

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM (NPDES) FOR  
MECHANICAL PLACER MINING IN ALASKA

General Permit No.: **AKG-37-0000**

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. 1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act":

Owners and operators of Mechanical Placer Mines except those sites excluded from coverage in Part I. of this NPDES permit, are authorized to discharge only in accordance with effluent limitations, monitoring requirements, and other provisions set forth herein.

**A COPY OF THIS GENERAL PERMIT MUST BE KEPT AT THE SITE OF THE  
PLACER MINE AT ALL TIMES.**

[Facility Name]

[Receiving Water]

This permit will become effective on October 4, 2005.

This permit and the authorization to discharge this permit shall expire at midnight on October 4, 2010.

Signed this 24th day of August, 2005.

/s/ Robert R. Robichaud for  
Michael F. Gearheard  
Director  
Office of Water & Watersheds

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## **I. PERMIT COVERAGE**

### **A. Coverage**

1. Authorization to discharge requires written notification from EPA that coverage has been granted and that a specific permit number has been assigned to the operation.
2. Existing Facilities (those mechanical operations facilities having coverage under the 2000 Alaska placer miner general permit): Owners or operators of facilities with coverage under the 2000 General Permit are eligible for coverage under this permit. See Permit Part I.F. for notification requirements.
4. New Facilities: New mechanical operations facilities that are determined to be new sources under the CWA will be required to have an Environmental Assessment (EA) completed pursuant to the National Environmental Policy Act (NEPA). A finding of no significant impact (FNSI) by EPA is necessary prior to receiving coverage under this permit. A FNSI will become effective only after the public has had notice of, and an opportunity to comment on, the FNSI including either the accompanying EA or a summary of it, and the EPA has fully considered all public comments submitted, pursuant to 40 CFR § 6.400(d). If there may be a significant impact, the facility will require an Environmental Impact Statement (EIS). An EIS will be issued only after public notice and an opportunity for public comments on a draft EIS pursuant to 40 CFR § 6.403(a) and § 1503.1(a).
5. Expanding Facilities: Mechanical operations facilities that contemplate expanding shall submit a new NOI that describes the new discharge. The current permit may be terminated and a new permit, reflecting the changes, issued in its place if the facility meets all the necessary requirements of coverage.

### **B. Authorized Placer Mining Operations**

1. Facilities that mine and process gold placer ores using gravity separation methods to recover the gold metal contained in the ore.
2. Open-cut gold placer mines except those open-cut mines that mine less than 1,500 cubic yards of placer ore per mining season.
3. Mechanical dredge gold placer mines except those dredges that remove less than 50,000 cubic yards of placer ore per mining season or dredge in open waters.
4. Hydraulicking facilities that are considered "no discharge" facilities.

### **C. Additional Requirements**

1. Many streams and stream reaches in Alaska have been designated as part of the federal wild and scenic rivers system or as Conservation System Units (CSUs) by the federal government. Permittees should contact the district offices of the federal agencies that administer the designated area for additional restrictions that may apply to operating within the area. See Permit Part I.F.6. for addresses.
2. Many streams in Alaska where placer mining occurs have been designated by the Alaska Department of Natural Resources/Office of Habitat Management and Permitting (OHMP) as anadromous fish streams. Placer mining activities in these streams require an OHMP Fish Habitat Permit that may include additional restrictions. The "Atlas to the Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fish" lists the streams in the State that require prior OHMP authorization. In addition, placer mining activities in resident fish streams require an OHMP Fish Habitat Permit if the proposed activity will block or impede the efficient passage of fish. Permittees operating in anadromous or resident fish streams should contact OHMP to determine permitting requirements and additional restrictions that may apply.

### **D. Prohibitions**

1. Discharges from the following beneficiation processes are not authorized under this permit: mercury amalgamation, cyanidation, froth floatation, heap and vat leaching.
2. Hydraulicking facilities, as defined in Part VI.I., that discharge on an intermittent or continuous basis are not authorized under this permit.
3. This general permit does not apply to facilities that are proposed to be 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, or waters adjacent to areas designated as wild under the Wild & Scenic Rivers Act.
4. This permit does not apply to wetlands designated in the 1995 Anchorage Wetlands Management Plan.

