



THE STATE
of **ALASKA**

GOVERNOR MICHAEL J. DUNLEAVY

Department of Natural Resources

DIVISION OF MINING, LAND & WATER
Mining Section

MINE PERMITTING ANCHORAGE

550 West 7th Avenue, Suite 900B
Anchorage, AK 99501
Main: 907.269-8647
Fax: 907-269-8949
dnr.anc.mining@alaska.gov

MINE PERMITTING FAIRBANKS

3700 Airport Way
Fairbanks, Alaska 99709
Main: 907.458-6896
Fax: 907.451-2703
dnr.fbx.mining@alaska.gov

2020 APPLICATION FOR PERMITS TO MINE IN ALASKA

November 4, 2019

Dear Miner:

Attached to this letter you will find the 2020 Application for Permits to Mine in Alaska (APMA) packet. This packet is applicable to placer mining, hard rock exploration, and suction dredging operations. Miners are encouraged to submit your application early, as applications are processed in the order that they are received. Applications received after May 31st will be processed on an "as staff are available" basis. Also, miners who are requesting cross country travel authorizations should submit their application at least 60-90 days before the planned travel.

Processing Fees:

The annual application fees have changed and are described in the Fees Section of the application. Other agencies such as the Department of Environmental Conservation and Department of Fish & Game may require additional fees for permits or authorizations.

Multi-Year Renewal Requirements:

For miners applying for a multi-year permit, the following forms still need to be submitted annually:

1. Signed Bond Renewal form with appropriate fees (if applicable), due April 1st.
2. Signed Reclamation Plan or Letter of Intent to Reclaim, due December 31st.
3. Signed Reclamation Statement, due December 31st.

Keep in mind that other permits, such as DEC's Wastewater Discharge Authorizations, Mining Tax License, Land Use Permits or US Army Corps of Engineers Wetlands permits, may have expiration dates separate from the DNR multi-year permit expiration date. Miners should be aware of expiration dates on these other permits.

Reclamation Statement: Due December 31, 2019

As a reminder, applicants are required to file an Annual Reclamation Statement by December 31, 2019 to keep their small miners' exemption from bonding requirements or to satisfy the reporting requirements of their previous reclamation plan. This statement is due whether or not activity took place in 2019 for existing permittees. If assistance is required, please feel free to contact one of our offices listed above.

Submit completed application and appropriate fee(s) to one of the following DNR offices:

DNR Division of Mining, Land & Water
550 W. 7th Ave. Suite 900B
Anchorage, AK 99501-3577
Phone: (907) 269-8647 or (907) 269-5916
Email: dnr.anc.mining@alaska.gov
Fax: (907) 269-8949

DNR Division of Mining, Land & Water
3700 Airport Way
Fairbanks, AK 99709-4699
(907) 458-6896 or (907) 451-2791
dnr.fbx.mining@alaska.gov
(907) 451-2703

Sincerely,

David Charron

David Charron
Geologist IV - Program Manager
Mine Permitting & Compliance



STATE OF ALASKA

Application for Permits to Mine in Alaska (APMA); For placer mining, suction dredging, and hardrock exploration

Generally, to conduct such activities in the State of Alaska, permits and licenses may be needed from several State and Federal agencies. For convenience, your APMA will be initially reviewed for completeness by the Alaska Department of Natural Resources (ADNR) and then distributed to the other agencies that utilize the APMA as the application form from which they issue their respective permits.

This application should satisfy the requirements to obtain permits and approvals from the following State government agencies, however, additional information may be requested:

ADNR Division of Mining, Land & Water (DMLW), Mining Section (DNR-Mining)

On State Mining Claims, Prospecting Sites, or the Nome Public Mining Areas:

- Miscellaneous Land Use Permit (MLUP) 11 AAC 96.040 --or--
- Approved Plan of Operations (APO) 11 AAC 86.150 --or--
- Other written authorization as appropriate for surface use of a mining property. 11 AAC 86.145

On State Upland Mining Leases, Offshore Prospecting Permits, and Offshore Mining Leases:

- Approved Plan of Operations (PoO) 11 AAC 86.800 --or--
- Other written authorization as appropriate for surface use of a mining property. 11 AAC 86.145

All State Lands

The building, placing, or uses of surface structures or other surface improvements, including airstrips and roads, within the boundaries of a mining property must be approved through a plan of operations, land use permit or other written authorization. An active approval is needed for structures, improvements, and equipment to remain on state land. (AS 38.05.255(a)).

All Mining and Exploration Operations (regardless of land status or ownership):

Reclamation Plan Approval and Reclamation Bonding. AS 27.19.030, AS 27.19.040 --or--
Reclamation Letter of Intent for small, exempt operations. AS 27.19.050

ADNR DMLW, Land Section (DNR-Lands)

- Land Use Permits: For summer cross country access and surface activities exceeding Generally Allowed Uses (11 AAC 96.020) on State land other than on mining claims, prospect sites and mining leases. For questions about your route, what supplemental forms may be required and what type of use is allowed, contact the appropriate Regional Land Office: Southcentral Office: (907) 269-8552 Northern Office: (907) 451-2740 or Southeast Office: (907) 465-3400

ADNR DMLW, Water Section (DNR-Water)

- Temporary Water Use Authorization for significant amount of water (including the use of 100% recycle systems). For questions, contact Kindra Geis (907) 451-2790 kindra.geis@alaska.gov

ADNR DMLW, Water Section - Dam Safety Program (DNR-Dam Safety)

- Artificial barriers (dams) come under the jurisdiction of the Dam Safety Program when they meet definitions under AS 46.17.900(3). For questions, contact Charlie Cobb (907) 269-8638 charles.cobb@alaska.gov
Additional forms will be required for jurisdictional dams.

Alaska Department of Environmental Conservation (DEC)

- Wastewater Discharge General Permit authorization: For discharges to waters of the U.S. For questions, contact Nick Dallman (placer mining) at (907) 451-2142 or nicholas.dallman@alaska.gov; or Tim Pilon (hard rock exploration) at (907) 451-2136 or tim.pilon@alaska.gov.
- Aboveground Storage Tank Registration: If your operation will employ the use of at least one aboveground storage tank of noncrude oil (e.g. diesel), that is 1,000 gallons or greater, it must now be listed on a Class 2 Facility Registration and Notification Form within 30 days of operation. For additional information, including the registration form, visit <http://dec.alaska.gov/spar/ppr/prevention-preparedness/class-2-facilities/> or contact Class 2 facility staff at (907)465-5237 or dec.spar.class2@alaska.gov.
- Notify Nearby Drinking Water Systems: If the project is within a Drinking Water Protection Area (DWPA) for a public water system (PWS), please notify the PWS of the proposed activity. Additional requirements from certain permits may apply, such as setbacks from water intakes. DWPAs can be found using an interactive web map application (<http://dec.alaska.gov/das/gis/apps.htm>). PWS contact information can be found at the Drinking Water Watch website (<http://dec.alaska.gov:8080/DWW/>). For additional questions, contact the DEC Drinking Water Program at (907) 269-7656 or online at <http://dec.alaska.gov/eh/dw/index.htm>.

Alaska Department of Fish & Game (ADF&G)

- Fish Habitat Permit (Title 16): Permits are required for stream crossings, suction dredging, and alterations to the bed/banks in anadromous fish streams; stream diversions, dams, and water intake structures in all fish bearing waters or any activity that could obstruct the efficient passage and movement of fish. For questions, contact: South Central/Southwest/Anchorage Office, Ron Benkert, (907) 267-2172 or ronald.benkert@alaska.gov
Interior/Northern/Arctic/Fairbanks Office, Audra Brase (907) 459-7289 audra.braser@alaska.gov
Mat-Su/Palmer Office, Jonathan Kirsch, (907) 861-3203 or jonathan.kirsch@alaska.gov
Kenai Peninsula/Soldotna Office, Brian Blossom (907) 714-2475 or brian.blossom@alaska.gov
Southeast/Douglas Office, Kate Kanouse (907) 465-4290 or kate.kanouse@alaska.gov
Craig Office, Mark Minnillo (907) 826-2560 or mark.minnillo@alaska.gov

Office of History and Archeology (OHA)

- In consideration of potentially significant cultural resources, please do not disturb any historical buildings, structures, objects, or artifacts that were located on the site without consultation with the OHA. If cultural resources are discovered during permitted activities, OHA should be contacted to consult on appropriate measures. Examples of cultural resource sites that could be encountered include, but is not limited to: historical cabin remains (collapsed, standing, or foundations); adits; dredges or other mining equipment; cultural depressions or pits; graves or cemeteries; prehistoric tools or artifacts; and paleontological (fossilized) remains.
- For more information or questions, please call the OHA Front Desk and request to speak with one of OHA's Review and Compliance Staff: (907) 269-8700

This application may serve as notice to obtain permits and approvals from the following Federal government agencies; however, additional information may be required:

Environmental Protection Agency (EPA)

- EPA Spill Prevention Control and Countermeasures (SPCC): For projects with cumulative fuel volume on site larger than 1,320 gallons. Fuel volumes larger than 10,000 gallons must have a SPCC plan certified by a professional engineer. For additional information contact Matthew Carr at (907) 271-3616 carr.matthew@epa.gov or visit <http://www.epa.gov/osweroe1/content/spcc/>

Bureau of Land Management (BLM)

- Notice of Plan of Operation: The BLM has simplified the supplemental document package to a worksheet that can be used to provide all the information required per §43 CFR 3809. For the 2018 mining season you may download a copy of the worksheet at: <http://www.blm.gov/alaska/mining>.
- Please contact your local BLM office if you have questions or to get a hard-copy of the worksheet:
 - Anchorage District Office (Covers Glennallen & Anchorage Field offices):
(907) 267-1246 BLM_AK_ADO_Mining@blm.gov
 - Fairbanks District Office (Central Yukon and Eastern Interior Field Offices):
(907) 474-2200 BLM_AK_CYFO_Mining@BLM.gov OR BLM_AK_EIFO_Mining@blm.gov
 - BLM Alaska State Office Mining Support Group (907) 271-5960 BLM_AK_AKSO_MINING@blm.gov

U.S. Army Corps of Engineers (USACE)

- Under Section 404 of the Clean Water Act (CWA), the USACE has jurisdiction over mechanical clearing and placement of fill into waters of the U.S, which includes streams and wetlands. A wetland Jurisdictional Determination (JD) and Mitigation Statement are required for all new applications (New and Existing Operations), including access within and outside your claim block.
- The CWA applies to operations on federal, state, and private lands; it is the responsibility of the applicant to contact the USACE.
- For assistance with your JD and Mitigation Statement, contact the USACE directly. Contact Ben Soiseth in Fairbanks: Benjamin.N.Soiseth@usace.army.mil (907) 474-2166 or Leslie Tose in Anchorage: Leslie.W.Tose@usace.army.mil (907) 753-2712 or (800) 478-2712.

Interagency supplemental forms and documents are available at: <http://dnr.alaska.gov/mlw/forms/?tab=mining>

The APMA serves primarily, but not exclusively, as a multi-agency application. Do not assume that this APMA application will suffice for all the permits and authorizations your project requires. Contact each agency with jurisdiction over your project to ensure you have submitted all required applications.

This application will NOT satisfy requirements for the following:

Alaska Department of Revenue: Alaska Mining License Tax

- Anyone conducting mining in Alaska must obtain a mining license. The mining license forms can be found online at <http://www.tax.alaska.gov/programs/programs/forms/index.aspx?60610>. Please submit your mining license application directly to the Department of Revenue. For questions contact Seletia Hall, (907) 269-1017 or seletia.hall@alaska.gov.

Department of Natural Resources: Rents, Labor and Production Royalties

- To preserve the right to mine on State lands, a 3% Production Royalty on net income must be submitted each year to Mineral Property Management (AS 38.05.212 and 11 AAC 86.760).
- Other requirements may include Annual Rent and Affidavits of Annual Labor. More information can be found on the DNR Mineral Property Management website at <http://dnr.alaska.gov/mlw/mining/min-prop.cfm>. For Questions contact Heather Lescanec at (907) 269-8648 or heather.lescanec@alaska.gov.

