GENERAL PERMIT (GP) POA-2014-55 Mechanical Placer Mining Activities within the State of Alaska

AUTHORITY: The District Engineer (DE), Alaska District, U.S. Army Corps of Engineers (Corps), reauthorizes General Permit (GP) POA-2006-1944-M1 as GP POA-2014-55, for Mechanical Placer Mining Activities in the State of Alaska, under Section 404 of the *Clean Water Act (CWA)*. (Public Law 95-217, 33 USC 1344 et seq.)

SUBJECT: This GP authorizes miners to place *fill material* into *waters of the United States (U.S.)*, including *wetlands* and streams, for the purpose of *mechanical placer mining* within the State of Alaska, under the terms and conditions of the GP. The goals of this GP are to avoid *loss of* and *minimize* impacts to waters of the U.S. Emphasis is placed on *restoration* of *aquatic resource functions*.

CHANGES FROM PREVIOUS GP (POA-2006-1944):

- This GP authorizes up to five (5) acres of *wetland disturbance* and/or up to 1,500 linear feet (If) of *stream channel diversion* or *relocation, at any time. Uplands* are not part of this GP.
- Operations solely on Federal lands, that meet the terms and conditions of this GP, will be *non-reporting* to the Corps and will not receive a hard copy Corps permit. Operations are subject to compliance inspections.
- A Corps Jurisdictional Determination (JD), and Mitigation Statement, including a Restoration Plan for Aquatic Resources are required.

NOTE: Words in *italics* are defined in the Appendix: Definitions, Acronyms, and Abbreviations. Words are italicized on first use in a section.

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- I. ACTIVITIES COVERED BY THE PERMIT: Mechanical placer mining activities that involve placement of *fill material* into *waters of the United States*, including *wetlands* and streams, such as:
 - Mechanized land clearing
 - Construction of berms or dams associated with settling ponds
 - Stream *diversions* (temporary)
 - Stream relocations (permanent)
 - New mine features constructed in wetlands, such as airstrips, camps, roads within the mining operation, culverted crossings of streams or wetland areas
 - Access roads and road extensions outside the mining operation intended to be permanent (may be permitted through a different process)
 - Stockpiles
 - Reclamation and *restoration* activities
 - Exploration activities for placer mining are included. Activities include:
 - o fill for exploratory drill pads
 - o fill for trenches and holes
 - o side casting from trenches and holes
 - o bulk samples and other test methods
 - A. LIMITS OF THE GP: General permits have restrictions. If your operation exceeds the limits of the GP, or if review reveals that your project may have a greater than minimal impact on the environment, you may be required to obtain an Individual Permit. (33 CFR 325.2(e)(2)).
 - 1. This GP authorizes up to five (5) acres of *wetland disturbance* and/or up to 1,500 lf of *stream channel diversion or relocation, at any time*.
 - Operations in impaired waters under the State's 303(d) program have water quality reporting requirements until such time as the waters are removed from the impaired waters list. (See Alaska Department of Environmental Conservation (ADEC) Certificate of Reasonable Assurance attached to this GP)

- **II.** ACTIVITIES NOT COVERED BY THE PERMIT: Some of these activities may require a different type of Department of the Army (DA) permit and others may not need a permit. Contact the Corps to determine whether a permit is required.
 - <u>Activities in *uplands*</u>. No Corps permit is required.
 - <u>Post mining development</u>. If future development plans have a different project purpose than mining, please contact the Corps for assistance.
 - <u>Temporary mining roads</u> for the purpose of moving mining equipment are exempt from the CWA (33 CFR 323.4 (a)(6)). Alaska District has a general time limit of **three (3) years** for a "temporary road". *Best Management Practices (BMPs)* apply; see the Mitigation Statement for guidelines. Generally, a road that is in place more than 3 years are not temporary.
 - <u>Recreational Mining</u> use of hand tools such as a pick, shovel, pan, and/or rocker box. No Corps permit is required as explained in Special Public Notice 94-10, issued September 13, 1994.
 - <u>Commercial Gravel Operations</u> located at a placer mining site, but operated for the sole purpose of gravel sales, are considered an independent mining action which may require a separate Corps permit.
 - <u>Suction dredge mining</u> use of suction device to remove bottom substrate from a water body, and discharges the material from a sluice box for the purpose of extracting gold or other precious metals. Sluice box discharge is regulated by the ADEC under a Section 402 Alaska Pollution Discharge Elimination System (APDES) permit.
 - <u>Mining in Navigable Waters</u> of the United States may be authorized under Section 10 of the Rivers and Harbors Act of 1899 through the use of GP POA-2007-372, Floating Recovery Devices (FRDs).
 - <u>Hard Rock Mining</u> is the process of removing valuable metals or elements (not necessarily gold) bound within rock. A Corps permit may be required if the project involves surface activities that discharge fill material into wetlands or streams.
 - <u>Coal Mining</u> is not covered under this GP but may require a Corps permit.

III. TERMS AND CONDITIONS FOR THE GP (33 CFR Part 325.4)

A. GENERAL CONDITIONS (GCs):

- 1. Disturbance area:
 - a. Up to five (5) acres of wetland disturbance and/or
 - b. Up to 1,500 lf of a stream *diversion* (temporary) or *relocation* (permanent)
 - c. At any time
 - Disturbed areas in *wetlands* and length of *stream channel* diversions *or* relocations shall not accumulate so as to exceed the size limits of this GP until such time as they are *successfully reclaimed* or *restored*.
 - A "rolling footprint" is allowed as long as an operator is engaged in concurrent reclamation.
- 2. Management of overburden and pay material:
 - a. Mine operations shall be managed to avoid *erosion* of *fill material* from the mine into waters of the U.S.
 - b. Appropriate measures, consistent with standard construction practices, to manage soil erosion, shall be implemented and maintained in effective operating condition during all phases of mine operation, and during periods of shut down.
 - c. Fill material shall not show signs of erosion, such as gullies, head cuts, caving, block slippage, or sloughing into waters of the U.S. beyond the limits of the *mine site*.
 - d. Organic materials, including vegetation, woody materials, peat, and other organic overburden, shall be separated from non-pay and mineral overburden, and stored so as to be available for efficient handling in reclamation and *restoration* of *aquatic resources*.
 - e. Mine operations and associated activities shall be separated from stream channels, diversions and relocations as *practicable*, so as to protect the operation from anticipated high flows. Separation measures shall include the use of *vegetated riparian areas*, compacted berms, silt fences, a distance separation of 25 feet, or other measures.
 - f. Material shall not restrict or impede the passage of normal or high flows in a stream channel.