### **E. Requiring an Individual Permit**

1. The Regional Administrator may require any person authorized by this permit to apply for and obtain an individual NPDES permit when:
  - a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

- b. The discharger is not in compliance with the terms and conditions of the general permit;
  - c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
  - d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;
  - e. A Water Quality Management Plan containing requirements applicable to such point sources is approved;
  - f. A Total Maximum Daily Load (TMDL) and corresponding wasteload allocation has been completed for a waterbody or a segment of a waterbody;
  - g. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.
2. The Regional Administrator may deny coverage under this permit in the following circumstances:
- a. a land management agency with jurisdiction over affected portions of the receiving water, bed, or uplands submits a request that general permit coverage be denied to EPA within thirty (30) days of the agency's receipt of an NOI; and,
  - b. the land management agency's request includes proposed additional or revised permit terms that the requesting agency believes -- based upon evidence attached to or cited in the request -- are necessary to protect the natural values of the affected location; and,
  - c. the land management agency's request concerns a person who either;
    - (1) seeks to discharge into U.S. waters located in National Recreation Areas, National Historic or Natural Landmarks, congressionally designated Land Use Designation (LUD) II which are to be managed in a roadless state, or in State Refuges, Sanctuaries, or Critical Habitat Areas; or,
    - (2) is in significant noncompliance with the terms and conditions of the most recent applicable NPDES permit; or,
    - (3) intends to discharge into waters designated as impaired under the

## Clean Water Act.

Any person denied coverage under this part must apply for and obtain coverage under either: (1) an individual permit; or (2) another applicable watershed-specific general permit. Upon receipt of any such application, EPA will determine whether the permit terms requested by the land management agency should be included in the applicable permit.

3. The Regional Administrator will notify the operator in writing by certified mail that a permit application is required. If an operator fails to submit an individual NPDES permit application by the date required in the notification, coverage under this general permit is automatically terminated at the end of the day specified for application submittal.
4. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application (Form 1 and Form 2C or 2D) with reasons supporting the request to the Regional Administrator at the address in paragraph I.F.4.
5. When an individual NPDES permit is issued to an owner or operator otherwise covered by this permit, the applicability of this permit to the facility is automatically terminated on the effective date of the individual permit.
6. When an individual NPDES permit is denied to an owner or operator otherwise covered by this permit, the Permittee is automatically reinstated under this permit on the date of such denial, unless otherwise specified by the Regional Administrator.
7. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

## F. Notification Requirements

1. Owners or operators of facilities eligible for this permit shall submit an NOI to be covered by this permit. The information required for a complete NOI is in Appendix A of this permit. Notification must be made:
  - a. by January 1 of the year of discharge to allow time for completion of the NEPA evaluation from a new facility or facility established since 1988 which would be subject to New Source Performance Standards (NSPS) that has not previously been covered by a permit. Notifications received after January 1 will likely not be processed until the next year; or
  - b. 60 days prior to discharge from a new or recommencing facility not subject

to NSPS; or

- c. 60 days prior to the expiration of an existing individual permit.
- 2. Any facility authorized under the 2000 general permit that files an NOI prior to the expiration date will be automatically authorized under this general permit.
- 3. An Annual Placer Mine Application (APMA) will be accepted as an NOI if all the required information is included and the APMA is signed as required in paragraph 4, below.
- 4. The NOI shall be signed by the owner or other signatory authority in accordance with Permit Part V.F. (Signatory Requirements), and a copy shall be retained on site in accordance with Permit Part III.F. (Retention of Records). The address for NOI submission to EPA is:

USEPA - Alaska Operations Office  
Placer Mining NOI  
222 W. 7th Avenue, Box #19  
Anchorage, Alaska 99513

- 5. A copy of the NOI must also be sent to the Alaska Department of Environmental Conservation (ADEC). The address is:

Alaska Department of Environmental Conservation  
610 University Avenue  
Fairbanks, Alaska 99709

- 6. Permittees who do not use the APMA procedure for filing their NOI with Alaska Department of Natural Resources shall send a copy of the NOI to the Federal, State, or local agency that manages or owns the land in which the mine is located or proposed to be located. The addresses are:

<u>Anchorage Area</u>	<u>Fairbanks Area</u>	<u>Glennallen Area</u>
U.S. Department of Interior <b>BLM</b> 222 West 7th Avenue, #13 Anchorage, AK 99513-7599	U.S. Department of Interior <b>BLM</b> 1150 University Avenue Fairbanks, AK 99709	U.S. Department of Interior <b>BLM</b> P.O. Box 147 Glennallen, AK 99588
U.S. Department of Interior <b>Fish and Wildlife Service</b> 1011 E Tudor Rd. Anchorage, AK 99503	U.S. Department of Interior <b>Fish and Wildlife Service</b> 101 12th Avenue, Box 19 Fairbanks, AK 99701	U.S. Department of Interior <b>National Park Service</b> Wrangell St. Elias P.O. Box 439 Copper Center, AK 99573

Anchorage Area (cont)	Fairbanks Area (cont)	Tok Area
U.S. Department of Interior <b>National Park Service</b> 605 West 4th Avenue, Suite 104 Anchorage, AK 99501	U.S. Department of Interior <b>National Park Service</b> 250 Cushman, Suite 1A Fairbanks, AK 99701	U.S. Department of Interior <b>BLM</b> P.O. Box 309 Tok, AK 99780
Nome Area		Juneau Area
U.S. Department of Interior <b>Bureau of Land Management</b> P.O. Box 925 Nome, AK 99762	U.S. Department of Interior <b>Fish and Wildlife Service</b> 3000 Vintage Blvd, Suite 201 Juneau, AK 99801	
U.S. Department of Interior <b>National Park Service</b> P.O. Box 220 Nome, AK 99762	U.S. Department of Interior <b>National Park Service</b> P.O. Box 21089 Juneau, AK 99802-1089	

7. A copy of the general permit will be sent to the Permittee when it is determined that the facility can be authorized under this general permit. If it is determined that a facility cannot be authorized to discharge under this permit, the applicant will be informed of this in writing.

### G. Permit Expiration

This permit will expire five years from the effective date. For facilities submitting a new NOI 90 days prior to expiration of this general permit, the conditions of the expired permit continue in force until the effective date of a new permit.

## II. EFFLUENT LIMITATION AND MONITORING REQUIREMENTS

### A. Discharge Limitations and Monitoring Requirements - No Discharge Facilities

1. Beginning with the effective date of this permit, the permittee shall not discharge wastewater to receiving waters except:
  - (a) overflow from facilities 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
  - (b) the maximum volume of water (drainage waters) which would result from a 5-year, 6-hour precipitation event.

In computing the maximum volume of wastewater which would result from a 5-year, 6-hour precipitation event, the facility must include the volume which

would result from all areas contributing runoff to the individual treatment facility.

2. The facility shall take all reasonable steps to minimize the overflow or excess discharge.
3. If a discharge occurs, the operator shall comply with the notification requirements of Permit Parts III.G. and III.H. If a discharge occurs during dry weather, the facility will be considered a discharging facility covered by the requirements in Permit Part II.B., below.
4. Discharges resulting from a precipitation event when the facility is designed as described above shall be monitored as listed below:

Effluent Characteristic	Monitoring Location	Monitoring Frequency	Sample Type
Settleable Solids, ml/L	effluent	once per day each day of discharge	Grab
Turbidity, NTU	effluent	once per discharge event*	Grab
	upstream	once per discharge event*	Grab
Arsenic, µg/L	effluent	once per discharge event**	Grab
Flow, gpm	effluent	***	Instantaneous
* See Part II.C.2. for details. ** See Part II.C.3. for details. *** See Part II. C.5. for details.			