Alaska Mental Health Trust Land Office (AMHTLO), Alaska Mental Health Trust Authority (AMHTA)

- The use of Trust land for recreational activities is allowed under the following conditions: All activities must be day use only, non-commercial, non-motorized, and in compliance with federal and local laws.
- Travel with motorized vehicles across Trust land requires written authorization from the AMHTLO.
- Mining claim staking is not allowed on Trust lands.
- To view maps of Trust lands, click on the following link: <https://alaskamentalhealthtrust.org/trust-land-office/land-sales/lands-and-maps>
- For further information, contact the TLO: (907) 269-8658

Department of Environmental Conservation: Solid Waste Disposal, Camp Permits, Potable Drinking Water Systems

- Remote Camps and Lodges Permit: Find the application online at <https://dec.alaska.gov/media/10894/remote-camps-and-lodges-gp-application.pdf>
- For more information, contact the Division of Environmental Health, Solid Waste Program at (907) 269-7802

Federal Mine Health and Safety Administration (MSHA): Mine ID or Registration

- Contact MSHA directly with general questions: AskMSHA@dol.gov

In accordance with Alaska Statute 27.19, miners may not engage in mining operations until a reclamation plan has been approved. Operations less than five acres must submit a Letter of Intent to Conduct Reclamation and file an Annual Reclamation Statement. Reclamation Statements must be filed or postmarked by December 31st each year, regardless of the level of activity conducted.

Operations of five acres or more must be bonded. You may either join the State Wide Bond Pool or you may submit evidence of an individual financial assurance. All plans and notices on BLM managed lands as per 43 CFR 3809.10 require a separate reclamation plan to be filed with BLM. If your operation involves BLM managed federal land, you must obtain BLM approval of your bonding prior to submission of your application to DNR-Mining.

AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(8) and confidentiality is requested, AS 43.05.230, or AS 45.48). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210. In submitting this form, the applicant agrees with the Department to use "electronic" means to conduct "transactions" (as those terms are used in the Uniform Electronic Transactions Act, AS 09.80.010 – AS 09.80.195) that relate to this form and that the Department need not retain the original paper form of this record: the department may retain this record as an electronic record and destroy the original.

FEES: APMA filing fees have been increased effective July 1, 2018 (see Director's Fee Order #3 for full fee schedule). Other fees, including fees for authorizations, petitions, and services not subject to a fee waiver reduction provided by DMLW and other divisions within the Department of Natural Resources are provided in 11 AAC 05.020 through 11 AAC 05.270 and other statutes and regulations. Additional fees may be charged by the Department of Environmental Conservation, Department of Fish & Game or other agencies using the APMA application.

DNR-Mining Fees:

A nonrefundable application fee is charged when all APMAs are submitted. Fees vary depending on mineral property type (Lease or Mining Claim), operation size and surface land use.

For Mining Claims and Prospecting Sites:

- Less than 5 acres: \$280 for first year, \$80 each additional year up to 5 years (\$600 max)
- More than 5 acres: \$240 for first year, \$80 each additional year up to 5 years (\$560 max)

For Upland Mining Leases, Offshore Mining Leases or those electing a Plan of Operation Approval:

- Less than 5 acres: \$200 for the first year, \$80 each additional year up to 5 years (\$520 max)
- More than 5 acres: \$400 for the first year, \$200 each additional year up to 5 years (\$1200 max)

For Non-State Land Reclamation Plan Approvals (Federal, Private, or Native Corporation lands): \$400 for up to 5 years

Amendments: The amendment filing fee is \$200. Changes in operation must be submitted in writing and approved in advance by all affected agencies before the start of such activity.

Additional fees may be billed for surface land use above two acres on mining claims or five acres on leases, for additional staff time, or for reclamation bonding release. See Director's Fee Order #3 for the full fee schedule.

DNR-Water Fees:

A nonrefundable application fee is charged when applicants request a Temporary Water Use Authorization (TWUA) by using this APMA form as an approved alternate form for the Application for Temporary Use of Water.

The TWUA fee is \$450 for each authorization. Each authorization may include up to 5 sources and can be for a period of up to 5 years. The TWUA fee is in addition to the DNR-Mining Fee and is collected at the time of filing. An annual maintenance fee of \$50 will be billed separately. An additional \$350 fee may be required for amendments.

DNR-Lands Fees:

The application fee for a Land Use Permit for Cross Country Travel is \$400. Additionally, Cross Country Travel is billable at \$240 for **each year** of travel. Authorizations issued by the DNR-Lands Section may also require bonding and insurance in addition to the application fee and will be billed separately.

AU_YW YWg'cf'a cbYmcfXYfg'dUnUV'Yhc''8 YdUfha YbhcZBUi fU'FYgci fWg''

DEC Permitting Fees:

Applicants who request a wastewater discharge authorization from DEC (section #25) are subject to the following annual fees:

- Mechanical Placer Mines without Mixing Zones: \$225
- Mechanical Placer Mines with Mixing Zones: \$315
- Medium-Sized Suction Dredges: \$90
- Norton Sound Large Dredges: \$715

A \$25.00 discount is available to Mechanical Placer Mines with Mixing Zones and fewer than 20 employees. DEC will mail a separate invoice upon authorization.

Submit completed application and appropriate fee(s) to one of the following DNR offices:

DNR Division of Mining, Land & Water
550 W. 7th Ave., Ste 900B
Anchorage, AK 99501-3577
Phone: (907) 269-8647 or (907) 269-5916
Fax: (907) 269-8949
Email: dnr.anc.mining@alaska.gov

DNR Division of Mining, Land & Water
3700 Airport Road
Fairbanks, AK 99709-4699
Phone:(907) 458-6896 or (907) 451-2791
Fax: (907) 451-2703
Email: dnr.fbx.mining@alaska.gov

APMA Instructions and Check List

1. State mining regulations require applications to be completed in ink or typed.
2. Maps and plans can be in black and white or in color, provided they are on 8 1/2 " x 11" sized paper. Over size maps and plans needed to clarify complex operations, are allowed so long as 8 1/2" x 11" sized equivalents are included.
3. If an applicant is requesting authorization to conduct activities on more than 12 claims, please attach a complete mineral property list.
4. **HARDROCK APPLICANTS:** If an applicant is requesting authorization to conduct permitted activities on more than 12 claims, planning 5 or more drill holes or trenches, using more than 5 water take points or conducting in-stream activities in more than 5 locations, then the tabular information in Excel is preferred. A template is downloadable at: http://dnr.alaska.gov/mlw/forms/18apma/AHEA_ReclamationSpreadsheet.xls. Please use the workbook provided or similar format.
5. Electronic application materials can be submitted to dnr.anc.mining@alaska.gov or dnr.fbx.mining@alaska.gov. Please ensure your electronic application materials are signed.

Please review the following checklist and make certain all applicable items are included before submitting the application. Incomplete applications will be returned.

ALL APPLICANTS:

- Are the applicable processing fees, use fees and bond pool fees enclosed?
- Have you written "N/A", or drawn a diagonal line through any un-applicable sections?
- Is there a current, legible sketch and narrative of proposed operation? (See sketch checklist)
- Is the reclamation page signed and dated and the appropriate boxes checked?
- Is the Annual Reclamation Report dated and signed?
- If you are not the owner of the listed State mineral locations, have you provided a notarized Notice of Operator Authorization?
- Are all operators listed? Independent mining subcontractors and other persons not in an employment relationship listed?
- If applicable, have you completed a State Wide Bond Pool Form or State Wide Bond Pool Renewal Form? Include BLM signature if Federal claims are listed.
- Are all your maps and sketches, paper or electronic, included?
 - Plan map and cross section of operations, (see instructions near back of application packet)
 - Access map(s): Include a map of your summer access and your winter cross country access (if applying). Include the appropriate U.S. Geological Survey (USGS) topographic map or maps at a scale of one inch equals one mile (1:63,360) overlain with the proposed access route. Identify entire access on and off your claim block from a major road system, airstrip, or boat landing. Reproduced portions of maps in 8 1/2" x 11" size are acceptable, provided they are readable and suitable for copying. Each map should be clearly identified with a USGS identifier, i.e. Fairbanks A-3; and a legal description (meridian, townships and ranges involving the route).
 - Have you provided a map of your claims? Include a USGS topographic map illustrating: location; claim name; claim number; camp location; airstrips; and appropriate USGS map identifier. Identify those claims with past disturbance and those on which activity will take place this season.

PLACER AND SUCTION DREDGE APPLICANTS:

- If applying for a Wastewater Discharge Permit, have you marked all applicable checkboxes within Box 26 and included coordinates and a signature?
- If applying for a stream diversion, have you provided a map with clearly labeled start and end points to the planned diversion? Provide the mining claim number or legal description of your planned or existing diversion.
- None Offshore Operator Supplement?

HARDROCK APPLICANTS:

- Have you included MSDS sheets for all drilling fluids?
- Have you identified drill targets (either points and/or regional targets) for the duration of the permit application?
- Have you clearly described reclamation measures and drill waste handling protocol?

STATE OF ALASKA
Application for Permits to Mine in Alaska (APMA)

Single Year _____ Multi-year Start: _____ Finish: _____ APMA Number (A/F/J, Year, ****) _____

| | | | | | | | | | | | | | |
|--|---|---|--------------------|----------------|----------------------------------|-------------|--|-----------------|-----------------------|--------------------|---------|------------------------|-----------------|
| What type activity are you planning to perform? *REQUIRED (1) <table style="width: 100%;"> <tr> <td style="width: 50%;">Exploration/Reclamation</td> <td style="width: 50%;">Access Equipment</td> </tr> <tr> <td>Mining/Reclamation</td> <td>Suction Dredge</td> </tr> <tr> <td>Hardrock Exploration/Reclamation</td> <td>Reclamation</td> </tr> </table> | Exploration/Reclamation | Access Equipment | Mining/Reclamation | Suction Dredge | Hardrock Exploration/Reclamation | Reclamation | Surface estate of mineral properties: *REQUIRED (2) <table style="width: 100%;"> <tr> <td style="width: 50%;">State (General)</td> <td style="width: 50%;">State (Mental Health)</td> </tr> <tr> <td>Private (Patented)</td> <td>Federal</td> </tr> <tr> <td>Private (Native Corp.)</td> <td>City or Borough</td> </tr> </table> | State (General) | State (Mental Health) | Private (Patented) | Federal | Private (Native Corp.) | City or Borough |
| Exploration/Reclamation | Access Equipment | | | | | | | | | | | | |
| Mining/Reclamation | Suction Dredge | | | | | | | | | | | | |
| Hardrock Exploration/Reclamation | Reclamation | | | | | | | | | | | | |
| State (General) | State (Mental Health) | | | | | | | | | | | | |
| Private (Patented) | Federal | | | | | | | | | | | | |
| Private (Native Corp.) | City or Borough | | | | | | | | | | | | |
| Mineral Property Owners: *REQUIRED (3) Individual Contact Name and Company Name | Lessee: (4) Individual Contact Name and Company Name *if applicable | Operator: *REQUIRED (5) Individual Contact Name and Company Name | | | | | | | | | | | |
| Mailing Address for official correspondence: *REQUIRED | Mailing Address for official correspondence: | Mailing Address for official correspondence: *REQUIRED | | | | | | | | | | | |
| Summer phone# (Primary): *REQUIRED | Summer phone# (Primary): | Summer phone# (Primary): *REQUIRED | | | | | | | | | | | |
| Summer phone# (Secondary): | Summer phone# (Secondary): | Summer phone# (Secondary): | | | | | | | | | | | |
| Winter phone# (Primary): *REQUIRED | Winter phone# (Primary): | Winter phone# (Primary): *REQUIRED | | | | | | | | | | | |
| Winter phone# (Secondary): | Winter phone# (Secondary): | Winter phone# (Secondary): | | | | | | | | | | | |
| Cell/Satellite: | Cell/Satellite: | Cell/Satellite: | | | | | | | | | | | |
| FAX: | FAX: | FAX: | | | | | | | | | | | |
| E-mail: | E-mail: | E-mail: | | | | | | | | | | | |
| Alaska Business/Corporation Entity #: _____ Registered Agent (Corp./LLC/LP): _____ | Alaska Business/Corporation Entity #: _____ Registered Agent (Corp./LLC/LP): _____ | Alaska Business/Corporation Entity #: _____ Registered Agent (Corp./LLC/LP): _____ | | | | | | | | | | | |
| Project Name If Applicable: (6) | Average Number of Workers: *REQUIRED (7) | Start-Up/Shut Down: (Month/Day) (8) _____ to _____. | | | | | | | | | | | |
| Mining District: *REQUIRED (9) | Applicable USGS Map: *REQUIRED (10) | On What Stream Is This Activity? (11) | | | | | | | | | | | |
| Legal Description of mineral properties to be worked and other projected related activities (MTRS): *REQUIRED (12) _____ _____ _____ | | | | | | | | | | | | | |
| Internal Use Only: Date Application Received Complete: _____ Adjudicator: _____ LAS Entry: _____ CID(s): _____ CID(s): _____ CID(s): _____ | | | | | | | | | | | | | |

ACCESS OUTSIDE OF CLAIM BLOCK, CONTINUED

Indicate type(s) of existing access:

All Season Road: _____.