- 3. Management of water:
 - a. Mine operations shall be managed to avoid *sedimentation* of waters of the U.S. beyond the limits of the mine site.
 - Appropriate measures, consistent with standard construction practices, shall be used to manage water during all phases of the mine operation, and during periods of shut down. This applies to management of surface water runoff, groundwater infiltration and storm water.
 - b. Water management features shall be designed to slow, collect, and retain water at the site, to promote *revegetation* and restoration of aquatic resources. This applies to settling ponds, bedrock drains, ditches, filters, natural vegetation, or other features.
 - c. Stream diversions and relocations are covered in GC 5.
- 4. Management of wetland *riparian areas*:
 - a. When riparian areas of streams contain wetlands, they shall be managed so as to maintain or restore a *vegetated riparian area* adjacent to streams, to improve *functions* for water quality and channel stability.
 - To maintain a vegetated riparian area means to keep the area adjacent to a stream in a state of natural vegetation free of heavy machinery, debris, garbage or pollutants.
 - To restore a vegetated riparian area means to utilize a revegetation method, including, but not limited to, natural revegetation, and use of locally available materials, including native seeds, dormant woody cuttings, transplanting, or other methods.
 - b. The width of the riparian area:
 - Riparian areas are measured perpendicular to the *ordinary high water mark* on each bank of the stream and follow the shape of the channel. Width shall be at least:
 - o 50 feet wide on *anadromous fish* streams
 - o 25 feet wide on all other streams
 - Operators shall consult the Alaska Department of Fish and Game (ADFG) or the state Anadromous Waters Catalog to determine fish status and appropriate riparian area width for streams at the site. This information shall be provided in the Corps *Jurisdictional Determination*.
 - c. Riparian areas shall be visibly marked prior to mining and maintained during the mining operation.

- d. If disturbed during mining, riparian areas shall be restored.
 - Recontouring: Berms shall be removed if present, and streambanks reshaped to provide a *floodplain* at moderate to high water (1.5 year flood).
 - Revegetation:
 - Width shall satisfy requirements in "GC 4-b".
 - o Initiation:
 - Revegetation shall be initiated immediately on a stream relocation.
 - Revegetation on all other disturbed riparian areas, including stream channel diversions, shall be initiated within one year of completing mining activities in an area. Until revegetation is initiated, this area is considered part of the *rolling footprint*.
 - Performance standards:
 - Achieve 30% live plant cover of the riparian area by the end of three (3) growing seasons.
 - Achieve 70% live plant cover of the riparian area by the end of five (5) growing seasons.
- 5. Management of stream channel diversions and relocations:
 - a. Stream channels may be diverted or relocated to allow mining within the area of the original channel. The Corps recommends that operators move the channel once, and establish one permanent relocation, rather than construct multiple, shorter, temporary diversions.
 - b. Length shall be limited to one thousand five hundred (1,500) linear feet at any time.
 - GPS points are required for beginning and ending points of diversions and relocations. Information shall be included in the Annual Report (see GC 10).
 - c. Time Limits:
 - A seasonal diversion shall remain in place for one (1) season, after which it shall be restored.
 - A temporary diversion shall remain in place for up to five (5) years, after which it shall be restored.
 - A stream relocation is considered a permanent realignment. Restoration is conducted at the time of realignment.
 - d. Stream channel diversions and relocations shall be constructed and maintained to:
 - Withstand periods of anticipated high flow
 - Retain channel, substrate, and floodplain features without significant gullying or head cutting.

- Reduce stream energy by maintaining a floodplain and riparian area, armoring bed and banks with large material, or using other methods
- Avoid excessive loss of flow through the bed and channel dewatering
- Provide fish passage and comply with the State of Alaska, Department of Fish and Game, Division of Habitat, Fish Habitat Permit. Diversion of anadromous streams is not allowed unless authorized by ADFG.
- e. Temporary diversions shall be restored:
 - Backfill with suitable, non-erodible material to promote natural plant growth.
 - Berms shall be removed if present.
 - Note: If an operator decides to leave a diversion as the permanent location of the channel, all requirements of a stream relocation in "GC 4 and GC 5-f" shall be satisfied.
- f. Channel relocations shall be constructed to restore functions for *floodplain connectivity*, channel stability and vegetated riparian areas:
 - Floodplain connectivity occurs when flood flow accesses the floodplain at moderate to high water (1.5 year flood).
 - Bank Height Ratio (BHR) measures this function. BHR shall be included in the Annual Report (see GC 10) prior to mining, and following channel restoration (at years 3 and 5).
 - Functioning: BHR is within range of 1.0 to 1.2
 - Functioning-at-risk: BHR is within range of 1.3 to 1.5
 - Non-functioning: BHR is greater than 1.5
 - Channel stability occurs when there is a balance between erosion from cut banks and deposition on bars, according to stream type.
 - The channel shall be constructed similar to the unmined channel with respect to: length, cross section, grade, sinuousity, substrate, and entrenchment. Exceptions:
 - Historically mined streams may require a longer channel for grade adjustment.
 - Grade control is required on channels that are shorter than the original channel
 - Abandoned channels may be used if available.
 - Riparian areas shall be revegetated, as outlined in "GC 4".
- <u>Reclamation</u>: Reclamation is currently required of all operators under the GP, by State statute (AS 27) and the Bureau of Land Management (BLM) regulation (3809.420). Minimum standards are for achieving site stability. Many aspects of reclamation, as required by the State, satisfy *minimization* as defined by the Corps.

- a. Time Limits:
 - Mine features shall be reclaimed concurrently with advancement of the mining operation, so as to maintain a *rolling footprint*.
 - Operators shall be current on reclamation requirements at the time the GP expires.
- b. Recontouring:
 - Pits and diversions shall be backfilled.
 - Areas shall be reshaped and regraded so as to conform to adjacent landforms, facilitate revegetation, control drainage, and *minimize* erosion.
 - All material, including tailings, non-pay overburden, and organic material, shall be used in reclamation.
 - Stockpiled organic material shall be spread over contoured tailings to hold sufficient moisture to promote natural plant growth.
 - Areas with compacted soils or tailings shall be ripped, tilled, or otherwise broken up to promote natural revegetation.
- c. Filling exploration drill holes, trenches, ditches, mineralized surfaces and bulk sample pits:
 - Exploration features shall be plugged or backfilled so as to facilitate revegetation, control drainage, and minimize erosion.
 - Areas showing mineralized discovery may be left open, however, drainage shall be controlled, erosion managed, and limits of GP apply.
- d. Acceptance of reclamation:
 - Under the CWA, the Corps regulates discharge of fill material into waters of the U.S., including wetlands and streams, on federal, state and private property.
 - The Corps will generally accept reclamation measures that have been accepted by the land manager or private land owner, unless there is a compliance or enforcement issue with respect to the CWA, or the terms and conditions of the GP.
 - Following reclamation, a permittee may be required to make minor construction adjustments for the purpose of addressing a compliance or enforcement issue with respect to the CWA, or the terms and conditions of the GP. These may include additional revegetation, use of fertilizer, re-shaping the channel, or adjustments of slope or structures to hold or maintain grade.
- 7. <u>Restoration of *Aquatic Resources*</u>: The Corps requires restoration of aquatic resources to provide functional lift on reclaimed mine sites. The Corps prefers that the operator determine how restoration occurs, based on knowledge of site conditions, the location of the site in the watershed, and concurrence of the land manager. The *Restoration Plan* shall be attached

to the Mitigation Statement. The following are some ideas for your proposal:

- a. *Swales* may be constructed on slope contour to improve functions at the site for water absorption, water storage, and groundwater recharge.
- b. *Wetland* areas may be constructed in shallow depressions, or low areas constructed off of stream channels. **Performance standards are**:
 - Vegetation:
 - Achieve 30% live plant cover of constructed wetland areas with hydrophytic (wetland) plants by the end of three (3) growing seasons.
 - Achieve 70% live plant cover of constructed wetland areas with hydrophytic (wetland) plants by the end of five (5) growing seasons.
 - Soils: Depressional areas shall be lined with a minimum of 2 to 6 inches of organic material, and be contoured so as to accumulate fine particles or *sediment* over time.
 - Hydrology: Depressional areas shall be constructed at an elevation that intercepts the water table. Within three (3) years, constructed wetlands shall show one primary indicator for wetland hydrology for at least 14 days of the growing season:
 - o Saturation within top 12 inches of soil profile
 - o High water table within top 12 inches of soil profile
 - o Surface water
- c. Shallow ponds with a *littoral shelf*. Settling ponds may be modified to provide areas for storage of surface water and habitat enhancement.
 - On fish-bearing streams, ADFG concurrence is requested.
 - Shallow ponds shall be no more than three (3) feet deep at center.
 - Littoral Shelf:
 - To add habitat complexity, shallow ponds may be constructed with irregular shorelines and variable depth, with islands or peninsulas.
 - Littoral shelves shall be constructed 20 to 60 feet wide, with slopes varying between 10 to 1 and 20 to 1, around 75% of the perimeter of the pond, below the ordinary high water mark.
 - To accelerate revegetation, 2 to 6 inches of organic materials may be spread on the shelf.
 - Performance Standard:
 - Achieve 30% live plant cover of constructed wetland areas with hydrophytic (wetland) plants by the end of three (3) growing seasons.
 - Achieve 70% live plant cover of constructed wetland areas with hydrophytic (wetland) plants by the end of five (5) growing seasons.

- d. Operators may propose restoration which results in functional lift of wetlands and/or streams in previously mined areas, such as:
 - Historically mined areas that were not reclaimed may be restored.
 - Non-wetland riparian areas may be revegetated.
- 8. *Inactive* Mine Sites:
 - a. Under this GP, a mine site is considered inactive if operations are suspended for three (3) years.
 - b. If an operation becomes inactive, the permittee, and claim owner, are not relieved of requirements to manage erosion and water at the site, and to conduct site reclamation and aquatic resource restoration.
 - c. A permittee or claim owner may make a good faith transfer of reclamation responsibilities to a third party. (See GC 11 Transfer of permit)
- 9. Section 401, Water Quality Certification ("401 Certification"):

Alaska Department of Environmental Conservation (ADEC) issues a Certificate of Reasonable Assurance, pursuant to Section 401 of the CWA (401 Certification). The "401 Certification" is attached to the final page of this GP. Operators shall follow all conditions listed in the "401 Certification".

- 10. Operators shall submit an Annual Report each year. It may be submitted directly to the Corps, by December 31 of each year, or, be included with the state's "Application for Permits to Mine in Alaska" (APMA) for the following year.
- 11. Transfer of General Permit: GP authorizations may be transferred from one responsible party to another by submitting a letter of request, or email, to the appropriate Corps office. The correspondence shall contain:
 - a. A copy of the GP authorization letter.
 - b. The following statement: 'Please transfer the authorization under General Permit POA-2014-55, for mining operation POA-(authorization number), (waterway name), APMA # (number) from (name: current operator/owner) to (name: new operator/owner)'.
 - c. Shall include **new** operator/owner signature and date.
 - d. The terms and conditions of this general permit, including any special conditions, will continue to be binding on the new responsible party.
- 12. Exceptions to conditions may be made on a case-by-case basis, in response to site specific conditions, or practicability, after consultation and written approval from the Corps.

B. SITE INSPECTIONS, COMPLIANCE AND ENFORCEMENT: (33 CFR Part 326)

- 1. The permittee shall keep an original copy of the permit in a safe location, and a duplicate copy at the *mine site* for review by visiting agencies. The yellow Notice of Authorization shall be visibly posted at the mine site.
- 2. The permittee must allow the DE or designated representative(s), to inspect the activity to ensure work is being, or has been, done according to the terms and conditions of this GP.
- 3. Refusing access to inspection of the authorized activities is considered noncompliance with the terms and conditions of this GP.
- 4. Failure to obtain a permit, or to comply with the terms of this GP, may result in an enforcement or non-compliance action, pursuant to 33 CFR 326.3, 33 CFR 326.4 and 326.5. The Corps and the permittee may work to reach a mutually agreeable solution to resolve the issue through voluntary measures, or, the Corps may issue an administrative order requiring compliance with the terms and conditions of the permit, or initiate legal action where appropriate.
- 5. A non-compliance or enforcement action may result in suspension of work, revocation of the permit, directive to remove fill material or other structures, and directed restoration of waters and/or wetlands.
- 6. If the permittee fails to comply with a directive, in certain situations (such as those specified in 33 CFR 209.170), the Corps may accomplish the corrective measures by contract, or otherwise, and bill the permittee for the cost.
- In certain cases, imposition of penalties is provided for under Section 301 of the CWA (33 USC 1319), or Section 9 of the Rivers and Harbors Act of 1899 (33 USC 401).

C. EXPIRATION: (33 CFR 325.2)

- 1. This permit expires October 31, 2020.
- 2. Operations that have a Corps authorization and are ongoing by the expiration date of the GP, have an additional twelve (12) months to operate under the terms and conditions of this GP. The permittee shall also notify the Corps of his/her intent to continue mining.