**B. Discharge Limitations and Monitoring Requirements - Discharging Facilities**

Beginning with the effective date of this permit, the permittee shall not discharge wastewater to receiving waters except in compliance with the following effluent limitations:

1. Effluent discharges are prohibited during periods when new water is allowed to enter the plant site. Additionally, there shall be no discharge as a result of the intake of new water.
2. The volume of wastewater which may be discharged shall not exceed the volume of infiltration, drainage and mine drainage waters which is in excess of the make-up water required for operation of the beneficiation process.

3. Limitations and Monitoring Requirements:

Effluent Characteristic	Instantaneous Maximum	Monitoring Location	Monitoring Frequency	Sample Type
Settleable Solids, ml/L	0.2	effluent	once per day each day of discharge	Grab
Turbidity, NTU	5 NTUs above natural conditions****	effluent	three times per week	Grab
		upstream	three times per week*	Grab
Arsenic, µg/L	50	effluent	once per season**	Grab
Flow, gpm	-	effluent	Daily***	Instantaneous
<p>* See Part II.C.2. for details.  ** See Part II.C.3. for details.  *** See Part II. C.5. for details.  ****See Part II.B.5 for details</p>				
<p>Those who receive a site-specific turbidity limit, described below, may not be required to take background turbidity samples. Samples for arsenic and turbidity monitoring must be taken during sluicing at a time when the operation has reached equilibrium. For example, samples should be taken when sluice paydirt loading and effluent discharge are constant.</p>				

4. Permittees may request a modified turbidity limit based upon a mixing zone approved by the Alaska Department of Environmental Conservation (ADEC) pursuant to 18 AAC 70.260. EPA will approve a modified turbidity limit proposed by ADEC under this General Permit if the modified limit and resulting mixing zone are consistent with the Clean Water Act, EPA's regulations, 18 AAC 70.250 and 255, and provided that:

- a. the modified turbidity limit does not exceed 1500 NTUs;
- b. the modified turbidity limit does not cause turbidity levels to exceed 100 NTUs in more than one-half of the cross-sectional area of resident and anadromous fish migration corridors;
- c. the modified turbidity limit is calculated using the 7-day, 10-year low flow (7Q10) as the chronic criterion design flow for the protection of aquatic life, see Permit Part VI.W.;
- d. the modified turbidity limit does not result in a mixing zone in an area of anadromous fish spawning or resident fish (as defined in Permit Part VI.T.) spawning redds when eggs or alevins are present;
- e. approved mixing zones do not overlap and the availability and extent of approved mixing zones is limited as necessary to avoid potentially harmful cumulative effects on the receiving environment; and,
- f. the public was provided reasonable notice of, and an opportunity to comment on, the modified turbidity limit and associated mixing zone, including site-specific assessments used to calculate the limit and zone,

prior to their approval by ADEC.

If ADEC issues a mixing zone and turbidity modification to a waterbody reclassified in the Alaska Water Quality Standards (AWQS), EPA will approve the turbidity modification and include it in a facility's GP if it meets the conditions of b. through f. above.

5. The volume of discharge shall not exceed the volume reported by the permittee on the NOI (Appendix A). If the permittee exceeds that volume, EPA will not consider the permittee in violation of the flow limit if:
  - a. the permittee submits to EPA turbidity samples, flow measurements/seepage estimates for the discharge, and flow and turbidity measurements for the upstream receiving water taken during the period of the flow exceedence; and,
  - b. those samples show that the permittee's discharge did not cause the standard of 5 NTU above background to be exceeded at the edge of the mixing zone.

The permittee must report all exceedences of the flow limit, together with any turbidity and flow/seepage data that the permittee intends to use to avoid being considered in violation of the flow limit, pursuant to the reporting requirements in Part III.G.

Pending decision on the modified turbidity limit, the limit in Permit Part II.B.2. applies.