Summer Cross Country Travel off of claim block that is not considered Generally Allowed Uses (Complete Box 16)

Airstrip

River

Winter Cross Country Travel that is not generally allowed use (Complete Box 16)

Indicate type(s) of access to be constructed:

Access Road

Airstrip

Please describe your construction activities and include mitigation measures to protect water, fish and game resources.

(A map outlining the route of construction activities is required). Attach additional pages if necessary:

CROSS COUNTRY TRAVEL

(16)

Summer Cross Country Travel: Approvals for summer travel are issued from the DNR/DMLW Land section. Applications for LUPs may require sixty to ninety days to process and applications for easements may require six months to one year to process. A performance guarantee, insurance and fees are required before a permit will be issued and will only be released after travel is completed and no negative trail impacts have occurred.

Winter Cross Country Travel: May be approved when ground conditions will support the movement of heavy equipment. Existing roads and trails should be used whenever possible. The winter operation of ground contact vehicles for off-road travel must be limited to areas where ground frost and snow cover are adequate to prevent damage to the vegetation mat and underlying substrate. A completion report is required within 30 days of travel completion. Travel is generally not authorized after April 15th of each year (extensions may be granted as conditions allow).

A Cross Country Travel Route Map is required to obtain authorization. Is the map attached? Yes No

Name the individual(s) or business(es) who will be conducting the cross country travel:

List all equipment and vehicles being transported from box 14, including vehicle weights:

State the average total miles traveled in one round trip: _____. State the number of trips proposed: _____.

State the start and end date(s) or period(s) of proposed cross country travel: _____.

Select the following terrain type(s) that best describes your route of travel: Wetlands Tundra

Uplands Rivers or Other Water Bodies Wooded Areas (6" Trees or larger at breast height)

Will water be needed to construct ramps/ ice bridges? Yes No

If Yes, estimated quantity of water will be used _____ gallons/day WaterSource: _____

CROSS COUNTRY TRAVEL, CONTINUED

Are you transporting fuel? Yes No

The volume of fuel and hazardous substances to be used is the total volume (in gallons) to be carried on one vehicle and any trailers or sleds that vehicle is towing.

Maximum volume of fuel (in gallons) that is being transported by one vehicle and any trailers or sleds it is towing:

Are you transporting other hazardous substances? Yes No If "yes", indicate type and amount (e.g. gallons, lbs, psi):

How are petroleum products contained? (i.e., drums, bladders, steel tanks, etc.) Indicate size of containers:

How are petroleum products being transported? (i.e., skid-mounted tank; trailer; 55 gallon drums on skid; etc.)

Do you have an Oil Discharge Prevention and Contingency Plan approved by the Alaska Department of Environmental Conservation? Yes No

Do you have either a trained spill response team or a contract with a spill response company? Yes No

Describe any measures you plan to take to minimize drips or spills from leaking equipment or vehicles:

Does your cross country travel include the staging or storage of equipment or structures off the claim block? Yes No

If Yes, describe the location and dimensions of the long term or short term parking and/or storage areas.

PETROLEUM PRODUCTS AT PROJECT SITE

(17)

Will Petroleum Products Be Stored on the Project Site? [BLM Operators Only - Spill Worksheet is Required]

0-1,320 gallons of total storage (Secondary Containment recommended, but not required)

1,321-10,000 gallons of total storage (count only containers greater than 55 gallon capacity). A self-certified Spill Prevention, Control, and Countermeasure (SPCC) plan is required and applies to all products, such as diesel fuel, gasoline, lube oil, hydraulic oil and waste oil.

10,000+ gallons of total storage (count only containers with 55 gallons or greater storage capacity). An SPCC certified by a professional engineer is required and applies to all oil products, such as diesel fuel, gasoline, lube oil, hydraulic oil and waste oil.

Indicate Distance Stored From Flowing Waters: _____ Feet. (Minimum distance from naturally occurring water bodies required by DNR is 100 feet).

Is waste oil stored on the project site? Yes No If yes, describe quantity and storage modality:_____.

Are fuel containment berms around storage containers? Yes No Is berm area lined? Yes No

ABOVEGROUND STORAGE TANK REGISTRATION

(18)

If your operation will employ the use of at least one 1,000-gallon aboveground storage tank of noncrude oil (e.g. diesel), it must now be listed on a Class 2 Facility Registration and Notification Form. For additional information, including the registration form, visit <http://dec.alaska.gov/spar/ppr/prevention-preparedness/class-2-facilities/> or contact Class 2 facility staff at (907)465-5237 or dec.spar.class2@alaska.gov. Understood: Yes No

TEMPORARY STRUCTURES/FACILITIES

(19)

Is a camp or placement of any temporary structure requested? Yes No

If No, Please explain: _____

Describe all temporary improvements (including buildings, tent platforms, out-buildings, etc., including thier quantity, dimensions and building type.

What type of property is the camp located on? State Federal Private (Patented) City or Borough MHTL

If camp is on private land, provide location: _____

Proposed Perimeter Dimensions of Camp: _____ length (ft) _____ Width (feet).

Request use of existing facilities, list ADL(s): _____

Year-Round Seasonal, from Approx. _____ to _____, annually.

Request to place temporary structures, list ADL(s): _____

Year-Round Seasonal, from Approx. _____ to _____, annually.

| | Temporary New Structures | Existing Structure Quantity | Use (Shop, office, etc.) | Dimensions (ft x ft) | Dimensions (ft x ft) | Dimensions (ft x ft) |
|---------------|--------------------------|-----------------------------|--------------------------|----------------------|----------------------|----------------------|
| Framed | | | | | | |
| Tent | | | | | | |
| Trailer | | | | | | |
| Platforms | | | | | | |
| Out-Buildings | | | | | | |
| Other: | | | | | | |

** If Required, list any other structures on a seperate sheet, include dimensions, use and type.*

Wastewater - Describe the wastewater type and quantity and proposed method of wastewater disposal:

Solid Waste - Describe the types of waste that will be generated on-site, including solid waste, the source of the waste, and the method of waste disposal, i.e. pit privy, or self-contained system, or outfall line; **Include distance from the nearest water body:**

What is the distance structures, including pit privies will be located from the ordinary high water mark of the nearest freshwater body (lake, stream, river, rivulet, etc.), or the mean high water mark of a saltwater body: _____

Will there be any use of animals (horses, dogs, goats/sheep, etc)? Yes No

Dismantle, Removal, and Restoration Plan: Provide a plan for dismantling and removing temporary structures. Include the method and timeline for restoration of all stucture location areas. **Be sure to include this in your narrative as part of your reclamation, See Section 31.**

MINING METHOD

(20)

Mechanical Placer Mining (e.g., terrestrial open-cut operations with dozer or excavator, etc.)

Estimated cubic yards processed annually: _____

Suction dredge Mechanical dredge (e.g., excavator or clam-shell)

List all suction and mechanical dredges. If information is not applicable, write "N/A." Attach extra sheet if necessary.

| | Dredge 1 | | Dredge 2 | | Dredge 3 | |
|---|-------------------------|--------|-------------------------|--------|-------------------------|--------|
| Vessel ID (Name or Number) | | | | | | |
| Vessel Dimensions | | | | | | |
| Suction Dredge Intake Nozzle Diameter / Pump Size | Inches: | HP: | Inches: | HP: | Inches: | HP: |
| Mechanical Dredge Bucket Volume | Cubic Yards: | | Cubic Yards: | | Cubic Yards: | |
| Processing Rate | Yds. ³ /Hr.: | | Yds. ³ /Hr.: | | Yds. ³ /Hr.: | |
| Wastewater Discharge Rate | GPM: | | GPM: | | GPM: | |
| Maximum Water Depth | Feet: | | Feet: | | Feet: | |
| Average Daily Operating Hours | | | | | | |
| Operation on Sea Ice (Yes/No) | Yes / No | | Yes / o | | Yes / No | |
| Vessel Registration # / State | #: | State: | #: | State: | #: | State: |

Location: Offshore / Salt Water Pond connected to stream
 Stream Pond isolated from stream
 Mine cut isolated from stream

EXPLORATION TRENCHING and DRILLING

(21)

(Indicate target and trenching locations on sketch sheet and/or topographic map)

Trenching: **Yes** **No**

Estimated number of trenches to be excavated: _____ . How long will trenches be open? _____ .

Average Size: Length: _____ Feet Width: _____ Feet Depth: _____ Feet

Drilling: **Yes** **No**

Total Number of Holes To Be Drilled: _____ Type of Drill(s) Used: _____

Estimated Maximum Depth: _____ Feet Diameter of Drill Rod/Casing Rod _____ (NQ/HQ/H, Etc.).

Will water be used? Yes No Indicate how many pumps per water source: _____

Water source name(s): _____

Describe detailed drill plan, closure, plugging methodology, reclamation and abandonment in project narrative.

| Trench/Drilling Location and Mining Claim Information | | | |
|---|---------------------|-------------------------------|-------------------------|
| Trench/Drill ID on Map | ADL/BLM/USMS NUMBER | Decimal Degrees, NAD 83 Datum | |
| | | Latitude | Longitude (approximate) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |

If more than 8 trenches/drill sites, please provide data in tabular format (http://dnr.alaska.gov/mlw/forms/19apma/AHEA_ReclamationSpreadsheet.xls.)

EXPLOSIVES

(22)

Will explosives be used? Yes No If "Yes", Indicate: Type: _____ Amount: _____.

Explosive Handler's Certification/ATF Permit Numbers: _____

Describe your blast design, blast schedule, and explosives handling plan in the project narrative.

DAMS

(23)

Definition of "dam" as described in AS 46.17.900(3). Note: Height should be measured from the lowest point at either the upstream or downstream toe of the dam to the crest of the dam.

No dam required Existing To be constructed

Proposed Structure: Temporary Permanent

Purpose: Makeup water pond Settling/recycle pond Stream diversion Other: _____

Length: _____ ft Height: _____ ft Width At Crest: _____ ft Width At Base: _____ ft

Calculated Water impoundment capacity: _____ acre-feet

IN-STREAM ACTIVITIES and STREAM CROSSINGS

(24)

List any equipment that will be crossing streams or used in-stream (refer to Box 14 if necessary):

List all stream crossings, suction dredge or pump locations, including unnamed streams.

| | Stream Name/ Water Source | NAD 83 Datum (approximate) Coordinates can be obtained using Alaska Mapper http://dnr.alaska.gov/mapper/controller | | MTRSC ¼ ¼ Ex: F001S001N01 SWSW | Check boxes to indicate type(s) of activity | | |
|----|------------------------------|--|------------------------|-----------------------------------|--|----------|-----------------|
| | | Latitude ddd.mmmm | Longitude -ddd.mmmm | | Crossing | Dredging | Water Intake |
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

If in-stream activities and/or stream crossings are requested at more than 5 locations, please provide tabular data format (DNR template available at <http://dnr.alaska.gov/mlw/forms/?tab=mining>).

WATER USE AUTHORIZATIONS

Water usage (including from 100% recycle systems) may require approval by either Temporary Water Use Authorization or a Water Right. Information provided below will be used to determine the quantity of water that you may be authorized to use for your mining operation. When estimating water quantities, please estimate withdrawal amounts typical of a dry summer and provide the maximum quantity that you may withdraw from a particular source (e.g. stream, pond, groundwater, etc.) in a season.

A Temporary Water Use Authorization application may be initiated from this APMA application unless a Water Right is requested. Please contact the ADNR, Water Resources Section at telephone number (907) 451-2790 if interested in a Water Right or for more information.

A. START-UP WATER AND MAKE-UP WATER:

Is water withdrawn from any lake, stream, creek, river, etc. (does not include recycling/settling ponds)? Yes No

What is the name(s) of the lake, stream, creek, river, etc.? _____

What are the months of water use needed (for example May 1st through October 31st)? _____

Start-up water: Is water required at the start of the season **to fill** your recycle/settling pond system?

Yes (if **YES**, complete information below). No If yes, what is the source name? _____

Source: Seepage infiltration from groundwater gained from cut and/or stream

 Diversion ditch from stream. Number of days diverting from stream for start-up water: _____

 Water intake rate: _____ gpm _____ hrs/day

 Pump from stream. Number of days pumping from stream for start-up water: _____

 Number of water pumps for start-up water: ____ Water intake rate (list for each pump): _____ gpm
 _____ hrs/day

Make-up water: Is water required **to maintain** water level in your recycle/settling pond system?