- IV. OTHER LAWS YOU MUST FOLLOW: This GP requires that you follow other regulations and laws. Violation of these regulations and laws may be grounds to suspend, revoke, or modify your Corps permit. (Also see section VII C. 3.) (33 CFR 320.4(4))
 - <u>State of Alaska Fish Habitat or Fish Passage Permits (AS 16.05.841 Fishway Act and AS 16.05.871 Anadromous Fish Act)</u>. You must follow the rules of the State of Alaska, Department of Fish and Game and comply with any Fish Habitat Permit regarding fish passage, water withdrawal, or *anadromous fish*. To minimize impacts associated with your project, conditions attached to Fish Habitat Permits may be incorporated into your Corps permit.
 - <u>State of Alaska Department of Environmental Conservation (ADEC) Section 402,</u> <u>Alaska Pollution Discharge Elimination System Permit (APDES).</u> You must follow the rules of the APDES, and comply with any discharge or mixing zone stipulations.
 - <u>Migratory Bird Treaty Act (16 U.S.C. 703-712)</u> prohibits the willful killing or harassment of migratory birds, including destruction of active nests and eggs. At first you may not notice migratory birds because many are small or camouflaged, however many species use spruce forests and stream corridors for migration and nesting. In our short Alaskan summers, the nesting season is also short. When possible, schedule activities such as stripping, excavating, and filling before or after the nesting season in your area to avoid impacts to breeding migratory birds. Nesting season in Southcentral and Interior Alaska is generally May 1 to July 15 (for other areas see http://alaska.fws.gov/fisheries/fieldoffice/anchorage/pdf/vegetation_clearing.pdf). For more information contact the closest U.S. Fish and Wildlife Service (USFWS)

For more information contact the closest U.S. Fish and Wildlife Service (USF office: Anchorage (907) 271-2888; Fairbanks (907) 456-0203.

- <u>Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, as amended)</u> protects eagles and their nests from take and disturbance. If you find an active eagle nest within one quarter mile of your mine site, please contact the closest USFWS office: Anchorage (907) 271-2888; Fairbanks (907) 456-0203.
- <u>Alaska Water Use Act (AS 46.15) and Temporary Water Use (11 AAC 93.210)</u>. The Alaska Department of Natural Resources (ADNR) Water Resources Section requires a permit to withdraw, divert, impound, and/or use water for any activities if those activities meet the definition of significant amount of water per 11 AAC 93.035.

V. <u>REEVALUATION, MODIFICATION, SUSPENSION, AND REVOCATION</u>: (33 CFR 325.7)

- 1. The DE may reevaluate the General Permit and/or any individual authorization under the GP at any time or as circumstances warrant. Factors to consider:
 - Compliance with the terms and conditions of the permit.
 - New information is provided to the Corps that was not considered in reaching the original decision.
 - If the activity is found to have greater than minimal adverse impacts to the aquatic ecosystem.
 - If the activity is found to be contrary to the Public Interest.
 - If there have been revisions to statutory and/or regulatory authorities.
 - The extent to which modification, suspension, or other action would adversely affect plans, investments and actions the permittee has reasonably made or taken into account when relying on the permit.
- 2. Reevaluation may cover individual activities, categories of activities, or geographic areas. It may result in use of suspension, modification, and revocation procedures.
- 3. Significant increases in scope of a permitted activity will be processed as new applications for permits in accordance with 33 CFR 325.2 of this part, and not as modifications under this section.
- 4. This GP may be modified, suspended, or revoked at any time by issuing a Public Notice, if the DE finds that the individual or cumulative effects of the authorized activities have an unacceptable adverse impact on the environment or on the Public Interest.

VI. LIMITS OF THIS AUTHORIZATION AND TO FEDERAL LIABILITY: (33 CFR Part 325, Appendix A)

- A. LIMITS OF THE AUTHORIZATION: This permit does not grant any property rights or exclusive privileges, does not authorize any injury to the property or rights of others and does not authorize interference with any existing or proposed Federal Project.
- **B. LIMITS TO FEDERAL LIABILITY**: The Government does not assume liability for:
 - Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - Damages to permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
 - Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - Design or construction deficiencies associated with the permitted work.
 - Damage claims associated with any future modification, suspension, or revocation of this permit.

- VII. HOW TO APPLY: The Alaska District will accept the APMA as a Pre-Construction Notification, pursuant to 33 CFR 320.1 (c).
 - A. COMPLETE APPLICATION: (33 CFR 325.1 (d)) requires the following:
 - 1. Note: Operations solely of federal lands are non-reporting
 - 2. Description, timeframe, and location of the mining operation
 - 3. Current and legible drawings, sketches or plans with plan views, cross sections, and dimensions of the site and the operation
 - Cuts, settling ponds, berms and roads
 - Stream diversions or relocations, and riparian areas
 - Stockpiles: pay material, overburden and organic
 - Access roads: identify new and pre-existing roads
 - Camps and airstrips
 - 4. Submit the Supplements: *Jurisdictional Determination* and *Mitigation Statement*, including your *Restoration Plan* for *Aquatic Resources* with APMAs for all new applications (New and Existing Operations)
 - 5. Signature and current contact information

B. APPLICATION PROCESS:

- 1. Use the state APMA, submitted to the Alaska Department of Natural Resources, Division of Mining (ADNR-Mining), or direct to the Corps.
- 2. There is no application deadline, however, to ensure that you receive a permit, early application is encouraged.
- 3. **Note:** If you have filed an APMA, do not assume that you have received your Corps permit. To be certain that you obtain a Corps permit, contact one of our offices directly.

Anchorage Offices

Corps of Engineers, Regulatory Division Alaska District Office P.O. Box 6898 2204 3rd St. JBER, Alaska 99506-0898 Phone: 907-753-2712 Toll free: 800-478-2712 Fax: 907-753-5567 Email: <u>CEPOA-RD-N@usace.army.mil</u>

ADNR-Division of Mining, Land, Water 550 West 7th Avenue, Suite 900B Anchorage, Alaska 99501 (907) 269-8652

Fairbanks Offices

Corps of Engineers, Regulatory Division Fairbanks Field Office 2175 University Avenue Suite #201E Fairbanks, Alaska 99709 Phone: 907-474-2166

Fax: 907-474-2164 Email: <u>CEPOA-RD-FFO@usace.army.mil</u>

ADNR-Division of Mining, Land, Water 3700 Airport Way Fairbanks, Alaska 99709 (907) 458-6896

C. AUTHORIZATION PROCESS

Day I. Key	Action
Day 0	Applicant submits <i>APMA</i> and Corps Supplements (if due).
Day 1	 Corps dates stamps APMAs received by mail, email, or in person. Corps regularly downloads and date stamps APMAs from the ADNR-Mining "Discuss" website. New projects are assigned a POA- file number.
45-day calendar day review	 45-day Corps review period starts when the APMA is received and date stamped. Note: The posting date on the ADNR-Mining "Discuss" web site is not necessarily the date of download. 45-day clock may be stopped and re-started if the application is incomplete, or there are issues with Cultural Resources, Threatened or Endangered Species, or, Essential Fish Habitat.
30 day completeness review Application Complete -or- Application Incomplete	 Within first 30 days, Corps reviews APMA for completeness. APMA must contain all information required at 33 CFR 325.1 (d) to be complete. This includes the two Corps Supplements required for all new applications (New and Existing Operations) If application is not complete, the Corps contacts the applicant by phone, email, or letter to ask for additional information. The 45-day Corps Review clock stops. The Corps request must specify information needed for completeness. The Corps may speak with the land manager or other agencies about your operation. A new 45 day review period starts once the Corps receives all information needed for a complete application.
10 calendar day agency review	 Corps is required (33 CFR 320.4 (4)) to coordinate with agencies over potential impacts of your project on resources including cultural resources, Threatened or Endangered Species, and Essential Fish Habitat. (See Agency Coordination Section VII C. 3.) Corps contacts agencies by e-mail, or telephone, maintaining a file record. Agencies have ten (10) calendar days from date of contact to respond to the Corps with substantive comments. If the Corps determines that your project may adversely affect a resource, additional coordination may be required between the Corps, the applicant, and the agency, and/or the GP may not apply. The 45-day clock is stopped. A new 45 day review period starts once issues are resolved.
Day 45	 If 45 calendar days have passed, and the applicant has not heard from the Corps regarding an incomplete application, or a substantive agency comment, the applicant may proceed in good faith with their project. The permittee is responsible for following terms and conditions of the GP.