#### 6. Arsenic Modifications

- a. Permittees may request a modified arsenic limit reflecting the arsenic concentrations naturally present in the receiving waters as determined by ADEC. EPA will approve a modified arsenic limit proposed by ADEC under this General Permit provided:
  - (1) the modified limit is consistent with the Clean Water Act, EPA's regulations, and state water quality standards regulations;
  - (2) The arsenic concentration naturally present in the receiving waters is determined upstream from any human-caused influence on, discharge to, or addition of material to, the waterbody; and
  - (3) the public was provided reasonable notice of, and an opportunity to comment on, the modified arsenic limit, including all data and other information used to calculate the limit, prior to its approval by ADEC.

Pending decision on the modified arsenic limit, the limit in Permit Part II.B.2. applies.

- b. An affected community or individual may request a modified arsenic limit in conjunction with a request that the State evaluate the need for a more stringent site specific criterion.

### **C. Other Monitoring Requirements**

The following requirements apply to all facilities covered by this permit.

#### **1. Inspection Program**

The Permittee shall institute a comprehensive inspection program to facilitate proper operation and maintenance of the recycle system and the wastewater treatment system. The Permittee shall conduct a visual inspection of the site once per day, while on site, during the mining season. The Permittee shall maintain records of all information resulting from any inspections in accordance with part III.F. of this permit. These records shall include 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. The records shall also include an assessment of the presence of sediment buildup within the settling ponds. The Permittee shall examine all ponds for the occurrence of short circuiting.

#### **2. Turbidity Monitoring**

The Permittee shall monitor visually for turbidity at the edge of the mixing zone or at the point of discharge if no mixing zone is approved, at least once each day a discharge occurs. The Permittee shall maintain records of all information resulting from this observation in accordance with Permit Part III.F.

Discharge (effluent) and upstream samples shall be taken within a reasonable time frame of each other. All samples should be taken and stored in the manner set forth in Attachment 1. The sample results shall be reported in the Annual Report (AR). Monitoring shall be conducted in accordance with accepted analytical procedures. See Attachment 1 for sampling protocol.

#### **3. Arsenic Monitoring**

Arsenic samples shall be representative of the discharge and shall be taken at a *point prior to entering the receiving stream*. Sampling should be concurrent with a turbidity sample. Monitoring shall be conducted in accordance with accepted analytical procedures. All samples should be taken and stored in the manner set forth in Attachment 2. The Permittee shall report the sample results in the AR. See Attachment 2 for sampling protocol.

4. Settleable Solids Monitoring

Settleable solids samples shall be representative of the discharge and shall be taken daily each day of discharge at a point *prior to entering the receiving stream*. Monitoring shall be conducted in accordance with accepted analytical procedures (Standard Methods, 18th Edition, 1992). The Permittee shall report the monthly average and daily maximum results in the AR. See Attachment 3 for sampling and analysis protocol.

5. Flow Monitoring

Effluent flow shall be measured at the discharge *prior to entering the receiving water*. Effluent flow shall be measured at least once per day each day a discharge occurs. The operator must also make a good faith effort to estimate seepage discharging to waters of the United States each day that seepage occurs. Effluent flow and seepage flow shall be reported in gallons per minute (gpm). The flow measurements and seepage estimates, the number of discharge events, and the duration of each discharge event shall be reported in the AR for each day of the mining season.

**D. Best Management Practices (BMP)**

The following BMPs apply to all facilities covered by this permit.

1. The flow of surface waters (i.e., creek, river, or stream) into the plant site shall be interrupted and these waters diverted around and away to prevent incursion into the plant site.
2. 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. 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 United States.
4. 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.
5. 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.
6. The operator shall take whatever reasonable steps are appropriate to assure 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.

7. During each mining season, a permittee may not discharge into the receiving water within three hundred feet of any other upstream or downstream placer mining operation which is discharging or from which it is visually apparent by the permittee that a discharge has occurred. Nor may a permittee discharge at a point within three hundred feet of the downstream edge of a mixing zone granted for any other upstream placer mining operation.
8. Care shall be taken by the operator during refueling operations to prevent spillage into surface waters or to groundwater. Any spills shall be cleaned up using materials such as sorbent pads and booms. All spills shall be reported to ADEC by calling 1-800-478-9300.