Yes (if **YES**, complete information below). No If yes, what is the source name? _____

Source: Seepage infiltration from groundwater gained from cut and/or stream

 Ditch from stream. Number of days diverting from stream for make-up water: _____

 Water intake rate: _____ gpm _____ hrs/day

 Pump from stream. Number of days pumping from stream for make-up water: _____

 Number of water pumps for make-up: ____ Water intake rate (list for each pump): _____ gpm
 _____ hrs/day Pump intake size: _____ inches

B. RECYCLE/SETTLING POND SYSTEM.

Beaver ponds or other natural water features will not be permitted for use as settling ponds.

Is a pre-settling pond used?: Yes No Is recycle used?: Yes No

How many ponds are used in the recycle system? _____

Recycle pond is pond #: _____ Settling pond is pond #: _____

C. RECYCLE/SETTLING POND SYSTEM (continued).

Indicate Length (L), Width (W), and Depth (D) of each pond:

Pond # 1: L: _____ ft W: _____ ft D: _____ ft Pond # 2: L: _____ ft W: _____ ft D: _____ ft
Pond # 3: L: _____ ft W: _____ ft D: _____ ft Pond # 4: L: _____ ft W: _____ ft D: _____ ft
Pond # 5: L: _____ ft W: _____ ft D: _____ ft Pond # 6: L: _____ ft W: _____ ft D: _____ ft

Estimated hours per day that pump(s) will be used, return line size (in inches), operating pump rate (in gallons per minute), and water usage days per month:

Pump #1: _____ hrs/day _____ inches _____ gpm _____ days/month
Pump #2: _____ hrs/day _____ inches _____ gpm _____ days/month
Pump #3: _____ hrs/day _____ inches _____ gpm _____ days/month

D. CAMP WATER USE.

Is camp water used? Yes No

Maximum number of persons present in camp at a time _____

Camp water source: Well Haul Stream Spring Lake

Name of water source (if any): _____ .

Camp pump intake diameter: _____ Camp pump rate: _____ gpm _____ hrs/day

E. EXPLORATION ACTIVITIES.

Is water required for exploration activities? Yes No

If **YES**, What types of exploration activities are being performed? Trenching Drilling

If **YES**, How many total pumps are used in the exploration activities? _____ (Max pumps per source).

Estimated hours per day that pump(s) will be used, return line size (in inches), operating pump rate (in gallons per minute), and water usage days per month: Pump #1: _____ hrs/day _____ inches _____ gpm _____ days/month

A map of your requested drilling water sources is required with the following information:

- MTRS sections,
- stream reaches or other water sources (please label, including take points if known)
- and drill hole locations

F. SUCTION DREDGING.

If suction dredging activity is occurring please ensure that you have completed the dredge table in Section **(20) MINING METHOD.**

**TIMBER CLEARING AND USE
(Operations on State Lands Only)**

(26)

Pursuant to AS 38.05.255, timber from land open to mining without lease, except "timberland", may be used by a mining claimant or prospecting site locator for the mining or development of the location or adjacent claims under common ownership. Timber not used for the mining or development of the location or adjacent locations, that is removed from the operation must be acquired via timber sale or written letter of non-objection from the Alaska Division of Forestry.

On other lands ("timberlands" and in areas that are closed to mining without lease), timber cleared, used and/or removed must be acquired via a timber sale or a written letter of non-objection from the Alaska Division of Forestry.

Will timber be used for the mining or development of the location or lease? Yes No If yes, continue:

Describe the timbered area or areas to be cleared; include a map or drawing of the areas of timber to be cleared.

Describe the amount of timber to be used for the mining or development of the location or lease and the clearing methods you will use.

Are more than 40 acres of timbered area(s) to be cleared? Yes No

11 AAC 86.145. "A classification or designation indicating that timber and other forest products of significant value are included within a mining property is prima facie evidence that the land on which the property is located is considered to be "timberlands" for purposes of AS 38.05.255"

WASTEWATER DISCHARGE PERMIT APPLICATION

(27)

All mechanical placer mine, suction dredge, and mechanical dredge operations that discharge to a water of the U.S. require an Alaska Pollutant Discharge Elimination System (APDES) permit from DEC. See Cover Pages for a list of APDES permit fees.

Operations wishing to discharge under the APDES Small Suction Dredge General Permit (dredges with intake diameters of 6" or less, or highbankers) may skip this section but must complete annual online registrations, including \$25 fee payments, at <http://alaska.gov/go/2MPF>.

Previously issued DEC-APDES Wastewater discharge permit #: _____

Do you want this APMA to act as an application or renewal for any of the following APDES general permits (GPs)*:

- Mechanical Placer Miners GP (open-cut terrestrial operations): Yes No
- Medium-Size Suction Dredge GP (nozzle diameter greater than 6" to 10"): Yes No
- Norton Sound Large Dredge GP (nozzle diameter greater than 10" or mechanical dredge): Yes No

Waterbody the discharge flows directly into, or would potentially flow: _____

Approximate coordinates of mine site:

Latitude: _____ Longitude: _____

Source (e.g., DNR - Alaska Mapper): _____

*Mechanical placer operations that do not elect coverage under the Mechanical Placer Miners GP may be required to obtain coverage under the Multi-Sector General Permit for Storm Water. Contact DEC to terminate a permit.

Optional* - Mixing Zone Request or Termination for Mechanical Placer Mine Operations

Do you wish to apply for a mixing zone and modified turbidity limit from DEC? Yes No

If a mixing zone is requested, provide the following:

Coordinates of discharge location: Latitude: _____ Longitude: _____.

Maximum Effluent Flow anticipated from your operation _____ (GPM) [must be greater than zero (0)].

Distance to nearest downstream drinking water source _____ and downstream placer mine _____.

Do you wish to terminate an active authorized mixing zone? Yes (APDES# _____) No

*A mixing zone authorizes an increase in the permit's turbidity limit based on available dilution from the surface water. Permittees without mixing zones must meet the water quality standard for turbidity at the point of discharge into the surface water.

Certification Statement – applicable only to information required for DEC authorizations (required for all DEC permit or mixing zone applicants)

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

Signature of Responsible Party: _____

Responsible Party Name (First Last, Position) - Printed: _____

Business Name (if applicable) - Printed: _____

STREAM DIVERSION

(29)

A MAP OF COMPLETE STREAM DIVERSION IS REQUIRED: Plan Map of Operation included in the APMA should show the entire length of the diversion (i.e. where the water is diverted from the natural stream channel to where it returns to the natural stream channel) with start and end locations clearly marked.

Please note: If you have a stream diversion structure; this structure may also qualify as a dam and be subject to the Alaska Department of Natural Resources Dam Safety Program per definitions provided in AS 46.17.900(3). Complete Section 24 (regarding a Dam) of this APMA. If you require further regulatory guidance regarding dams, please contact our Dam Safety and Construction Unit, Dam Safety Engineer at telephone number 907-269-8636 or for more information go to the Alaska Dam Safety Program website at: <http://dnr.alaska.gov/mlw/water/dams/index.cfm>

Is stream diversion required? Yes (if **YES**, complete information below). No

Stream Name: _____

Existing (Date Constructed _____) To Be Constructed (Date _____)

If a diversion is required or pre-existing, please contact your local ADF&G, Habitat Section for Fish Habitat Permitting information. To facilitate permit issuance, please provide the following information:

Is Stream Diversion? Permanent Temporary _____ year(s) _____ months

Will diversion be reclaimed annually prior to freeze-up or be retained throughout the mine life?

Annually reclaimed/returned to natural stream Maintained throughout mine life

Dimensions of existing stream in diversion area:

Length _____(ft) Top Width____(ft) Bottom Width____(ft) Depth____(ft) Floodplain Width____(ft)

Dimensions of proposed diversion:

Length _____(ft) Top Width____(ft) Bottom Width____(ft) Depth____(ft) Floodplain Width____(ft)

Dominant substrate type (Choose Two): Bedrock Boulder Cobble Gravel Sand Silt/Clay

Note: Diversion should approximate the existing stream in terms of meander bends, length, depth, stream width, and floodplain width.

(Please provide plan and profile diagrams of diversion in Section 29, PLAN MAP OF OPERATION) or attach additional sheets as necessary

VICINITY MAP

| | |
|---|-----------------|
| Date Prepared: | Applicant Name: |
| STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND AND WATER | |
| MAP: | |
| Sec.(s) _____ Township _____, Range _____, Meridian _____ | |
| Scale: 1" = _____ | ADLs: |
| SHEET OF _____ | APMA # _____ |

(Attach additional sheets, along with detailed explanations as necessary)

CROSS SECTION SKETCH *REQUIRED

BEFORE ACTIVITY

(31)

DURING ACTIVITY

AFTER ACTIVITY

Date Prepared:

Applicant Name:

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER**

MAP:

Sec.(s) _____ Township _____, Range _____, Meridian _____

Scale: 1" = _____

ADLs:

SHEET OF

APMA #

2019 ANNUAL RECLAMATION STATEMENT

(32)

Placer Mining
Suction Dredging
Hardrock Exploration

APMA #: _____

Complete and return this statement by December 31, 2019. If you did not operate, fill in name, check bottom box, sign and return form.

In accordance with AS 27.19 (Reclamation Act):

I, _____ hereby file an annual reclamation statement for the 2019 mining operation described in subject Application for Permits to Mine in Alaska. (Submission of this statement does not constitute reclamation approval.)

Volume of material disturbed in 2019: _____ cubic yards (includes strippings and processed material).

Sluice days last season: _____ Cubic yards of material processed daily: _____ Annually : _____

Total acreage disturbed in 2019: _____ acres. (Includes stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary stream diversions, stream bypasses, and settling ponds). Federal operators should include area of camp and access roads.

Length _____ feet and Width _____ feet of stream diversion. No Diversion

Stream diversion: Temporary Permanent (check one).

Total area reclaimed in 2019: _____ acres.

Total un-reclaimed acres: _____ (This should match "total acreage currently disturbed" on the 2019 Reclamation Plan Form.)

For areas reclaimed, the following reclamation measures were used (check only measures that were used).

You must include photographs or videotapes of the completed reclamation work:

- Spread and contoured tailings
Spread topsoil, vegetation, overburden muck or fines on the surface of contoured tailings
Reestablished flood plain with stream channel in stable position
Ponds are reclaimed
Backfilled and reclaimed temporary stream diversions
Camp removed, cleaned up and left free of debris
Hardrock Exploration: Complete and submit an electronic Annual Reclamation Report

Other reclamation measures taken:

[Empty box for other reclamation measures taken]

I did not operate in 2019 and therefore did not conduct reclamation.

Relationship to Claim(s)
Owner Lessee Operator
Agent For: _____

Signed _____ Date _____

HARDROCK NARRATIVE *REQUIRED

(32, CONT)

A narrative of the operation is required. A narrative of the operation is required. Please use the space provided below or attach additional sheets as necessary to answer the following questions. Include any additional information to fully define your operation.

DESCRIBE ACCESS TO PROPERTY, DRILL/TRENCH SITES, INCLUDING LENGTH AND TYPE OF ACCESS ROUTES. DESCRIBE ACCESS RECLAMATION MEASURES TO BE CONDUCTED AND TIMELINE:

DESCRIBE EXPLORATION METHOD, SCOPE OF WORK PROPOSED, EQUIPMENT, WHEN AND WHERE ACTIVITIES WILL OCCUR, PERSONNEL HOUSING LOCATION AND CAMP DESCRIPTION:

DESCRIBE SITE PREPARATION ACTIVITIES AND PRE-RECLAMATION MEASURES:

DESCRIBE PAD CONSTRUCTION AND DIMENSIONS:

DESCRIBE DRILL WASTE AND DRILL WATER MANAGEMENT, DRILL FLUIDS AND DISPOSAL METHODS. ATTACH MSDS/SDS FOR ALL SUBSTANCES:

DESCRIBE FUEL HANDLING AT EXPLORATION SITES DRILL (PADS AND TRENCHES) AND OFF SITE (CAMP OR BASE OPERATIONS). DISCUSS SPILL PREVENTION AND RESPONSE PLAN:

DESCRIBE WATER USE INCLUDING ESTIMATE OF DAILY WATER USE:

DESCRIBE HOW THE OPERATION WILL AVOID AND/OR MITIGATE POTENTIAL IMPACTS TO FISH, WILDLIFE AND CULTURAL RESOURCES:

DESCRIBE CLOSURE, PLUGGING METHODOLOGY, SURFACE RECLAMATION AND ABANDONEMENT:

ANNUAL RECLAMATION REPORT FOR HARDROCK EXPLORATION REQUIREMENTS

The Alaska Reclamation Act AS 27.19 requires operations that disturb less than five acres to file an Annual Reclamation Statement. DNR- Mining requests that you do so by December 31st of each year that the permit is in effect. Operations that will disturb more than five acres are required to have a Reclamation Plan Approval and to submit an Annual Exploration Report detailing the exploration and reclamation actions taken during the year. Please ensure that your Annual Hardrock Exploration Report contains the following information:

- A written narrative describing your activities and the reclamation measures taken at all disturbances.
- A topographic map showing the portion of the claim block where surface disturbing exploration activities have occurred. The plan map should be at a scale of 1"= 1 mile, or other appropriate scale sufficient to illustrate: existing trails and roads; new trails and roads; drill hole locations (other than shallow auger holes); trench locations; the camp location; and, any other surface disturbances (please distinguish between reclaimed and unreclaimed features).
- A photo of representative sections of any new road or trail construction.
- A detailed description of the methods used to plug the drill holes.