1. Review Process: (33 CFR 330.6)

- 2. Corps Jurisdictional Determination (Corps JD): (33 CFR Part 325.9)
 - Wetland and stream information must be provided in the Corps Jurisdictional Determination Attachment, found in the Supplement.
 - The Corps is requesting aerial and/or site photos of your mine for the purpose of determining whether wetlands are present, and whether or not you require a Corps permit. As a service, the Corps uses photos to make a "preliminary offsite JD", following a process identified in the "1987 Corps of Engineers Wetland Delineation Manual" and the "2007 Alaska Regional Supplement to the Corps Wetland Delineation Manual". This process may be used in place of requiring a consultant supplied JD.
 - A preliminary determination may not be appealed (Regulatory Guidance Letter (RGL) 08-02), however you may provide additional information to be considered.
 - The Corps writes a brief determination stating if jurisdictional or not.
 - All Corps JDs, including "No Permit Required" letters, are valid for five (5) years from issuance, unless plans change or new information is supplied that change the circumstances of the determination. The five year duration of a Corps JD is determined by RGL 05-02, which recognizes that landscapes are affected by man-made and natural changes which may affect wetland status.
- 3. Agency coordination occurs during the 10 day agency review period:
 - Section 106 of the National Historic Preservation Act (NHPA) (36 CFR Part 800) requires the Corps to coordinate with the State Historic Preservation Office (SHPO) to determine potential effects of a project on historic properties or cultural resources. The Corps provides this service by consulting the Alaska Historic Resources Survey (AHRS). Also, the law states that if you discover previously unknown historic or archaeological remains while mining, you must contact the Corps. The Corps then contacts the SHPO.
 - <u>Essential Fish Habitat Section 305 (b) of the Magnuson-Stevens Fishery</u> <u>Conservation and Management Act and 50 CFR Part 600</u> requires the Corps to coordinate with National Marine Fisheries Service (NMFS) to determine potential effects of a project on Essential Fish Habitat (EFH). EFH includes migration, rearing and spawning habitat for *anadromous fish*. You must supply EFH information with your Corps Jurisdictional Determination (Attachment 1). You may obtain this information from the ADFG or the state's Anadromous Fish Catalog.

- <u>The Endangered Species Act (ESA)</u> of 1973 requires the Corps to consult with the USFWS or NMFS to determine potential effects of your project on endangered species or critical habitat. There are no endangered species or critical habitat in Interior Alaska where most mechanical placer mining operations occur.
- <u>Subsistence Resources</u>: The Corps checks with ADFG or tribes to determine if your project would have an adverse effect on subsistence resources.
- <u>State or Federal Special Area Designation</u>: State areas include Game Refuges and Sanctuaries, and Critical Habitat Areas. Federal areas (existing or nominated) include National Wildlife Refuges, National Parks and National Wild and Scenic Areas. Mining operations must not occur in these areas without coordination with the managing agency.
- 4. One of the following three letters may be issued:
 - a. No Permit Required
 - b. Individual Permit is required
 - c. General Permit is verified
 - This GP includes the General Conditions contained in this document, which apply to all operations unless an exception is made.
 - Additional special conditions may be added to individual operations from your *Restoration Plan* for *Aquatic Resources*.
- 5. Authorizations are valid until the General Permit expires five years from the GP issuance (October 31, 2020), unless otherwise modified revoked, or suspended. If you commence this activity before the date that this GP expires, you will have twelve (12) months from the date of the expiration to complete the activity under the present terms and conditions of this GP.

lichael R Michael Salyer

Chief, North Branch Regulatory Division Alaska District, Corps of Engineers

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APPENDIX: DEFINITIONS, ACRONYMS AND ABBREVIATIONS

I. Definitions

<u>1987 Corps of Engineers Wetland Delineation Manual</u>: The federal delineation manual, dated January 1987, used in the CWA, Section 404 Regulatory Program for the identification and delineation of wetlands. The manual requires evidence of wetland vegetation, soils, and hydrology in order to determine that an area is a wetland. <u>http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf</u>

There are different procedures for conducting onsite delineations, by collecting field data, and offsite determinations, from aerial and site photos.

<u>2007 Alaska Regional Supplement to the Corps Wetland Delineation Manual</u>: The federal regional guidebook to identifying wetlands in Alaska. <u>http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/erdc-el_tr-07-24.pdf</u>

<u>Anadromous Fish</u>: 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. In Alaska, anadromous fish species include anadromous forms of Pacific trout and salmon of the genus Oncorhynchus (rainbow and cutthroat trout and chinook, coho, sockeye, chum and pink salmon), Arctic char, Dolly Varden, sheefish, smelts, lamprey, whitefish, and sturgeon.

<u>Aquatic resources</u>: Inclusive term, consisting of natural resources associated with waters of the U.S. regulated under the CWA. It includes the waterbodies listed at 33 CFR Part 328.3, such as *wetlands*, streams, lakes, and bogs, along with the interrelated and interacting communities and populations of plants and animals that live in the waterbodies. It also includes the *functions* associated with a waterbody. See also "*waters of the U.S.*" and *functions*.

<u>At any time</u>: Area of wetland disturbance and/or length of stream diversion or relocation may not accumulate so as to exceed the limits of the GP until such time as they are successfully reclaimed or restored. See also rolling footprint.

<u>Bank Height Ratio</u>: A common method used to assess *floodplain connectivity*. It is obtained by comparing the bankfull depth to the total depth of the channel. It is a ratio determined by measuring the depth from the top of the LOWEST bank to the deepest part of the channel (thalweg) at that location divided by the depth from the bankfull elevation to the deepest part of the channel (thalweg) at that location; preferably at a riffle.

<u>Best management practices (BMPs)</u>: Policies, practices, procedures, or structures implemented to *minimize* the adverse effects on the environment resulting from development. BMPs are categorized as structural or non-structural.

<u>Clean Water Act (CWA)</u>: In 1972, the CWA was signed into law, and the Army was directed to administer Section 404 of the Act, which regulates the discharge of dredged material, *fill material* or both into *waters of the United States*. In 1977, the Corps of Engineers' jurisdiction was increased to include *wetlands* as part of the waters of the United States. The mission of the Corps under Section 404 of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, while allowing reasonable development. This is accomplished through a program which regulates the discharge of fill material into waters of the United States, including wetlands, through issuance of permits to conduct development activities.