#### **E. Other Requirements**

The operator shall maintain fuel handling and storage facilities in a manner that will prevent the discharge of fuel oil into the receiving waters or on the adjoining shoreline. A Spill Prevention Control and Countermeasure Plan (SPCC Plan) shall be prepared and updated as necessary in accordance with provisions of 40 CFR Part 112 for facilities with the capacity to store 660 gallons in a single container above ground, 1320 gallons in the aggregate above ground, or 42,000 gallons below ground.

The Permittee shall indicate in the AR if an SPCC Plan is necessary and in place at the site and if changes were made to the Plan over the previous year.

#### **F. Storm Exemption**

A non-discharging facility may qualify for a storm exemption from the technology-based effluent limitation for settleable solids and the flow requirements in Permit Parts II.B.1. and II.B.2. of this NPDES general permit if the following conditions are met:

1. The treatment system is designed, constructed and maintained to contain
  - a. 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
  - b. the maximum volume of water runoff (drainage waters) resulting from a 5-year, 6-hour precipitation event.

In computing the maximum volume of water which would result from a 5-year, 6-hour precipitation event, the operator must include the volume which should result from the plant site contributing runoff to the individual treatment facility.

2. The operator takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow.
3. The operator complies with the notification requirements of Permit Parts III.G. and III.H.

### III. MONITORING AND REPORTING REQUIREMENTS

- A. Representative Sampling.** All samples for monitoring purposes shall be representative of the monitored activity. To determine compliance with permit effluent limitations, "grab" samples shall be taken as established under Permit Part II.B. Specifically, effluent samples for settleable solids, turbidity, and arsenic shall be collected from the settling pond outlet or other treatment system's outlet prior to discharge to the receiving stream. Additionally, turbidity background samples shall be taken at a point that is representative of the receiving stream just above the permittee's mining operation.
- B. Reporting of Monitoring Results.** If sampling occurs, monitoring results shall be summarized each month and reported on EPA Form 3320-1 (DMR, OMB #2040-0004, expiration date 5/31/98) as part of the Annual Report (AR). The AR shall be submitted to the Environmental Protection Agency, Region 10, 1200 Sixth Avenue, NPDES Compliance Unit OCE-133, Seattle, Washington 98101-3188, **no later than January 31 for the previous calendar year.**

If there is no mining activity during the year or no wastewater discharge to a receiving stream, the Permittee shall notify EPA of these facts no later than January 31 for the previous calendar year.

The AR shall also be sent to the ADEC office located in Fairbanks. The address can be found in Permit Part I.F.5.

- C. Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- D. Additional Monitoring by the Permittee.** If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the AR. Such increased frequency shall also be indicated.
- E. Records Contents.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
  2. The individual(s) who performed the sampling or measurements;
  3. The date(s) analyses were performed;
  4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and
6. The results of such analyses.

**F. Retention of Records.** The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director or ADEC at any time. Data collected on-site, copies of the Annual Reports (ARs), and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.

**G. Notice of Noncompliance Reporting.**

1. Any noncompliance which may endanger health or the environment shall be reported as soon as the Permittee becomes aware of the circumstance. A written submission shall also be provided in the shortest reasonable period of time after the Permittee becomes aware of the occurrence.
2. The following occurrences of noncompliance shall also be reported in writing in the shortest reasonable period of time after the Permittee becomes aware of the circumstances:
  - a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Permit Part IV.G., Bypass of Treatment Facilities.); or
  - b. Any upset which exceeds any effluent limitation in the permit (See Permit Part IV.H., Upset Conditions.).
  - c. Any violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the Permit.
3. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
4. The Director may waive the written report on a case-by-case basis if an oral report has been received by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.

5. Reports shall be submitted to the addresses in Permit Part II.B., Reporting of Monitoring Results.

**H. Other Noncompliance Reporting.** Instances of noncompliance not required to be reported in Permit Part III.G., above, shall be reported at the time that monitoring reports for Permit Part II.B. are submitted. The reports shall contain the information listed in Permit Part III.G.3.