DEPENDING ON YOUR LEVEL OF ACTIVITY, THE FOLLOWING REPORTING REQUIREMENTS INCLUDE A REQUEST FOR DATA IN TABULAR FORMAT

For reclamation reporting we require that operators submit requested reclamation information in tabular format.

Please use the MS Excel Workbook provided by DNR-Mining. The table is available for download at http://dnr.alaska.gov/mlw/forms/19apma/AHEA_ReclamationSpreadsheet.xls (electronic copies can be submitted via e-mail to dnr.fbx.mining@alaska.gov, dnr.anch.mining@alaska.gov or provided on other media with application packet). Contact DNR-Mining if you have questions or need assistance.

- A table of drill sites with Latitude & Longitudes in NAD 83. Included with the sites list if fuel storage is on site, if a tundra mat is present, where trash and sanitary facilities are located, if drill additives are in use, if artesian zones are encountered and if water is discharged from the drill site. Also list whether the drill site has been reclaimed. If a drill site has been reclaimed, please include how the hole has been plugged and cemented (may reference description for more detail), if there is a standing pipe, if the site has been revegetated and the date that the reclamation occurred.
- A table of sump pit sites with Latitude & Longitudes in NAD 83. Included with the sites list if there is a discharge trench and the dimensions of the pit. Also list whether the sump pit has been reclaimed.
- A table of drill water supply sites with Latitude & Longitudes in NAD 83. Included with the sites list what kind of site it is (lake, pond, stream, etc.), intake size, mesh size on intake, if the intake is completely submerged, hose color, average gallons per minute consumed and start up and stop dates.
- A photo, with appropriate caption including reference to drill site table location, of each reclaimed drill site and exploration trench.
- A list of Mining Claims by ADL# or BLM # that contain unreclaimed disturbance at the end of the year and a total acreage that remains unreclaimed.

Hardrock Exploration Statement of Need:

Alaska's mineral industry is important to the state's economy and its health is tracked by the Department of Natural Resources in part through a voluntary questionnaire <http://www.dggs.alaska.gov/minerals_questionnaire>. Your answers provided in the questionnaire are crucial to make an accurate compilation of yearly exploration and mining activities in Alaska, provided in annual *Alaska's Mineral Industry* reports <<http://www.dggs.alaska.gov/sections/minerals/>>.

Please consider submitting important information such as yearly exploration expenditures, which are not collected through any other agency. All information on the questionnaire will be considered to be confidential, unless items are clearly marked as publicly available or are already available in the public record.

2020 RECLAMATION PLAN FORM (PLACER EXPLORATION OR MINING)

| | | |
|---|---|--|
| <p>A. RECLAMATION PLAN</p> <p>(REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres).</p> | <p>B. RECLAMATION PLAN VOLUNTARY</p> <p>(for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool. (Operations on BLM Lands and others not filing Letter of Intent).</p> | <p>C. LETTER OF INTENT (34)</p> <p>(less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area).</p> |
|---|---|--|

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations. Reclamation bonding is required of operations with disturbance of 5 acres or greater. Completion of this application will meet the requirements for a "Reclamation Plan" for operations 5 acres and larger in size and for a "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, you must provide additional information concerning your plans for reclamation under separate attachments.

Total acreage currently disturbed: _____ acres. This should match: "Total Unreclaimed Acres" on your 2019 Annual Reclamation Statement for Small Mines, or line #7 on your 2020 Bond Pool Renewal Form. Disturbed ground includes all unreclaimed mining and exploration activity (excluding camps and roads) since October 1991. Federal operators must include areas of camps and roads.

New acres to be disturbed in 2020 _____ acres. Total acreage (currently disturbed plus new acres): _____ acres.

Acreage disturbed by land status: _____ State (general) _____ State (Mental Health) _____ Private _____ Federal

Total acreage to be reclaimed in 2020: _____ acres; Total volume of material to be disturbed in 2020: _____ cubic yards.

Include strippings and overburden to be removed. Cubic yards = Length (yards) x Width (yards) x Depth (yards).

Reclamation will be conducted concurrently with activity. Reclamation will be conducted at the end of the season.

THE FOLLOWING RECLAMATION MEASURES SHALL BE USED:

(These measures are required by law. Those that do not apply may be crossed out; but, an explanation must be given as to why these measures are not necessary at your site.)

- Topsoil, vegetation, and overburden muck, not promptly redistributed to an area being reclaimed, will be individually separated and stockpiled for future use. This material will be protected from erosion and from contamination by acidic or toxic materials and will not be buried by tailings.
- The area reclaimed will be reshaped to blend with the surrounding area using tailings, strippings, and overburden and be stabilized.
- Stockpiled topsoil, overburden muck, will be spread over the contoured exploration sites to promote natural plant growth such that the area can reasonably be expected to revegetate within five years. Stockpiled vegetation will be spread over topsoils.
- Settling ponds located within the active flood plain and necessary for continued use during the next mining season will be protected from erosion or the fines removed.
- If the mining operation diverts a stream channel or modifies a flood plain to the extent that the stream channel is no longer stable, the stream channel will be reestablished in a stable location in the valley flood plain.
- The flood plain will be established as appropriate to accommodate seasonal high-water flood events and prevent undue erosional degradation.
- Exploration trenches will be backfilled. Brush piles, stumps, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
- Shallow auger holes (limited to depth of overburden) will be backfilled with drill cuttings or other locally available material in such a manner that closes the hole to minimize the risk to humans, livestock and wildlife.
- At placer drift mine closure, all mine shafts, adits, tunnels, and air vents to underground workings will be stabilized and properly sealed to ensure protection of the public, wildlife, and the environment.
- On state lands; all buildings and structures constructed, used or improved will be removed, dismantled, or otherwise properly disposed of unless the surface owner or manager authorizes that the buildings and structures may stay.
- On state lands; all scrap iron, equipment, tools, piping, hardware, chemicals, fuels, waste, and general construction debris will be removed or properly disposed of.
- Reclamation measures taken will be consistent with any alternate post mining land use approved by the Commissioner, subject to the provisions of 11 AAC 97.300(h) and the conditions (if any) of an approved reclamation plan.

IMPORTANT: 1. Alternative reclamation measures may be approved if the reclamation measures presented above are not applicable to your site. Please explain in separate correspondence. Submit a sketch and describe additional reclamation measures you propose to conduct at your operation. Reclamation measures must comply with AS 27.19.

BONDING: In accordance with AS 27.19, bonding is required for all operations having a mined area of greater than or equal to five acres on State Land. This area must be bonded for \$750.00 per acre, unless the miner can demonstrate that a third party contractor can do the needed reclamation for less. The Statewide Bonding Pool may be joined by completing a bond pool application form and meeting certain requirements. No reclamation plan approval goes into effect until the bonding pool deposit and annual nonrefundable fees are paid. Use bond form to calculate area of disturbance for bonding.

BLM requires that a reclamation plan be consistent with §43 CFR 3809.420, Performance Standards for the Surface Management regulations for Federal Operations. Refer to 43 CFR 3809 or the BLM minerals website available at <http://www.blm.gov/ak/st/en/prog/minerals.html> for more information on what is needed for a reclamation plan on Federal lands, as they may be different than those identified above.

| | | |
|--|---|---|
| <p>_____ Printed name (Applicant)</p> <p>_____ Signature (Applicant)</p> | <p>Relationship to Mineral Property:</p> <p>Owner Lessee Operator</p> <p>Agent For: _____</p> | <p>Date: _____</p> <p>APMA #: _____</p> |
|--|---|---|

2020 RECLAMATION PLAN FORM (HARDROCK EXPLORATION)

| | | |
|---|---|--|
| <p>A. RECLAMATION PLAN</p> <p>(REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres).</p> | <p>B. RECLAMATION PLAN VOLUNTARY</p> <p>(for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool. (Operations on BLM Lands and others not filing Letter of Intent).</p> | <p>C. LETTER OF INTENT (35)</p> <p>(less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area).</p> |
|---|---|--|

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations. Reclamation bonding is required of operations with disturbance of 5 acres or greater. Completion of this application will meet the requirements for a "Reclamation Plan" for operations 5 acres and larger in size and for a "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, you must provide additional information concerning your plans for reclamation under separate attachments.

Total acreage currently disturbed: _____ acres. This should match: "Total Unreclaimed Acres" on your 2019 Annual Reclamation Statement for Small Mines, or line #7 on your 2020 Bond Pool Renewal Form. Disturbed ground includes all unreclaimed mining and exploration activity (excluding camps and roads) since October 1991. Federal operators must include areas of camps and roads.

New acres to be disturbed in 2020 _____ acres. Total acreage (currently disturbed plus new acres): _____ acres.

Acreage disturbed by land status: _____ State (general) _____ State (Mental Health) _____ Private _____ Federal

Total acreage to be reclaimed in 2020 _____ acres; Total volume of material to be disturbed in 2020: _____ cubic yards.

Include strippings and overburden to be removed. Cubic yards = Length (yards) x Width (yards) x Depth (yards).

Reclamation will be conducted concurrently with activity. Reclamation will be conducted at the end of the season.

THE FOLLOWING RECLAMATION MEASURES SHALL BE USED:

(These measures are required by law. Those that do not apply may be crossed out; but, an explanation must be given.)

- Topsoil, vegetation, and overburden muck, not promptly redistributed to an area being reclaimed, will be individually separated and stockpiled for future use. This material will be protected from erosion and from contamination by acidic or toxic materials and will not be buried by tailings.
- The area reclaimed will be reshaped to blend with the surrounding area using tailings, strippings, and overburden and be stabilized.
- Stockpiled topsoil, overburden muck, will be spread over the contoured exploration sites to promote natural plant growth such that
- Exploration trenches will be backfilled. Brush piles, stumps, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation. All exploration trenches will be reclaimed by the end of the exploration season in which they are constructed, unless specifically approved by the DMLW (Mining operations are required by law to be reclaimed as contemporaneously as practicable with the mining operation to leave the site in stable condition).
- Shallow auger holes (limited to depth of overburden) will be backfilled with drill cuttings or other locally available material in such a manner that closes the hole to minimize the risk to humans, livestock and wildlife.
- All drill hole casings will be removed or cut off at, or below, ground level. All drill holes will be plugged by the end of the exploration season with bentonite holeplug or equivalent slurry, for a minimum of 10 feet within the top 20 feet of the drill hole. The remainder of the hole will be backfilled to the surface with drill cuttings. If water is encountered in any drill hole, a minimum of 7 feet of bentonite holeplug or equivalent slurry will be placed immediately above the static water level in the drill hole. (NOTE: The operator understands that complete filling of the drill holes, from bottom to top, with bentonite holeplug or equivalent slurry is also permitted and is considered to be the preferred method of hole closure, unless communicated otherwise by DMLW.)
- If artesian conditions are encountered, the operator will take all measures practicable to prevent the offsite discharge of those waters subject to 11 AAC 97.240 and will contact the DMLW for approval of hole plugging measures.
- At closure, all shafts, adits, tunnels, and air vents to underground workings will be stabilized and properly sealed to ensure protection of the public, wildlife and the environment.
- On state lands, all buildings and structures constructed, used, or improved will be removed, dismantled, or otherwise properly disposed of unless the surface owner or manager authorizes that the buildings and structures may stay.
- On state lands, all scrap iron, equipment, tools, piping, hardware, chemicals, fuels, waste, and general construction debris will be removed or properly disposed of.
- Reclamation measures taken will be consistent with any alternative post mining land use approved by the Commissioner, subject to the provisions of 11 AAC 97.300(h) and the conditions (if any) of an approved reclamation plan.