<u>Concurrent reclamation</u>: Reclamation that occurs in areas where mining has been completed, while at the same time, other phases of a mining operation continue. This may lead to a *rolling footprint*.

<u>Erosion</u>: Dispersal of soil particles by wind or water. For the purpose of this GP, *fill material* shall not show signs of erosion, such as gullies, head cuts, caving, block slippage, or sloughing into waters of the U.S. beyond the *mine site*.

Diversion: See Stream Channel

Fill material: Material placed into waters of the U.S. that has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a waterbody. Examples of "fill material" include rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the U.S. The placement of overburden, slurry, tailings, or similar mining-related materials" is included in the definition of "discharge of fill material" regulated under Section 404 of the CWA. (Final Definition of Fill, 2002)

<u>*Floodplain*</u>: Land area adjacent to a stream that is subject to flooding during moderate to high flows. One way to define a floodplain is to observe the extent of water overtopping the streambanks during high water events.

<u>Floodplain connectivity</u>: Occurs when moderate to high flood flows are able to spread across the *floodplain*, thereby providing access, or connection between water in the channel and its floodplain. *Bank Height Ratio* is one way to measure floodplain connectivity.

Functions: Physical, chemical, and biological processes that influence the flow, storage, and transformation of materials, energy and water within and through an ecosystem. Examples of physical processes include transport and storage of water and *sediment*. Examples of chemical processes include regulation of oxygen and carbon dioxide, and processing of organic matter and nutrients. Examples of biological processes include: numbers and diversity of species, amount of biomass, and biological productivity. Processes can be measured, which suggest that it is possible to establish objective targets for reclamation.

<u>Inactive</u>: The Corps considers a *mine site* inactive if is not being actively mined for three (3) consecutive years.

Jurisdictional Determination: Procedures used by the Corps to determine whether a Section 404 permit is required for a project at a site. For the purpose of this GP, a JD includes:

- Identification of streams, open waters, wetlands and uplands on a site
- Identification of wetland type (forested, scrub-shrub, emergent, shallow open water)
- Determination that streams connect with downstream navigable waters
- Determination that wetlands abut or are adjacent to streams

Loss of waters of the United States (U.S.): Is caused by filling, flooding, excavation, or drainage of a water of the U.S. as a result of a regulated activity. It includes permanent discharges of *fill material* that change an aquatic area to dry land (or *uplands*), that increase the bottom elevation of a waterbody, or change the use of a waterbody.

Loss of *wetlands* is measured in square feet (X linear feet by X linear feet) and acres. Loss of *stream channel* is measured in the linear feet of stream bed that is filled, excavated, or shortened.

Waters of the United States that are restored to pre-construction contours, lengths and elevations after construction and during reclamation, are not included in the measurement of loss of waters of the United States.

The Corps has a record-keeping responsibility to track "loss of waters of the U.S" that occur as a result of activities that receive a Corps permit.

<u>Littoral shelf</u>: "Littoral" refers to the near shore area of a waterbody that often provides high biological productivity. A "littoral shelf" is a near shore, shallow area with a gradual slope around the perimeter of a waterbody.

<u>Mechanical placer mining</u>: The removal of gold or other precious materials from alluvial gravels using mechanized equipment.

<u>Mine Site</u>: All features of a mining operation covered under "Section I. Activities Covered by the Permit".

<u>Minimize</u>: To make less, reduce <u>Minimization</u>: measures to reduce impacts to waters of the U.S., including wetlands

<u>Mitigation Statement</u>: 325.1 (7) A descriptive statement included with a Section 404 permit application that describes how an applicant plans to avoid and minimize impacts to waters of the U.S. The Mitigation Statement must also describe how impacts to waters of the United States are to be compensated for or, explain why compensatory mitigation should not be required. All permit applications must include this Mitigation Statement.

<u>Non-reporting</u>: Mining operations entirely within federal management that satisfy the requirements of this GP are exempt from submitting the Corps Supplements. These operations will not receive a written notification from the Corps. Operators are responsible for following the terms and conditions of the GP, sight inspections, and compliance. This non-reporting does not expand to operations larger than the GP limits, and requirements to submit an application directly to the Corps for an individual permit remain.

<u>Ordinary high water mark</u>: The line on the shore established by the fluctuations of water, and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. (33 CFR 328.3(e) and RGL 05-05)

<u>*Practicable*</u>: Available and capable of being done after taking into consideration cost, existing technology, and logistics, in light of overall project purposes.

<u>Relocation</u>: See Stream Channel

<u>*Restoration:*</u> The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic *functions* to a former or degraded aquatic resource.

<u>Restoration Plan</u>: A proposal, consisting of a drawing, map, or sketch, and a brief written narrative describing how *aquatic resources* will be restored at a site. (See Attachment 2 in the Corps Supplement)

<u>*Revegetation*</u>: Activities that include, but are not limited to, natural revegetation, and use of locally available materials, including native seeds, dormant woody cuttings, transplanting, or other methods.

<u>*Riparian areas:*</u> Lands adjacent to streams, rivers, ponds, and lakes. Riparian areas are transitional between terrestrial and aquatic ecosystems. See also *vegetated riparian area*.

<u>Rolling footprint</u>: Once an operator has *successfully reclaimed* a mined area, including reestablishing the footprint for *aquatic resources*, the area may be subtracted from the five acre limit. It will then be possible for the operator to move ahead, so as to increase the mine area to five acres again. This is considered a rolling footprint.

<u>Sediment</u>: Eroded material suspended in water or air <u>Sedimentation</u>: Deposition of eroded material

<u>Stream channel</u>: Geologic feature that contains the flow of water in a valley. A stream is physically confined to the channel and defined by its bed and banks.

- Channel form is described in terms of geometry (plan, cross-sections, profile), physical characteristics (substrate, watershed size) and rates of change (discharge).
- Channel development is controlled by interaction between gradient, *sediment* and a range of water discharges.
- A stream channel *diversion* may remain in place for up to five (5) years, after which it shall be restored.
- A stream channel *relocation* is considered a permanent realignment. Restoration is conducted at the time of realignment.

<u>Successfully reclaimed</u>: When an operator has reclaimed an area, including reestablishing the footprint for *aquatic resources*, so that all of the following steps have been accomplished:

- Backfill of pits, recontouring, and respreading organics so as to conform to adjacent landforms, initiate *revegetation*, control drainage, and *minimize erosion*.
- Areas to be restored as aquatic resources have been recontoured, with revegetation initiated.
- Areas are no longer a part of the active mining operation.
- Stream channel *diversions* have been backfilled, with berms removed, and organics respread.
- Stream channel *relocations* are constructed to be on track to satisfy floodplain connectivity, be of appropriate length and other dimensions, and revegetation of the riparian area has been initiated.
- The operator has accomplished all steps to put the area on track to satisfying performance standards. In order to be considered successfully restored, Performance Standards shall be satisfied.