#### IV. COMPLIANCE RESPONSIBILITIES

**A. Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**B. Penalties for Violations of Permit Conditions.**

1. **Civil and Administrative Penalties.** Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$32,500 per day for each violation).

2. **Criminal Penalties:**

a. **Negligent Violations.** The Act provides that any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or by both.

b. **Knowing Violations.** The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

c. **Knowing Endangerment.** The Act provides that any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or

imprisonment of not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this subparagraph, be subject to a fine of not more than \$1,000,000.

- d. **False Statements.** The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more that \$10,000, or by imprisonment for not more than 2 years, or by both.

Nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

- C. Need to Halt or Reduce Activity not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.
- F. Removed Substances.** Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner so as to prevent any pollutant from such materials from entering waters of the United States.
- G. Bypass of Treatment Facilities.**
  1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.
  2. Notice:
    - a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
    - b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Permit Part III.G., Notice of

## Noncompliance Reporting.

3. Prohibition of bypass.
  - a. Bypass is prohibited and the Director or ADEC may take enforcement action against a Permittee for a bypass, unless:
    - i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - iii. The Permittee submitted notices as required under paragraph 2 of this section.
  - b. The Director and ADEC may approve an anticipated bypass, after considering its adverse effects, if the Director and ADEC determine that it will meet the three conditions listed above in paragraph 3.a. of this section.

## H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. An administrative review of a claim that noncompliance was caused by an upset does not represent final administrative action for any specific event. A determination is not final until formal administrative action is taken for the specific violation(s).
2. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the Permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The Permittee submitted notice of the upset as required under Permit Part III.G., Notice of Noncompliance Reporting; and
  - d. The Permittee complied with any remedial measures required under Permit Part IV.D., Duty to Mitigate.

3. Burden of proof. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

I. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

## V. GENERAL REQUIREMENTS

A. **Anticipated Noncompliance.** The permittee shall also give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

C. **Duty to Reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit by resubmitting the information in Appendix A. The NOI must be submitted at least 90 days before the expiration date of this permit.

D. **Duty to Provide Information.** The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

E. **Other Information.** When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

F. **Signatory Requirements.** All applications, reports or information submitted to the Director shall be signed and certified.

1. All permit applications shall be signed as follows:

a. For a corporation: by a responsible corporate officer.

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the

Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Director, and
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph V.F.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph V.F.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
  4. Certification. Any person signing a document under this section shall make the following 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."

- G. Availability of Reports.** Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- H. Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.
- I. Property Rights.** The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

- J. Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- K. State Laws.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.
- L. Paperwork Reduction Act.**

EPA has reviewed the requirements imposed on regulated facilities in this general permit under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* The information collection requirements of this permit have already been approved by the Office of Management and Budget in submission made for the NPDES permit program under the provisions of the CWA.

## VI. DEFINITIONS

- A. "*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 developed therefrom.
- B. "*Application*" means a written "notice of intent" pursuant to 40 CFR 122.28.
- C. "*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 United States". BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, waste disposal, or drainage from mined areas.
- D. "*Bypass*" means the intentional diversion of waste streams around any portion of a treatment facility.
- E. "*Director*" means the Regional Administrator of the United States Environmental Protection Agency, Region 10 or an authorized representative.
- F. "*Drainage Water*" means incidental surface waters from diverse sources such as rainfall, snow melt or permafrost melt.
- G. "*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.
- H. A "*Grab*" sample is a single sample or measurement taken at a specific time.
- I. "*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).