IMPORTANT: 1. Alternative reclamation measures may be approved if the reclamation measures presented above are not applicable to your site. Please explain in separate correspondence. Submit a sketch and describe additional reclamation measures you propose to conduct at your operation. Reclamation measures must comply with AS 27.19.

BONDING: In accordance with AS 27.19, bonding is required for all operations having a mined area of greater than or equal to five acres on State Land. This area must be bonded for \$750.00 per acre, unless the miner can demonstrate that a third party contractor can do the needed reclamation for less. The Statewide Bonding Pool may be joined by completing a bond pool application form and meeting certain requirements. No reclamation plan approval goes into effect until the bonding pool deposit and annual nonrefundable fees are paid. Use bond form to calculate area of disturbance for bonding.

BLM requires that a reclamation plan be consistent with §43 CFR 3809.420, Performance Standards for the Surface Management regulations for Federal Operations. Refer to 43 CFR 3809 or the BLM minerals website available at <http://www.blm.gov/ak/st/en/prog/minerals.html> for more information on what is needed for a reclamation plan on Federal lands, as they may be different than those identified above.

| | | |
|---|---|---|
| <p>_____</p> <p>Printed name (Applicant)</p> <p>_____</p> <p>Signature (Applicant)</p> | <p>Relationship to Mineral Property:</p> <p>Owner Lessee Operator</p> <p>Agent For: _____</p> | <p>Date: _____</p> <p>APMA #: _____</p> |
|---|---|---|

2020 RECLAMATION PLAN FORM (SUCTION DREDGE)

| | | |
|---|---|--|
| <p>A. RECLAMATION PLAN</p> <p>(REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres).</p> | <p>B. RECLAMATION PLAN VOLUNTARY</p> <p>(for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool. (Operations on BLM Lands and others not filing Letter of Intent).</p> | <p>C. LETTER OF INTENT (36)</p> <p>(less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area).</p> |
|---|---|--|

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations. Reclamation bonding is required of operations with disturbance of 5 acres or greater. Completion of this application will meet the requirements for a "Reclamation Plan" for operations 5 acres and larger in size and for a "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, you must provide additional information concerning your plans for reclamation under separate attachments.

Total acreage currently disturbed: _____ acres. This should match: "Total Unreclaimed Acres" on your 2019 Annual Reclamation Statement for Small Mines, or line #7 on your 2020 Bond Pool Renewal Form. Disturbed ground includes all unreclaimed mining and exploration activity (excluding camps and roads) since October 1991. Federal operators must include areas of camps and roads.

New acres to be disturbed in 2020 _____ acres. Total acreage (currently disturbed plus new acres): _____ acres.

Acreage disturbed by land status: _____ State (general) _____ State (Mental Health) _____ Private _____ Federal

Total acreage to be reclaimed in 2020 _____ acres; Total volume of material to be disturbed in 2020: _____ cubic yards.

Include strippings and overburden to be removed. Cubic yards = Length (yards) x Width (yards) x Depth (yards).

Reclamation will be conducted concurrently with activity. Reclamation will be conducted at the end of the season.

THE FOLLOWING RECLAMATION MEASURES SHALL BE USED:

(These measures are required by law. Those that do not apply may be crossed out; but, an explanation must be given.)

Stream Suction Dredge Operations:

- Reclamation will be completed prior to the end of the mining season. Reclamation will consist of leveling or contouring all gravel bar and stream bed tailings. Tailings will be left in such a manner that spring run-off will level the tailings without causing undue erosion.
- In no case will tailing piles extend more than 18 inches above the water surface at the end of the mining season.
- Prior to the end of the mining season, tailing piles, berms, or wing dams will be removed or left in such a manner to allow unrestricted passage of fish and flood waters.
- Other: _____

Offshore Suction Dredge Operations:

- Tailings discharged from the dredge to the lake, channel, sound, bay or sea floor will be placed in a manner that will approximate the adjacent floor surface. The dredge shall be moved as necessary to allow for the proper low-profile distribution of tailings.
- Tailings will be placed in a manner that will maintain a water depth suitable for safe passage of traffic.
- Other: _____

Generally:

- On all state lands, all buildings and structures constructed, used, or improved will be removed, dismantled, or otherwise properly disposed of unless the surface owner or manager authorizes that the buildings and structures may stay.
- On state lands, all scrap iron, equipment, tools, piping, hardware, chemicals, fuels, waste, and general construction debris will be removed or properly disposed of.
- Reclamation measures taken will be consistent with any alternate post mining land use approved by the Commissioner, subject to the provisions of 11 AAC 97.300(h) and the conditions (if any) of an approved reclamation plan.

IMPORTANT: 1. Alternative reclamation measures may be approved if the reclamation measures presented above are not applicable to your site. Please explain in separate correspondence. Submit a sketch and describe additional reclamation measures you propose to conduct at your operation. Reclamation measures must comply with AS 27.19.

BONDING: In accordance with AS 27.19, bonding is required for all operations having a mined area of greater than or equal to five acres on State Land. This area must be bonded for \$750.00 per acre, unless the miner can demonstrate that a third party contractor can do the needed reclamation for less. The Statewide Bonding Pool may be joined by completing a bond pool application form and meeting certain requirements. No reclamation plan approval goes into effect until the bonding pool deposit and annual nonrefundable fees are paid. Use bond form to calculate area of disturbance for bonding.

BLM requires that a reclamation plan be consistent with §43 CFR 3809.420, Performance Standards for the Surface Management regulations for Federal Operations. Refer to 43 CFR 3809 or the BLM minerals website available at <http://www.blm.gov/ak/st/en/prog/minerals.html> for more information on what is needed for a reclamation plan on Federal lands, as they may be different than those identified above.

| | | |
|--|---|---|
| <p>_____ Printed name (Applicant)</p> <p>_____ Signature (Applicant)</p> | <p>Relationship to Mineral Property:</p> <p>Owner Lessee Operator</p> <p>Agent For: _____</p> | <p>Date: _____</p> <p>APMA #: _____</p> |
|--|---|---|

CHECK LIST FOR COMPLETING DETAIL(S) OF OPERATIONS

Sketch your complete plans in detail, and included the following items as necessary

PLAN OF OPERATIONS MAP(S):

-] NORTH ARROW
-] SCALE BAR
-] TOPOGRAPHY – USGS enlargements or equivalent
-] CLAIM LOCATIONS – Only indicate ADL/BLM numbers and boundaries of claims where activities occur
-] STREAMS – Transfer names as necessary
-] IN STREAM ACTIVITIES AND STREAM CROSSINGS
-] MINING CUTS - Indicate dimensions, and sequence of mining, active cuts, areas currently stripped, and areas planned to be strip, areas to be reclaimed, and areas previously reclaimed
-] SIZE OF VALLEY - indicate, with dotted lines, the approximate width of the valley floor
-] OVERBURDEN STOCKPILES – include dimensions
-] TAILINGS DISPOSAL AREAS
-] SUCTION DREDGE LOCATIONS
-] EXPLOSIVE STORAGE
-] FUEL STORAGE AREA - indicate location with respect to flowing waters
-] EXISTING AND PLANNED ROADS AND TRAILS
-] EXISTING AND PLANNED TRENCHES
-] EXISTING AND PLANNED DRILL HOLES
-] TAKE POINTS FOR WATER - Label points for camp, mechanical placer mining, and any other site
-] DAMS
-] SETTLING PONDS - dimensions, sequence of use, discharge location, and recycle pump
-] CAMP FACILITIES or STRUCTURES indicate dimensions, type, and purpose of each structure
-] SANITARY AND SOLID WASTE – for example your outhouse; trash collection; etc
-] STREAM DIVERSIONS
-] SKETCH OF SUCTION DREDGE/BUCKET DREDGE (Offshore Nome operators only)

ACCESS MAP:

-] NORTH ARROW
-] SCALE BAR
-] TOPOGRAPHY – USGS enlargements or equivalent
-] CLAIM LOCATIONS – Indicate ADL/BLM numbers and boundaries of the claim block
-] STREAMS – Transfer names as necessary
-] EXISTING AND PLANNED ROADS AND TRAILS – Other than your access to the claim block

CROSS COUNTRY ROUTE MAP:

-] NORTH ARROW
-] SCALE BAR
-] TOPOGRAPHY – USGS enlargements or equivalent
-] CLAIM LOCATIONS – Indicate ADL/BLM numbers and boundaries of the claim block
-] STREAMS – Transfer names as necessary
-] START AND STOP POINTS OF TRAVEL – may label as A to A' or simply "start" and "stop."
-] STAGING OR EQUIPMENT STORAGE AREAS – Indicate where equipment will be staged or stored in support of cross country travel activities.

Example Narrative

Mechanical Placer Mining:

The mining operation is designed to economically recover gold and complete acceptable reclamation. The mine layout is directly related to reclamation. Mining will progress in the following steps -- see sketch:

- 1) A stream diversion, 800' x 10', will be constructed on the left limit (facing downstream) of the operation. The [temporary or permanent] diversion will be constructed to accommodate high water events (at least a 2-year flood interval) including break-up without bank erosion and will remain in place for _____ years or _____ mining seasons.
- 2) Surface waters will be directed away from the work site with berms and ditches. Water from the cut and surface water on site will be directed into settling ponds. Process water will be recycled in settling ponds.
- 3) Vegetation, including trees, brush, tundra, etc., will be separated from topsoil and overburden gravel and stockpiled in such a manner as to avoid erosion. Stockpiles will be 200' x 25' x 15', located on the right limit of each cut.
- 4) Topsoil will be separated and stockpiled next to the vegetation stockpiles. A space will be maintained between the stockpiles so that topsoil can be re-spread before the vegetation. Each topsoil stockpile will be 200' x 25' x 15', located on the right limit of each mining cut.
- 5) Gravel overburden will be used to reconstruct the stream channel and cap ponds. Gravel will be stored in the following manner:
 - a) Gravel from each cut will be pushed into the previously mined cut forming a dike for the next recycle pond. The dike will be constructed in such a manner that the largest portion of the pond will be immediately below the processing plant on the right limit. This places the pond sediment away from the reclaimed stream channel. The return portion of the pond will be narrow, one dozer blade width, forcing the fines to settle in the large pond area.
 - b) A stockpile of gravel, 200' x 25', will be placed on the left limit of the mine cuts and used to reconstruct the stream channel in the left limit of the ponds.
- 6) Coarse tailings will be pushed onto the pond dike and used to cap ponds.

Mechanical Placer Mining Reclamation:

Reclamation will progress in the following steps:

- 1) Ponds will be drained slowly with care taken not to lose sediment.
- 2) Reestablished streams will not run through reclaimed settling ponds. The stream will be reestablished to the left limit of the ponds (NO streams running through the settled fine material). All sediment will be bailed out and a stable stream channel will be established using tailings stockpiled in the center and left limit of the ponds. The flood plain will be wide enough to prevent erosion during high water events and maintain fish passage. For this stream, the reconstructed flood plain will consist of a stream bed 20' wide with side banks 20' wide. The banks will have a 20:1 foot slope. The diversion will be filled and vegetation respread.
- 3) The remaining tailing stockpiles will be used to cap the large portion of the pond and/or stabilize any remaining pond areas from erosion. To minimize erosion, final shaping will be done across the slope rather than up and down.
- 4) Banks of ponds will be flattened out to allow natural revegetation and avoid erosional degradation. The banks will have a slope of 20:1 feet.
- 5) Topsoil will then be respread over the tailings.
- 6) Finally, vegetation will be respread over topsoil. The vegetation will trap seeds and moisture as well as reduce erosion.

Example Narrative

Hardrock Exploration:

- 1) Access to drill and / or trench sites, including type and length of access routes. Include a reference to the map showing existing and new roads, trails, airstrips, river routes and landings.
- 2) Exploration activities including type(s) of equipment to be used, when and where activities will occur.
- 3) Measures taken to prepare for reclamation upon completion of exploration activities, such as stockpiling organic materials.
- 4) Drill sites. Include pad construction methods. Include a reference to the map showing drill site locations.
- 5) Drill fluid disposal. Include MSDS sheets.
- 6) Trench excavation methods and location. Include a reference to the map showing trench locations.
- 7) Fuel handling at exploration sites (drill pads and trenches) and off site (camp or base of operations).
- 8) Indicate if there is a spill prevention and response plan in place.
- 9) Water use. Reference the map showing water withdrawal locations. State estimated daily water use and measures planned to prevent fish entrapment.
- 10) Cultural resource clearing. If needed, indicate measures take to avoid disturbance archaeological sites. Contact Mark Rollins at the State Historic Preservation Office if you need assistance determining whether or not you need to address cultural resource clearing. (907) 269-8722 or mark.rollins@alaska.gov

Hardrock Exploration Reclamation:

- 1) Plan for reclamation of disturbed areas.
- 2) Cuttings management and drill hole plugging methods and materials.
- 3) Trench reclamation.
- 4) Trash disposal.
- 5) Methods proposed to promote the establishment of vegetation (measures can including promotion of natural growth by stockpiling & redistribution of organic material).
- 6) Disturbance calculations. Describe how acres of disturbance are calculated for drill pads, trenches, roads, trails and camps).
- 7) For bonding purposes, please indicate the amount of existing and proposed disturbance.