<u>Successfully restored</u>: An area may be considered successfully restored when it satisfies performance standards.

<u>Swales</u>: Swales are generally shallow features in the landscape that may hold or convey water across an area during and following storm events. Swales typically have grass or other low-lying vegetation throughout the swale.

<u>Uplands</u>: There is no regulatory definition of uplands, except that they do not satisfy wetland criteria. In other words, they do not contain wetland vegetation, wetland soils or hydrology during the growing season.

On *mine sites*, uplands may include old tailings, camps, roads or airstrips. These areas may have been *wetlands* filled under a prior GP or before the CWA. Mine sites may also include naturally occurring upland areas that do not satisfy wetland criteria.

<u>Vegetated riparian area</u>: Supports plants that are native to the area, including sedges, grasses, shrubs and trees. A vegetated riparian area provides important *functions* to stream ecosystems, such as:

- reduces runoff and *erosion* from the site
- reduces stream energy
- reduces channel erosion
- maintains *floodplain* structure and function
- provides cover and shade
- provides wood and nutrients
- maintains stream channel dimensions
- improves stream water quality
- improves habitat for fish and other aquatic organisms

<u>Waters of the United States</u>: Include all waters listed at 33 CFR Part 328.3. For the purposes of this GP, this includes *wetlands* and perennial (year round), intermittent (seasonal), and ephemeral (after rain) streams that have a downstream connection to navigable waters.

<u>Wetland disturbance</u>: Area of disturbance in *wetlands*, measured dimensionally, for example: "x" linear feet by "x" linear feet, and in acres. The wetland disturbance includes all activities and mine features constructed by placing fill into wetlands. See Section I, "Activities covered by the permit"

<u>Wetlands</u>: Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (33 CFR 328.3(b))

• Wetlands in Alaska may include bogs, grassy wetlands, forested wetlands, sedge wetlands, tussocks, tundra, and boreal forest. The "1987 Corps of Engineers Wetland Delineation Manual" and the "2007 Alaska Regional Supplement" will be used to determine whether an area is a wetland.

II. Acronyms and Abbreviations:

ADEC – Alaska Department of Environmental Conservation

ADFG – Alaska Department of Fish & Game

ADNR-Mining – Alaska Department of Natural Resources, Division of Mining, Land and Water

APMA – Applications for Permits to Mine in Alaska (ADNR-Mining)

BLM – Bureau of Land Management

Corps – U.S. Army Corps of Engineers

CWA – Clean Water Act

DE – District Engineer

EFH – Essential Fish Habitat

GC – General Condition (of the GP)

GP – General Permit

JD - Jurisdictional Determination

NMFS – National Marine Fisheries Service

SHPO – State Historic Preservation Office

USFWS - U.S. Fish and Wildlife Service

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DIVISION OF WATER Wastewater Discharge Authorization Program

> 555 Cordova Street Anchorage, Alaska 99501-2617 Main: 907.269.6285 Fax: 907.334.2415 www.dec.alaska.gov/water/wwdp

Certified Mail: 7012-3460-0002-9326-5387

May 15, 2015

U.S. Army Corps of Engineers Alaska District - Fairbanks Field Office Regulatory Division (1145), CEPOA-RD 2175 University Ave, Suite 201E Fairbanks, Alaska 99707-4927

Re: General Permit – Mechanical Placer Mining Activities within the State of Alaska Reference No. POA–2014-55

Dear Benjamin Soiseth:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of dredged and/or fill material in waters of the U.S., including wetlands and streams, associated with mechanical placer mining activities within the State of Alaska.

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 15 days of the permit decision.

Visit <u>http://dec.alaska.gov/commish/ReviewGuidance.htm</u> for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the DEC, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

James Rypkema Program Manager, Storm Water and Wetlands

Enclosure: Section 401 Certificate of Reasonable Assurance

cc: (with encl.) Deb McAtee, USACE, Fairbanks Leslie Tose, USACE, Anchorage Michael Daigneault, ADF&G Jack Winters, ADF&G

USFWS Field Office(s) Anchorage, Fairbanks Gayle Martin, EPA Operations, Anchorage Matthew LaCroix, EPA Operations, Anchorage Heather Dean, EPA Operations, Anchorage

STATE OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION CERTIFICATE OF REASONABLE ASSURANCE

In accordance with Section 401 of the Federal Clean Water Act (CWA) and the Alaska Water Quality Standards (18 AAC 70), a Certificate of Reasonable Assurance is issued to the U.S. Army Corps of Engineers, Alaska District, Regulatory Division (1145), CEPOA-RD, 2175 University Ave, Suite 201E, Fairbanks, Alaska 99709-4927 for the placement of dredged and/or fill material in waters of the U.S. including wetlands and streams associated with mechanical placer mining activities within the State of Alaska associated with a Regional General Permit. Mechanical placer mining is defined as the removal of gold or other precious materials from gravels using mechanized equipment.

A state issued water quality certification is required under Section 401 because the proposed activity will be authorized by U.S. Army Corps of Engineers permit (POA-2014-55) and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice POA-2014-55 posted from December 17, 2014 to January 15, 2015.

The proposed activity is located throughout Alaska.

The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge that may result, will comply with applicable provisions of Section 401 of the CWA and the Alaska Water Quality Standards provided that the following additional measures are adhered to.

- 1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, subsurface, or surface waterbodies.
- 2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The permittee must contact by telephone the appropriate DEC Area Response Team for Central Alaska at (907) 269-3063, Northern Alaska at (907) 451-2121, Southeast Alaska (907) 465-5340 during work hours or 1-800-478-9300 after hours. Also, the permittee must contact by telephone the National Response Center at 1-800-424-8802.
- 3. Construction equipment shall not be operated below the ordinary high water mark if equipment is leaking fuel, oil, hydraulic fluid, or any other hazardous material. Equipment shall be inspected recorded in a log on a daily basis for leaks. If leaks are found, the equipment shall not be used and pulled from service until the leak is repaired.
- 4. Fill material (including dredge material) must be clean, free from petroleum products and toxic contaminants in toxic amounts.

- 5. Excavated or fill material, including overburden, shall be placed so that it is stable, meaning that after placement the material does not show signs of excessive erosion. Indicators of excess erosion include: gullying, head cutting, caving, block slippage, material sloughing, etc. The material must be contained with siltation best management practices (BMPs) to preclude reentry into any waters of the U.S., which includes wetlands.
- 6. Include the following BMPs to handle storm water and total storm water volume discharges as they apply to the site:
 - a. Divert storm water from off-site around the site so that it does not flow onto the project site and cause erosion of exposed soils;
 - b. Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
 - c. Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters.
- 7. During construction of the new stream channel, the upstream and downstream ends of the new channel will remain plugged by the existing streambed materials. All channel excavation, other than the plug removals, and bank stabilization shall be completed prior to directing the stream into the new channel. If there are plans to transplant vegetation along the stream banks, the stream should not be directed into the new channel until the fall of the year, to allow for the new vegetation to take hold and not wash out when exposed to the stream during high flow events. If the stream is intermittent, connection of the two channels shall occur during a dry period. Otherwise, the water shall be slowly introduced into the new channel by first removing the downstream plug, then removing the upstream plug.
- 8. All surface runoff water from areas disturbed during the stripping of overburden or moving of existing overburden piles shall be diverted to existing mine cuts or stabilized areas, such as settling ponds, using berms, diversion channels, or brush barriers. Surface runoff containing sediment from disturbed areas shall not be discharged to surface waters, which includes wetlands without treatment.
- 9. Settling ponds shall not be located in a flowing stream. If a settling pond is located where it is likely to flood, and is needed for mining during the next year, it shall be protected from erosion by a berm or another method. Settling ponds shall not be located where a stream channel is going to be reestablished unless the fine sediments are removed or protected from erosion.
- 10. Impaired Waterbody: A water is impaired for purposes of this permit if it has been identified by a State or Environmental Protection Agency (EPA) pursuant to Section 303(d) of the CWA as not meeting applicable State Water Quality Standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established Total Maximum Daily Load (TMDL), and those that a TMDL has not yet been approved or established. For further information on impaired waters and the most current approved 303(d) Listed Waterbodies see: http://dec.alaska.gov/water/wqsar/waterbody/integratedreport.htm.

- a. Discharging to a CWA §303(d)-Listed Waterbody (Category 5) (e.g., Turbidity or Sediment)
 - (i) A permittee who places fill into a surface waterbody listed on the CWA §303(d) list for turbidity or sediment must monitor turbidity at the following locations to evaluate compliance with the turbidity Water Quality Standard. The permittee must sample the:
 - Upstream turbidity in the §303(d)-listed receiving waterbody at a representative location (upgradient) from the mechanical placer mining activity (activity) into the §303(d)-listed surface waterbody; and
 - (2) Downstream turbidity at a representative location immediately downgradient from the activity in the §303(d)-listed surface waterbody, inside the area of influence of the activity.
 - (3) Samples must be collected concurrently, or within a one-hour of each other.
 - (4) Monitoring frequency shall be "three times per week" starting on either the first or second day of the week that activities commence with subsequent samples taken every other day thereafter until three samples are collected.
 - (ii) If a sample is not collected due to safety concerns or a situation beyond the permittee's control, the circumstances must be documented in a log and another sample must be collected as soon as conditions allow.
 - (iii) Based on the sampling, the resulting water quality must meet the state Water Quality Standard for turbidity, as follows: the downstream sample may not exceed 5 nephelometric turbidity units (NTU) above the upstream sample when the upstream turbidity is 50 NTU or less, and may not have more than 10% increase in turbidity when the upstream turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU.
 - (iv) If the difference between the upstream and downstream sample exceeds the turbidity Water Quality Standard, the permittee must:
 - (1) Review the mine site plan and the BMPs selected for the project phase and make appropriate improvements and corrections to the BMPs within seven (7) calendar days of the date the discharge exceeds the water quality standard;
 - (2) Implement improvements and changes to the BMPs;
 - (3) Continue to sample according to the frequency identified in Section 10.a(i)(4) of the certification.
 - (v) Monitoring requirements in Section (10.a) of the certification do not apply when activity occurs outside the riparian zone, as defined in permit section Permit Part III.A.4.b.
- b. Discharging into a Surface Waterbody with an Approved or Established TMDL (Category 4a or 4b) (e.g., Turbidity or Sediment). If the permittee discharges into a surface waterbody with an EPA-established or approved TMDL, the permittee must implement measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL. This includes ensuring that the discharge does not exceed specific wasteload or load allocation that has been established that would apply to the discharge. The permittee must also evaluate the recommendations in the implementation section of the TMDL and incorporate applicable measures into the operations.

- c. Inspection Program. The permittee shall institute an inspection program. A daily visual inspection of the site must be conducted and documented in a log while on-site during the mining season, and include the following:
 - (i) 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; and
 - (ii) Visual monitoring for turbidity upstream of the mine site and at a point immediately downstream of the mine site.
 - (iii) If during a daily visual inspection the receiving water downstream of the operation appears more turbid than upstream, the permittee must take measures to determine the source and ensure compliance with discharge limits in Section 10.a(iii) of the certification and BMPs.
- d. Sampling and Analysis Methods
 - (i) Turbidity analysis must be performed with a calibrated EPA-approved turbidimeter.
 - (ii) 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.
- e. Recordkeeping
 - (i) A permittee must retain records of all monitoring information, field logbooks, or visual monitoring logbooks for a minimum of three years from the time of measurement or observation.
 - (ii) For each sample collected, the permittee must record in a log the following:
 - (1) The date, monitoring location, method, and time of sampling;
 - (2) The name and title of the individual(s) who performed the sampling and analyses;
 - (3) The date(s) and time any analyses was performed;
 - (4) The analytical techniques or methods used; and
 - (5) The results of such analyses in nephelometric turbidity units (NTU) and all calibration and quality control information used to validate the measurement(s).
- 11. Additional Monitoring Required by DEC. DEC may notify the permittee of additional discharge monitoring requirements. Any such notice will state the reasons for the requested monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

12. Other Considerations:

- All solid waste and foreign debris must be eliminated by removal to an off-site DEC-approved facility or by burning (if a paper product). Waste, in this paragraph means all discarded matter, including, but not limited to: human waste, trash, garbage, litter, oil drums, petroleum, ashes and discarded equipment. Hazardous waste must not be disposed of on-site, but instead must be hauled out for disposal in a DEC-approved disposal site.
- All greywater and human waste must be disposed of in a pit, or containment (port-a-potty) that can be transported to allow for disposal at a DEC-approved disposal site. If a pit is used, it must be located at least 100 feet from the ordinary high-water mark of the nearest surface waterbody and four (4) feet above the high groundwater table, and back-filled prior to leaving the site. Prior to installing a septic system check with the DEC office in Fairbanks (Tonya Bear, 907-451-2177, <u>Tonya.Bear@alaska.gov</u>; or 907-451-2109, <u>http://dec.alaska.gov/water/wwdp/ onsite/index.htm</u>) for plan review requirements.
- If activity includes discharges of process wastewater, dewatering water, or drainage waters from open-cut mines or mechanical dredges, permittees shall obtain additional discharge coverage from an appropriate Alaska Pollutant Discharge Elimination System (APDES) permit. For further information, contact the DEC Engineering and Mining Technical Services (907-451-2142, dec.placer@alaska.gov/water/wwdp/engineering.htm)

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: May 15, 2015

James Rypkema, Program Manager Storm Water and Wetlands