- J. "*Infiltration Water*" means that water that permeates through the earth into the plant site.
- K. "*Instantaneous Maximum*" means the maximum value measured at any time.
- L. "*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.
- M. "*Mining Season*" means the time between the start of mining in a calendar year and when mining has ceased for that same calendar year."
- N. "*New Facility*" means a facility that has not operated in the area specified in the NOI prior to the submission of the NOI.
- O. "*New Water*" means water from any discrete source such as a river, creek, lake or well which is deliberately allowed or brought into the plant site.
- P. "*NTU*" (Nephelometric Turbidity Unit) is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in a straight line through the water.
- Q. "*Plant Site*" 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.
- R. "*Receiving Water*" means waters such as lakes, rivers, streams, creeks, wetlands, or any other surface waters that receive wastewater discharges.
- S. "*Recommencing Facilities*" are those facilities that may have let permit coverage lapse but still meet the coverage requirements of the GP.
- T. "*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.
- U. "*Severe property damage*" 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.
- V. "*Short circuiting*" means ineffective settling due to inadequate or insufficient retention characteristics, excessive sediment deposition, embankment infiltration/percolation, lack of maintenance, etc.

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

- X. "*Upset*" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit 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.
- Y. "*Wastewater*" 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 that commingle with mine drainage or waters resulting from the beneficiation process.
- Z. "*Waters of the United States.*" See 40 CFR 122.2.

## ATTACHMENT 1

### Turbidity Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be cooled to 4 degrees Celsius (iced).
4. Samples must be analyzed within 48 hours of sample collection.

## ATTACHMENT 2

### Arsenic Sampling Protocol

1. Grab samples shall be collected.
2. Samples shall be collected in a sterile one liter polypropylene or glass container.
3. Samples must be acidified promptly with nitric acid (HNO<sub>3</sub>), 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 (iced) until acidified at the laboratory.
4. Acidified samples must be analyzed within 180 days of the sample collection date.
5. Samples must be acidified for at least 16 hours prior to analysis.

## ATTACHMENT 3

### Settleable Solids Sampling Protocol

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

### Settleable Solids Analysis Protocol

1. Fill an Imhoff cone to the liter mark with a thoroughly mixed sample.
2. Settle for 45 minutes, then gently stir the sides of the cone with a rod or by gently spinning the cone.
3. Settle 15 minutes longer, then record the volume of settleable matter in the cone as milliliters per liter. 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.

**APPENDIX A  
MECHANICAL PLACER MINING PERMIT: AKG-37-0000  
NOTICE OF INTENT INFORMATION**

PERMITTEE NAME			PREVIOUS NPDES PERMIT NUMBER (if any)  AKG-37-0
ADDRESS	<u>SUMMER</u>	<u>WINTER</u>	WATER THAT THE FACILITY DIRECTLY DISCHARGES TO (Receiving Water):
PHONE			
OPERATOR NAME  <input type="checkbox"/> Check if same as Permittee			PLEASE PROVIDE A DRAWING OF YOUR OPERATION ON THE BACK OF OR ATTACHED TO THE NOI SHEET THAT IS SUBMITTED
ADDRESS	<u>SUMMER</u>	<u>WINTER</u>	
PHONE			
FACILITY NAME:	Is your facility located in an area National Parks System Units (i.e., Parks and Preserves), <b>National</b> Monuments, Sanctuaries, Wildlife Refuges, Conservation Areas, Wilderness Areas, or Critical Habitat Areas. <input type="checkbox"/> Y <input type="checkbox"/> N <i>If yes, Which?</i>		LATITUDE
NEAREST TOWN:			LONGITUDE
MINING DISTRICT:		New Source? <input type="checkbox"/> Y <input type="checkbox"/> N (e.g. virgin ground)	
QUAD MAP, TOWNSHIP, RANGE, SECTION		MERIDIANS: <input type="checkbox"/> Umiat <input type="checkbox"/> Kateel <input type="checkbox"/> Fairbanks <input type="checkbox"/> Seward <input type="checkbox"/> Copper River	
For Mixing Zone information please contact: ADEC, 610 University Avenue, Fairbanks, Alaska 99709			
Type of Operation:	Mechanical <input type="checkbox"/> No discharge <input type="checkbox"/> Discharge	or Hydraulicking <input type="checkbox"/> No discharge only	Amount of Material Processed:
SIGNATURE:		DATE:	
PRINTED NAME:			
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.			

Permittee Name:

Previous Permit No. (if any)

Receiving Water:

AKG-37-0

**Drawing:**