Hardrock Exploration Statement of Need:

Alaska's mineral industry is important to the state's economy and its health is tracked by the Department of Natural Resources in part through a voluntary questionnaire <http://www.dggs.alaska.gov/minerals_questionnaire>. Your answers provided in the questionnaire are crucial to make an accurate compilation of yearly exploration and mining activities in Alaska, provided in annual *Alaska's Mineral Industry* reports <<http://www.dggs.alaska.gov/sections/minerals/>>.

Please consider submitting important information such as yearly exploration expenditures, which are not collected through any other agency. All information on the questionnaire will be considered to be confidential, unless items are clearly marked as publicly available or are already available in the public record.

Example Narrative**Suction Dredging:**

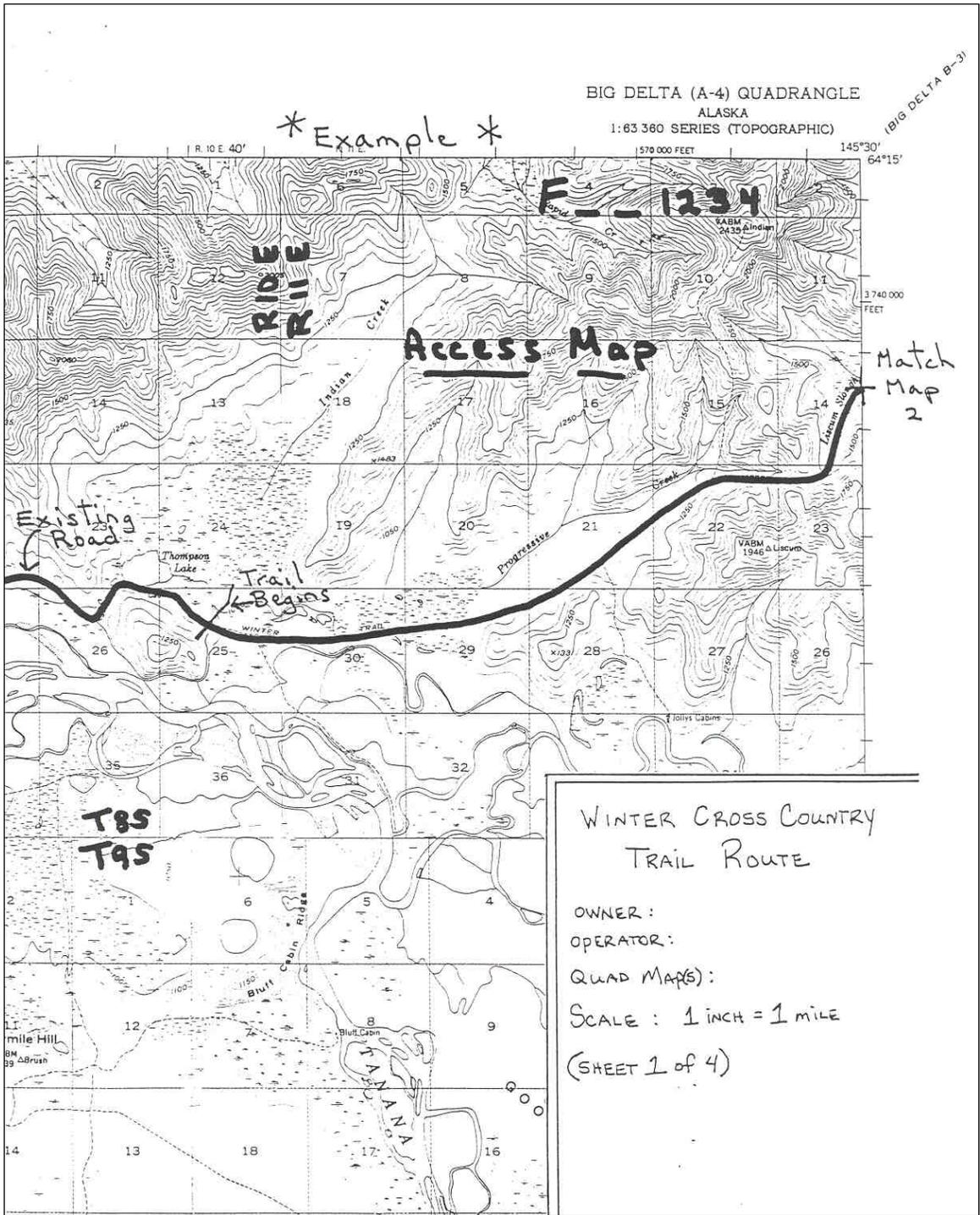
The mining operation is designed to economically recover gold and complete acceptable reclamation. The mine layout is directly related to reclamation. Mining will progress in the following steps -- see sketch:

- 1) We will be operating a suction dredge with an 8" nozzle and a 36 hp motor. The maximum depth will not exceed 10 feet. Material will be washed and processed in 2'X 4' sluice box and deposited back on the water body floor.
- 2) Operations are beginning early June or as soon as the ice gone and will continue throughout the mining season.
- 3) Access to mine site is via all season road. We will launch our 16' boat from public boat launch and travel upstream to mining claims. Camping structures will consist of a removable wall tent.

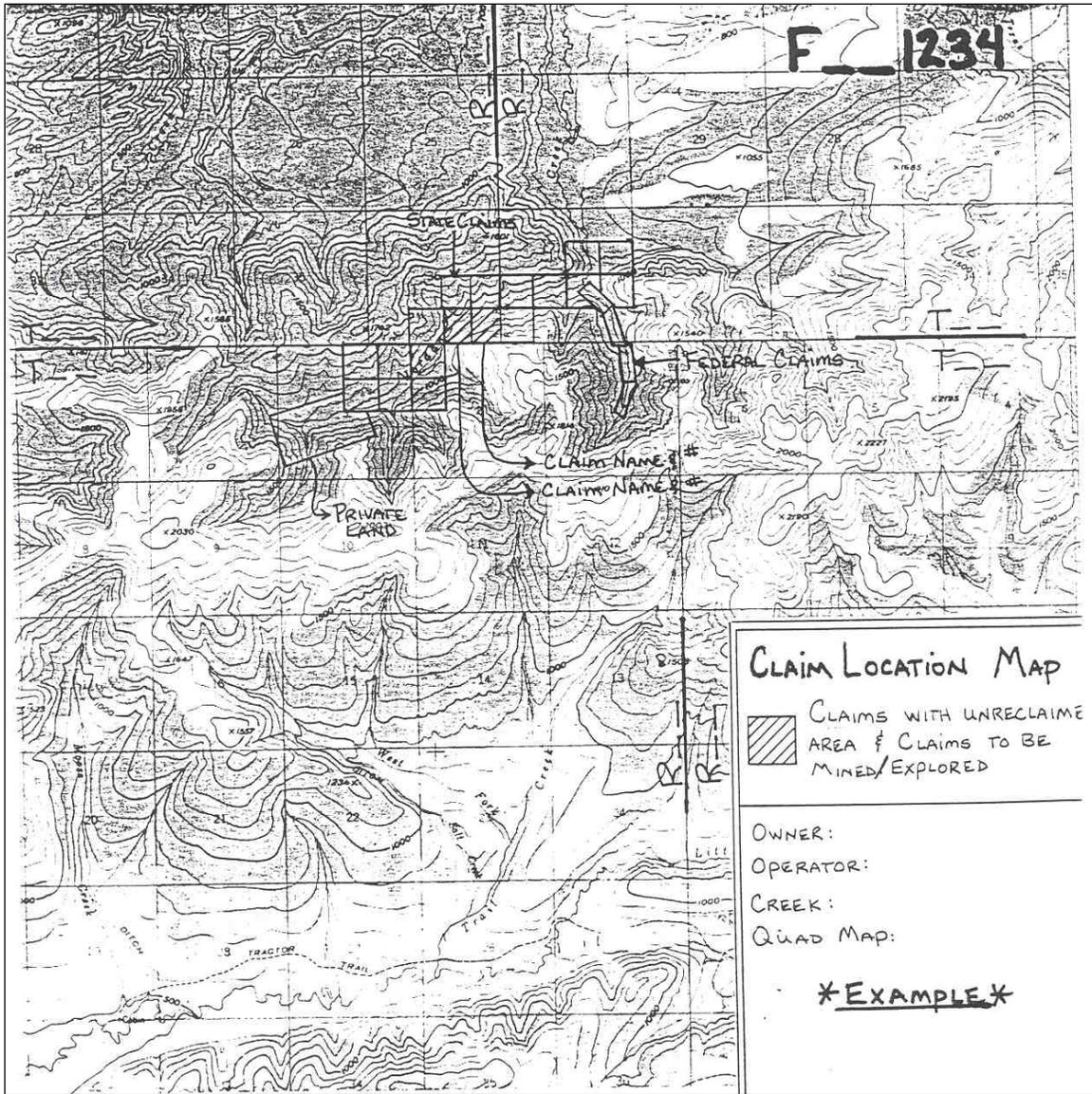
Suction Dredging Reclamation:

Reclamation will progress in the following steps:

- 1) Reclamation will be concurrent with mining. All dredge tailings will be returned to approximately the same location from which they were dredged. Reclamation shall consist of leveling or contouring any tailing piles, contouring gravel bar and stream bed tailings in a manner that will approximate the adjacent bottom surface.

