technical Paper Number 40, Rainfall Frequency Atlas of the United States, May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information.
7-day, 10-year low flow (7Q10)	Means the consecutive seven-day low flow with a ten year return frequency; the lowest stream flow for seven consecutive days that would be expected to occur once in ten years.
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.
Anadromous Fish ^b	Means a fish or fish species that spends portions of its life cycle in both fresh and salt waters, entering fresh water from the sea to spawn and includes the anadromous forms of pacific trout and salmon of the genus <i>Oncorhynchus</i> (rainbow and cutthroat trout and chinook, coho, sockeye, chum and pink salmon), Arctic char, Dolly Varden, sheefish, smelts, lamprey, whitefish, and sturgeon.
Application	Means an individual permit application, Application for Permits to Mine in Alaska (APMA) , or written Notice of Intent (NOI) pursuant to 18 AAC 205.
Available Evidence ^b	Means all relevant and applicable data and information the applicant has or can obtain, and all relevant and applicable data and information available to the department from other sources; "available evidence" does not include data and information that the collection or preparation of which, in the department's determination, is not practicable.
Beneficiation Area ^c	Means the area of land used to stockpile ore immediately before the beneficiation process, the area of land used for the beneficiation process, the area of land used to stockpile the tailings immediately after the beneficiation process, and the area of land from the stockpiled tailings to the treatment system (e.g., holding pond or settling pond, and the area of the treatment system).
Beneficiation Process ^c	Means the dressing or processing of gold bearing ores for the purpose of (i) regulating the size of, or recovering, the ore or product, (ii) removing unwanted constituents from the ore, and (iii) improving the quality, purity, or assay grade of a desired product.
Best Management Practices (BMPs)	Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the U.S. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from mined areas.
Bypass ^a	Means the intentional diversion of waste streams from any portion of a treatment facility.
Clean Water Act	Means the federal law codified at 33 U.S.C. 1251-1387, also referred to as the Federal

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 40 CFR 440.141

(CWA) ^a	Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.
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.
Department ^a	When used alone, means the Alaska Department of Environmental Conservation.
Dewatering Water	Means water from pumps within the mine area or well pumps that are used to lower the water table and control infiltration water.
Discharge ^a	When used without qualification, means the discharge of a pollutant.
Drainage Water ^c	Means incidental surface waters from diverse sources such as rainfall, snow melt or permafrost melt.
Dredge ^c	Means a self-contained combination of an elevating excavator (e.g., bucket line dredge), the beneficiation or gold-concentrating plant, and a tailings disposal plant, all mounted on a floating barge.
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.
Effluent limitation or Effluent limit ^a	Means any restriction imposed by the department on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the U.S., the waters of the contiguous zone, or the ocean.
Estimated	Means a way to estimate the discharge volume. Approvable estimations include, but are not limited to, the number of persons per day at the facility, seepage volume, noncompliance event volume and weight, etc.
Existing Facilities	Means those mechanical operations facilities having coverage under the 2012 Mechanical Placer Miners General Permit.
Expanding Facility	Means any facility increasing in size such as to affect the discharge but operating within the permit area covered by its general permit.
Facility ^a	Means any point source or any other facility or activity, including land or appurtenances, that is subject to regulation under the APDES program.
Fish Bearing	Means frequented by resident or anadromous fish as determined by the Alaska Department of Fish and Game.
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.
Gravity Separation Methods ^c	Means the treatment of mineral particles which exploits differences between their specific gravities. The separation is usually performed by means of sluices, jigs, classifiers, spirals, hydrocyclones, or shaking tables.
Hydraulicking	Means both the hydraulic removal of overburden and the use of hydraulic power to move raw rock to the point of processing (i.e. to the gate of the sluice or other processing equipment).

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 40 CFR 440.141

Impaired Water	Means a waterbody that has been identified by a State, Tribe or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State or Tribal water quality standards (these waters are called “water quality limited segments” under 40 CFR 130.2(j)).
Infiltration Water ^c	Means water that permeates through the earth into the plant site
Instantaneous Maximum	Means the maximum value measured at any time
Make-up Water	Means that volume of water needed to replace process water lost due to evaporation and seepage in order to maintain the quantity necessary for the operation of the beneficiation process.
Mine ^c	Means a place where work or other activity related to the extraction or recovery of ore is performed.
Mine Area ^c	Means the land area from which overburden is stripped and ore is removed prior to moving the ore to the beneficiation area.
Mine Drainage ^c	Means any water drained, pumped or siphoned from a mine.
Mining Season	Means the time between the start of mining in a calendar year and when mining has ceased for that same calendar year.
Mixing Zone ^b	Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water.
Moving Facility	Means any facility that moves its outfall outside the area covered by its general permit authorization.
Nephelometric Turbidity Unit (NTU)	Means an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in a straight line through the water.
New Facility	Means a facility that has not operated in the area specified in the Notice of Intent (NOI) prior to the submission of the NOI.
New Water ^c	Means water from any discrete source such as a river, creek, lake, or well which is deliberately allowed or brought into the plant site.
Open-cut Mine ^c	Means any form of recovery of ore from the earth except by a dredge.
Operation	Means the same as “facility.”
Ore ^c	Means gold placer deposit consisting of metallic gold-bearing gravels, which may be: residual, from weathering of rocks in-situ; river gravels in active streams; river gravels in abandoned and often buried channels; alluvial fans; sea-beaches; and seabeaches now elevated and inland. Ore is the raw “bank run” material measured in place, before being moved by mechanical or hydraulic means to a beneficiation process.
Outfall	Means the discharge point of a wastewater stream into the receiving water.
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.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 40 CFR 440.141

Plant Site ^c	Means the area occupied by the mine, necessary haulage ways from the mine to the beneficiation process, the beneficiation area, the area occupied by the wastewater treatment storage facilities and the storage areas for waste materials and solids removed from the wastewaters during treatment.
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.
Process Wastewater ^c	Means all water used in and resulting from the beneficiation process, including but not limited to the water used to move the ore to and through the beneficiation process, the water used to aid in classification, and the water used in gravity separation, mine drainage, and infiltration and drainage waters which commingle with mine drainage or waters resulting from the beneficiation process.
Receiving Water	Means waters such as lakes, rivers, streams, creeks, wetlands, or any other surface waters that receive wastewater discharges.
Recommencing Facilities	Means those facilities that may have let permit coverage lapse but still meet the coverage requirements of this permit.
Resident Fish	Means arctic grayling, northern pike, rainbow trout, lake trout, brook trout, cutthroat trout, whitefish, sheefish, Arctic Char, Dolly Varden, burbot, and landlocked coho, king, and sockeye salmon.
Settleable Solids ^c	Means the particulate material (both organic or inorganic) which will settle in one hour expressed in milliliters per liter (ml/L) as determined using an Imhoff cone and the method described for Residue - Settleable in 40 CFR part 136.
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.
Short Circuiting	Means ineffective settling due to inadequate or insufficient retention characteristics, excessive sediment deposition, embankment infiltration/percolation, lack of maintenance, etc.
Total Maximum Daily Load (TMDL)	Means a regulatory determination of the amount of a pollutant that a waterbody can assimilate and still comply with applicable water quality standards and the amount that pollutant must be reduced to allow the waterbody to support its designated uses.
Turbidity ^b	Means an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through a water sample; turbidity in water is caused by the presence of suspended matter such as clay, silt, finely divided organic and inorganic matter, plankton, and other microscopic organisms.
Turbidity Load	Means turbidity levels provided in relationship to flow rate and expressed as $turbidity \text{ (NTU)} \times flow \text{ (gpm)}$.
Turbidity Modification	Means the procedures used to calculate a higher turbidity limit based on a mass balance equation that relates upstream and effluent flow and turbidity to downstream

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 40 CFR 440.141

flow and turbidity. The basic form of this equation is:

$$Q_1C_1 + Q_2C_2 = Q_3C_3,$$

where C_1 = effluent turbidity;

C_2 = natural background turbidity;

C_3 = receiving water downstream turbidity after mixing where the allowable increase is 5 NTU above background;

Q_1 = effluent flow;

Q_2 = receiving water flow upstream from the discharge (i.e., 7Q10); and

Q_3 = total receiving water flow downstream from discharge after complete mixing ($Q_1 + Q_2$).

Upset ^a	Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
Wasteload Allocation	Means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution (e.g., permitted waste treatment facilities).
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 (U.S.)	Has the meaning given in 18 AAC 83.990(77).
Week	Means the time period of Sunday through Saturday.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 40 CFR 440.141

APPENDIX D. MIXING ZONE AUTHORIZATIONS

Table D-1 presents facilities with mixing zones to be authorized under the General Permit.

Table D-1: Mixing Zone Authorizations

APMA ^a	APDES ^b	Permittee	Receiving Water	USGS Quad Map	Effluent Limits		Mixing Zone Length (ft.)	Authorized Discharge Period	Status ^c
					Turbidity (NTU)	Flow (GPM)			
F9434	AKG370609	Alvin Hanson	Boulder Crk.	Solomon D-6	120	50	800	Year Round	R
F7104	AKG370588	Carl Congdon	Quail Crk	Livengood B-6	665	10	670	6/16-4/30	E
A5696	AKG370269	Clark-Wiltz Co.	Ganes Crk.	Iditarod D-2	470	100	3713	6/16-4/30	E
F9004	AKG370223	Cy Bras	Canyon Crk.	Eagle A-1	219	128	1843	6/16-4/30	R
A5570	AKG370114	Dan Plano	Innoko R.	Ophir A-1, A-2	144	800	3735	Year Round	E
F7332	AKG370256	Dawn & John Lines	NF Harrison Crk.	Circle B-3	32	50	174	6/16-4/30	E
F5909	AKG370391	Donald Stein, DEPEM	Gilmore Crk.	Fairbanks D-1	139	25	433	Year Round	R
A2761	AKG370867	Ellet Enterprises, Inc.	Valdez Crk.	Healy A-1	151	200	4651	6/16-10/31	N
F9149	AKG370394	George Seuffert	Faith Crk	Circle B-5	856	30	3150	6/16-4/30	E
A5590	AKG370131	Girdwood Mining Co.	Crow Crk.	Anchorage A-6	47	500	1083	Year Round	E
F6953	AKG370220	Great Divide Mining Co.	Lil. Boulder Crk.	Tanana A-3	29	250	615	6/16-4/30	E
F6006	AKG370214	Int.Alaskana Assoc.	Harrison Crk.	Circle B-3	12	1500	845	6/16-4/30	E
A2729	AKG370595	Ivan Merrill	Falls Crk.	Seward B-7	510	150	2000	5/15-7/15	E
A3027	AKG370728	Ivan Merrill & John Deacon	Fresno Crk.	Seward C-7	211	150	339	Year Round	E
F6859	AKG370559	Larry Weisz	Hammond R.	Wiseman B-1	921	150	2165	Year Round	R
F7223	AKG370154	Mark Gumaer	Dick Crk.	Bendeleben D-6	104	50	838	Year Round	E
F9572	AKG370427	John McClain	Kokomo Crk.	Livengood A-1	21	150	410	Year Round	R
F5845	AKG370070	N.B. Tweet & Sons	Kougarok R.	Bendeleben C-6	320	300	5280	6/16-8/31	E
F9698	AKG370A13	Nome Gold Alaska Corp.	Dry Crk.	Nome C-1	175	50	1900	Year Round	R
F7194	AKG370718	Rampart Exploration	American Crk.	Tanana A-3	18	200	337	Year Round	R

Table D-1: Mixing Zone Authorizations

APMA ^a	APDES ^b	Permittee	Receiving Water	USGS Quad Map	Effluent Limits		Mixing Zone Length (ft.)	Authorized Discharge Period	Status ^c
					Turbidity (NTU)	Flow (GPM)			
F9049	AKG370007	Ron Wrede	Switch Crk.	Circle B-2	66	20	91	Year Round	E
F2015	AKG370556	Sheldon Maier	Montana Crk	Eagle B-3	28	150	232	Year Round	R
F9702	AKG370589	Slisco, Inc.	Nugget Crk.	Chandalar B-6	26	400	432	6/16-4/30	E
F9016	AKG370226	Taiga Mining Co., Inc.	Aloha Crk.	Hughes A-6	75	200	614	5/1-6/15	E
F9017	AKG370227	Taiga Mining Co., Inc.	Clear Crk.	Hughes A-6	78	200	1038	5/1-6/15	E
A6191	AKG370039	Tod Bauer	Eldorado Crk.	Talk. Mtns. C-6, D-6	139	500	2860	Year Round	E
A5691	AKG370039	Valdez Creek Mining, LLC	Valdez Crk.	Healy A-1	51	200	1500	Year Round	N
F4399	AKG370412	William Aldridge	Poker Crk.	Eagle A-1	51	50	180	Year Round	E

Notes:

- a. Application for Permits to Mine in Alaska number
- b. Alaska Pollution Discharge Elimination System authorization number
- c. E: Extended facilities that were issued mixing zones under the 2012 general permit and submitted a Notice of Intent prior to the expiration date.
N: New mixing zone authorizations under the current permit
R: Facilities with closed (expired or terminated) mixing zones that have reapplied

APPENDIX E. SAMPLING PROTOCOL

Sample Location

1. Effluent (discharge) samples for settleable solids, turbidity, and arsenic shall be collected from the settling pond outlet or other treatment systems outlet prior to discharge to the receiving stream.
2. Upstream samples shall be taken at a point that is representative of the receiving stream just above the permittee's mining operation.

Settleable Solids Sampling Protocol^a

3. Grab samples shall be collected in sterile one liter polypropylene or glass containers.
4. Samples must be cooled to 4 degrees Celsius / 39 degrees Fahrenheit (iced), if analysis is not performed immediately.
5. Cooled samples must be analyzed within 48 hours of sample collection.
6. To analyze:
 - a. Fill an Imhoff cone to the one liter mark with a thoroughly mixed sample.
 - b. Settle for 45 minutes, then gently stir the sides of the cone with a rod or by gently spinning the cone.
 - c. Settle 15 minutes longer, then record the volume of settleable matter in the cone as milliliters per liter. If the settled matter contains pockets of liquid between large settled particles, estimate volume of these and subtract from volume of settled solids. Do not estimate any floating material. The lowest measurable level on the Imhoff cone is 0.1 mL/L. Any settleable material below the 0.1 mL/L mark shall be recorded as trace.

Turbidity Sampling Protocol

1. Grab samples shall be collected in sterile polypropylene or glass containers.
2. Samples must be cooled to 4 degrees Celsius / 39 degrees Fahrenheit (iced), if analysis is not performed immediately.
3. Cooled samples must be analyzed within 48 hours of sample collection.

Arsenic Sampling Protocol

1. Grab samples shall be collected in sterile polypropylene or glass containers.
2. Samples must be acidified promptly with nitric acid (HNO₃), to a pH less than 2 or sent to a laboratory within 48 hours of sample collection. Non-acidified samples must be chilled to 4 degrees Celsius / 39 degrees Fahrenheit (iced) until acidified at the laboratory.
3. Acidified samples must be analyzed within 180 days of the sample collection date.
4. Samples must be acidified for at least 16 hours prior to analysis.

a) See Standard Methods for the Examination of Water and Wastewater , 18th Edition, 1992

APPENDIX F. FORMS

Appendix F includes forms that may be used for the recording and/or submission of information required under this permit. Information may be recorded or submitted in a different format provided all required data elements are included. The Department reserves the right to modify the format of any of the attached forms at any point after the permit issuance date.

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**Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program**

**Notice of Intent (NOI) to Discharge under General Permit
AKG370000 for Mechanical Placer Miners**

Permittee Name (First Last, Business): <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Other:		Previous Discharge Authorization #: AKG370 _____
Address:	Phone:	Waterbody that would receive direct discharge:
Email:		
Additional Contact (First Last, Business): <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Agent <input type="checkbox"/> Other:		Please attach a drawing of your operation and/or reference a current Alaska Permits to Mine Application (APMA).
Address:	Phone:	
Email:		APMA #:
USGS Quad Map:	Mining District:	
Township, Range, Section, Meridian:	<input type="checkbox"/> Umiat <input type="checkbox"/> Kateel <input type="checkbox"/> Fairbanks <input type="checkbox"/> Seward <input type="checkbox"/> Copper River	
Does the facility have a proposed discharge to a waterbody within a National Park or Preserve, National Monument, National Sanctuary, National Wildlife Refuge, National Conservation Area, National Wilderness Area, National Critical Habitat Area, or to marine waters or waters designated as wild under the Wild & Scenic Rivers Act? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Anticipated volume of ore processed per year: _____ cubic yards Anticipated area of disturbance: _____ acres	Type of Operation: <input type="checkbox"/> Open-cut <input type="checkbox"/> Mechanical Dredge	
Do you wish to receive a mixing zone and turbidity modification? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide the following: Maximum discharge flow anticipated _____ gpm (must be greater than zero); Distance to nearest downstream drinking water source _____, and nearest downstream placer mine _____		
Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Signature:		Date:
Printed Name (First Last, Title, Business):		
Mailing Address: DEC Division of Water 610 University Ave. Fairbanks, AK 99709		Phone: (907) 451-2142 Fax: (907) 269-4604 Email: dec.placer@alaska.gov

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**Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program**

**Mechanical Placer Miners General Permit (AKG370000)
Annual Report Form**

Permittee Name:	Mining Season Year:
	Waterbody Name:
Address:	Authorization #: AKG37_____
	APMA #:
Phone:	Mining Occurred: <input type="checkbox"/> Yes <input type="checkbox"/> No
Email:	Discharge Occurred: <input type="checkbox"/> Yes <input type="checkbox"/> No
If mining occurred: Period of Operation: _____ Total Sluice Days: _____ Total Acreage Disturbed: _____ Cubic Yards of Material Processed Daily (average): _____, Annually _____	
If discharge occurred, monitoring results are required for flow, total settleable solids, turbidity, and arsenic. Sample results must be attached on a separate sheet. Monitoring Results Attached: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Comments, including explanations of any violations and actions taken to return to compliance: 	
To terminate an authorization, provide a request with a brief explanation in the comment box above.	
Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
Printed Name:	Title:
Signature:	Date:
Note: Reports are due by January 31. A separate Annual Report must be submitted for each permit number. Reports may be submitted by fax, email, or hardcopy to the address below. Permittees must retain legible copies of submitted documents.	
Mailing Address: AK Dept. of Environmental Conservation Division of Water Attn: Compliance Program 555 Cordova Street Anchorage, Alaska 99501	Phone: <u>Compliance Program:</u> Toll Free Nationwide: (877) 569-4114 Anchorage or International: (907) 269-4114 <u>Permitting Program:</u> (907) 451-2142
Fax: (907) 269-4604	Email: dec-wqreporting@alaska.gov Website: dec.alaska.gov/water/Compliance/permittee.html