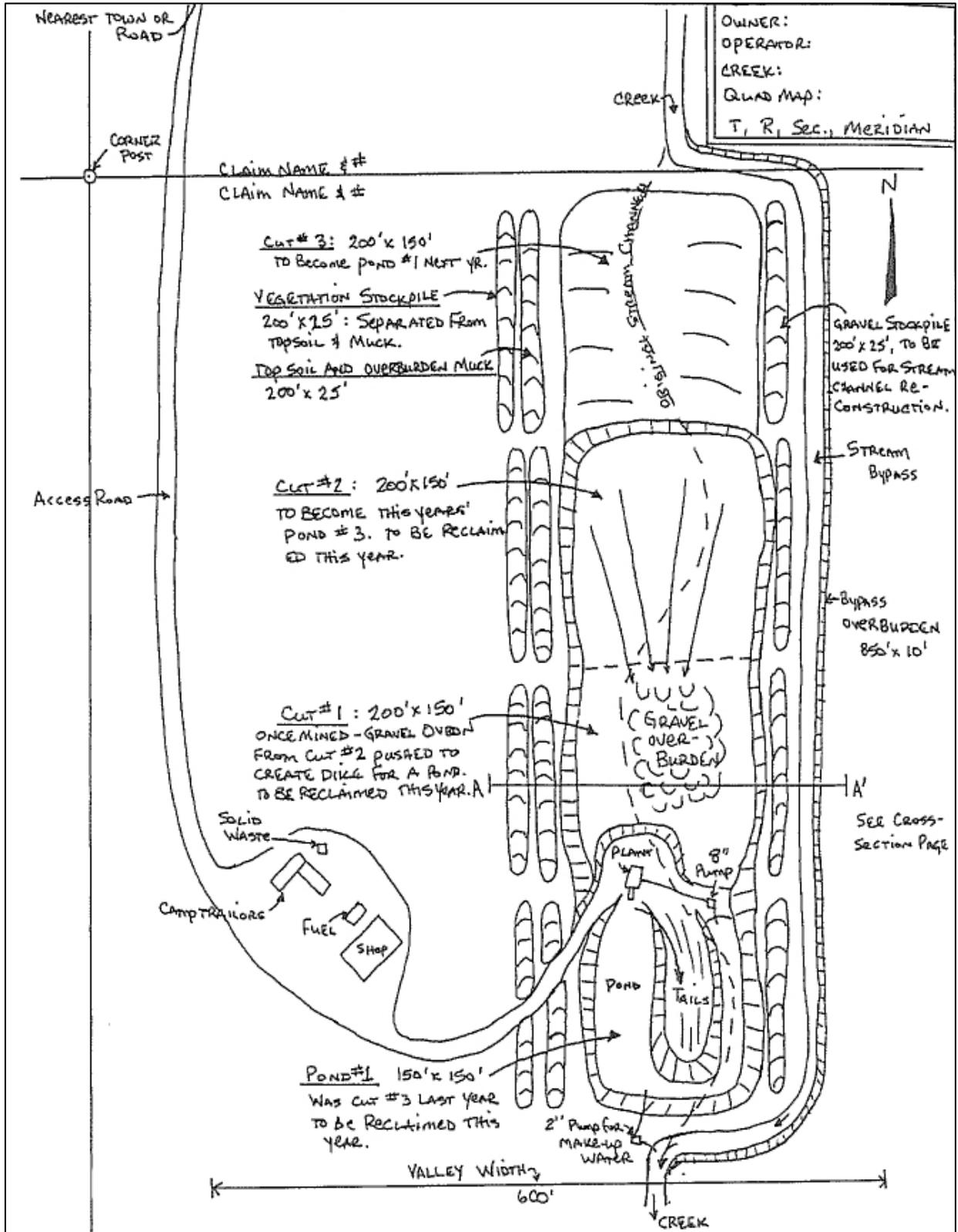


Example of Access Map



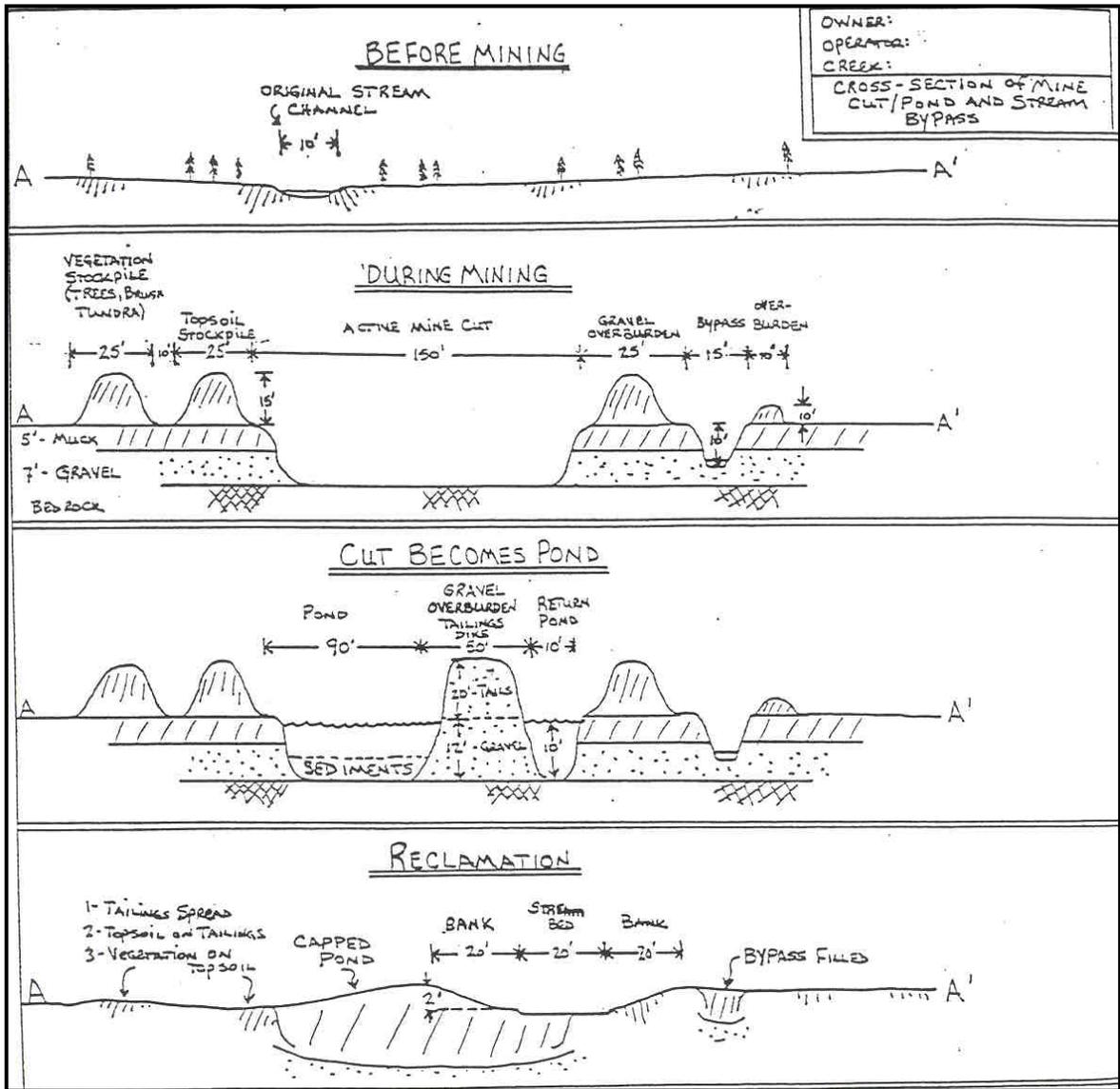
Example of Claim Location Map

Example of Plan of Mechanical Placer Mining



(Attach additional sheets and narrative as necessary)

Example of plan of operations cross-section sketch sheet



(Attach additional sheets and narrative as necessary)

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL FORM**

APMA # _____.

Name

Mailing Address

City

State

Zip Code

Submits unto the State of Alaska, Department of Natural Resources, the sum of

\$ _____ DOLLARS

for payment into the State Wide Bonding Pool to meet the bonding requirements of Alaska Statute 27.19 for mining activity located on claim numbers

These claims are located within legal description (Township, Range, Section, Meridian)

This bond amount was calculated as follows:

For **Federal Claims**: The total area of the mining operation, including camp site, access roads, unreclaimed areas, and areas to be stripped for mining next season is _____ acres. Acreage should be rounded to the next whole acre. This acreage must include all areas disturbed by mining operations after January 1, 1981, that have not been approved as reclaimed by BLM. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

For **State and Patented Claims**: The active mining disturbance, not including camp and access roads is _____ acres (acreage should be rounded to the next whole acre). This includes all areas that are part of the mining operation; including stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary or permanent stream diversions, and settling ponds. This acreage must include all areas disturbed by a mining operation after October 15, 1991 that have not been approved as reclaimed by ADNR. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

Refundable bond deposit (new): _____ acres X \$112.50 = \$ _____.

Nonrefundable bond pool annual fee (new): _____ acres X \$ 37.50 = \$ _____.

Total \$ _____.

Make check payable to 'Department of Natural Resources'. Sign and return form with applicable fees to: DNR - Mining: 550 W. 7th Ave. Suite 900B, Anchorage, AK 99501-3577 or 3700 Airport Way, Fairbanks, AK 99709-4699.

Signed - Miner

Date

ADNR - Division of Mining, Land & Water

Date

BLM - Bureau of Land Management

Date

AMENDED ACREAGE
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL FORM

APMA # _____

Name

Mailing Address

City State Zip Code

Submits unto the State of Alaska, Department of Natural Resources, the sum of
\$ _____ DOLLARS

for payment into the State Wide Bonding Pool to meet the bonding requirements of Alaska Statute 27.19 for mining activity located on
claim numbers

These claims are located within legal description (Township, Range, Section, Meridian

This bond amount was calculated as follows:

For **Federal Claims**: The total area of the mining operation, including camp site, access roads, unreclaimed areas, and areas to be stripped for mining next season is _____
acres. Acreage should be rounded to the next whole acre. This acreage must include all areas disturbed by mining operations after January 1, 1981, that have not been approved as reclaimed by BLM. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

For **State and Patented Claims**: The active mining disturbance, not including camp and access roads is _____ acres (acreage should be rounded to the next whole acre). This includes all areas that are part of the mining operation; including stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary or permanent stream diversions, and settling ponds. This acreage must include all areas disturbed by a mining operation after October 15, 1991 that have not been approved as reclaimed by ADNR. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

Original acreage bonded: _____.

New acreage bonded: _____.

Refundable bond deposit (new): _____ acres X \$112.50 = \$ _____.

Nonrefundable bond pool annual fee (new): _____ acres X \$ 37.50 = \$ _____.

Total \$ _____.

Grand total of bonded acres: _____.

Make check payable to 'Department of Natural Resources'. Sign and return form with applicable fees to: DNR - Mining: 550 W. 7th Ave. Suite 900B, Anchorage, AK 99501-3577 or 3700 Airport Way, Fairbanks, AK 99709-4699.

Signed – Miner Date

ADNR - Division of Mining, Land & Water Date

BLM - Bureau of Land Management Date

**STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL RENEWAL FORM
FOR 2020 OPERATIONS**

APMA # _____.

Name

Mailing Address

Submits to the State of Alaska, Department of Natural Resources, a renewal of reclamation bonding in accordance with AS 27.19 for mining activity on claim's: _____.

located in T. _____, R. _____, Sections _____, _____, _____ M.

The amount of the refund or amount owed was calculated as follows:

- 1. Number of acres bonded in 2019: _____ acres
- 2. Total number of acres disturbed in 2019? _____ acres

This includes unreclaimed acreage from previous years, October 1991 to present, for state or private lands, and 1981 to present for federal claims. On federal claims include area of camp and access roads.

Bonding credits carried forward from 2019 to 2020:

- 3. Number of acres bonded in 2019 but not disturbed: _____ acres x \$ 112.50 = \$ _____.
(1 minus 2 above)
- 4. Number of acres reclaimed in 2019 and approved by BLM/
DNR (must submit Bond Release Application for State claims, _____ acres x \$ 112.50 = \$ _____.
when field inspection was not completed for reclaimed area --
(PHOTO/VIDEO DOCUMENTATION REQUIRED.)
- 5. Dollar total of lines 3 + 4: \$ _____.

Bonding obligations for 2020:

- 6. Number of acres disturbed but not bonded in 2019: _____ acres x \$ 150.00 = \$ _____.
- 7. Total number of all unreclaimed acres: _____ acres x \$ 37.50 = \$ _____.
(line 7 should match "total acreage currently disturbed"
on your 2020 Reclamation Plan. (2 minus 4 above)
- 8. New acres to be disturbed in 2020: _____ acres x \$ 150.00 = \$ _____.
- 9. Dollar total of lines 6 + 7 + 8: \$ _____.
- 10. Total acreage bonded in 2019 (7 + 8): _____ acres

If line 5 is larger than line 9 enter the difference here \$ _____.. This amount will be refunded.

If line 9 is larger than line 5, the difference is due DNR \$ _____.. Make check payable to: DEPARTMENT OF NATURAL RESOURCES.

Signed – Miner Date

ADNR - Division of Mining, Land & Water Date

BLM - Bureau of Land Management Date

NOTICE OF OPERATOR AUTHORIZATION -- STATE MINERAL LOCATIONS

All operators or lease holders submitting APMA's for operations on State mineral locations must submit a "Notice of Authorization" from the owner of record. This notice of authorization must name the operator and leaseholder (if different), the claims(s) by Name and ADL number(s), and the time frame (beginning and ending dates) for which the authorization remains in force. The Division of Mining, Land & Water will not issue any mining permits until we receive this Notice of Authorization. **Please include it with your APMA.**

OPERATOR AUTHORIZATION

I, _____, OWNER of state claim(s) :

| <u>Claim Name</u> | <u>ADL Number</u> | <u>Claim Name</u> | <u>ADL Number</u> | <u>Claim Name</u> | <u>ADL Number</u> |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| _____ | _____ | _____ | _____ | _____ | _____ |

(Attach additional sheet if necessary)

Have authorized _____.

Address of Operator _____.

to operate on these claims from ____ / ____ / ____ to ____ / ____ / ____.

Owner's Signature _____ Date _____

NOTARY

Subscribed and sworn to before me this ____ day of _____, 20__.

For (owner)

(Signature of Notary) _____.

My commission expires:

OR (If the LESSEE and OPERATOR are not the same, both sections must be completed)

I, _____, LESSEE of state claim(s) :

| <u>Claim Name</u> | <u>ADL Number</u> | <u>Claim Name</u> | <u>ADL Number</u> | <u>Claim Name</u> | <u>ADL Number</u> |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| _____ | _____ | _____ | _____ | _____ | _____ |

(Attach additional sheet if necessary)

have authorized _____ to operate on these claims from ____ / ____ / ____ to ____ / ____ / ____.

Lessee's Signature _____ Date _____

Lessee's Address _____.

NOTARY:

Subscribed and sworn to before me this ____ day of _____, 20__.

For (Lessee)

(Signature of Notary) _____.

My commission expires: