

Department of Natural Resources

DIVISION OF MINING, LAND & WATER MINERAL RESOURCES SECTION

ANCHORAGE OFFICE

550 W 7TH AVENUE SUITE 900B ANCHORAGE, ALASKA 99501 MAIN (907) 269-8647 FAX (907) 269-8949

FAIRBANKS OFFICE

3700 AIRPORT WAY FAIRBANKS, ALASKA 99709 MAIN (907) 458-6896 OR (907) 451-2774 FAX (907) 451-2703

October 30, 2017

APPLICATION FOR PERMITS TO MINE IN ALASKA (APMA)

Dear Miner:

Attached to this letter you will find the 2018 Application for Permits to Mine in Alaska 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. Also, miners who are requesting winter cross country travel authorization should submit their application at least four weeks before the planned travel.

Processing Fees:

The annual application fee is \$150.00. A Multi-Year is \$150 for the first year and \$50 for each year thereafter, for up to 5 years, payable in advance. A 5 year application is \$350.00. There is also a \$50.00 fee for any amendment to the application. Other agencies such as the Department of Environmental Conservation may require additional fees for permits or authorizations.

Multi-Year Renewal Requirements:

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

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

Keep in mind that other permits, such as Wastewater Discharge Authorizations, Mining Tax License, or US Army Corps of Engineers Wetlands permits, may have expiration dates separate from the DNR multiyear permit expiration date. Miners should be aware of expiration dates on these other permits.

Reclamation Statement: Due December 31, 2017

As a reminder, 2017 applicants are required to file an Annual Reclamation Statement by December 31, 2017 to keep their small miners exemption from bonding requirements or to satisfy the reporting requirements of their reclamation plan. This statement is due whether or not activity took place in 2017.

If assistance is required, please feel free to contact one of our offices listed above.

Sincerery

Jack Kerin Geologist IV

DNR Mining Section

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 involved for formal review.

This application should satisfy the requirements to obtain permits and approvals from the following government agencies:

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

- Miscellaneous Land Use Permit (MLUP): For mining activity on State claims and prospect sites
- Approved Plan of Operations (APO): For tideland mining claims, upland mining leases and Offshore mining leases
- Reclamation Plan: For mining activity on private property with greater than 5 acres disturbance and all State land
- Winter Cross Country Travel
- Surface Structures: Placement and/or use of any structure must be requested in writing and approved in advance. An active MLUP is needed for structures and/or equipment to remain on State land. (AS 38.05.255(a)).

ADNR DMLW, Land Section (DNR-Lands)

 LUP: For access and surface activities that exceed Generally Allowed Uses (11 AAC 96.020) on State land other than claims, prospect sites and mining leases. For questions about your route and what type of use is allowed, contact the appropriate Regional Land Office: Southcentral Region Office: (907) 269-8552
 Northern Region Office: (907) 451-2740 or Southeast Land Section: (907) 465-3400

ADNR DMLW, Water Section (DNR-Water)

• Temporary Water Use Permit, Water Rights Permit, or Certificate, for significant water usage (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) qualify under the jurisdiction of the Dam Safety Program when they meet definitions under AS 46.17.900(3). For questions, contact Charles Cobb (907) 269-8638 charles.cobb@alaska.gov

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, Jacob Cunha (907) 267-2343 or jacob.cunha@alaska.gov Interior/Northern/Arctic/Fairbanks Office, Audra Brase (907) 459-7289 audra.brase@alaska.gov Mat-Su/Palmer Office, Ron Benkert, (907) 861-3204 or ronald.benkert@alaska.gov Kenai Peninsula/Soldontna Office, Brian Blossom (907) 714-2475 or brian.blossom@alaska.gov Southeast/Douglas Office, Jackie Timothy (907) 465-4275 or jackie.timothy@alaska.gov Craig Office, Mark Minnillo (907) 826-2560 or mark.minnillo@alaska.gov

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.
- 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.

State Historical Preservation Office (SHPO)

 In consideration of potentially significant historic properties/cultural resources, please do not remove or disturb any buildings, structures, objects, or artifacts that were located on the site prior to conducting permitted activities If you have questions please contact Mckenzie Johnson of SHPO at (907) 269-8726 or mckenzie.johnson@alaska.gov

Alaska Department of Revenue (DOR)

Alaska Mining License – 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 Dept. of Revenue.
 For questions contact Saletia Hall, (907) 269-1017 or saletia.hall@alaska.gov

This application may serve as notice to obtain permits and approvals from the following 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 or 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 as a multi-agency application. Do not assume that you have all permits you require. We strongly suggest that you contact each agency to be sure your application has been received and processed or if you need to terminate your permits. Please read the stipulations of your permits carefully.

Non-compliance can result in revocation of authorizations and financial penalties.

In accordance with Alaska Statute 27.19, miners may not engage in mining operations on State land 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 31steach year. 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.

Amended Plans: Changes in operation must be submitted in writing and approved in advance before the start of such activity.

A \$150.00 processing fee is charged when an APMA is submitted and thereafter \$50.00 is charged for each amendment to the DNR approved permit or DNR approved plan of operations.

- "Multi-Year" MLUP and Reclamation Plan Approval and Approved Plan of Operations fees (for up to five years): \$150.00 payable when APMA is submitted and a \$50.00 fee for each additional year.
- Make check or money order payable to "Department of Natural Resources."

Applicants who request a wastewater discharge authorization from DEC (section #26) are subject to the following annual fees:

- Mechanical Placer Mines without Mixing Zones: \$225
- Mechanical Placer Mines with Mixing Zones: \$270 in 2018 / \$315 after 2018
- Medium-Sized Suction Dredges: \$90
- Norton Sound Large Dredges: \$540 in 2018 / \$715 after 2018

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 applications to one of the following DNR offices

State Division of Mining, Land & Water or

550 W. 7th Ave. Suite 900B

Anchorage, AK 99501-3577

Telephone: (907) 269-8647 FAX: (907) 269-8949 State Division of Mining, Land & Water

3700 Airport Way

Fairbanks, AK 99709-4699

(907) 458-6896, (907) 451-2774 or (907) 451-2791

(907) 451-2703

APMA Instructions and Check List

State mining regulations require applications to be completed in ink or typed. Maps and plans can be in black and white or in color, provided they are on 8 1/2 " x 11" sized paper in order to ease distribution. Over size maps and plans needed to clarify complex operations, are allowed so long as 8 1/2" x 11" sized equivalents are included.

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 electronic Micro Soft Excel is preferred. A template is downloadable at:

http://dnr.alaska.gov/mlw/forms/18apma/AHEA_ReclamationSpreadsheet.xls. Please use the workbook provided. Electronic application materials can be submitted by e-mail to dnr.fbx.mining@alaska.gov or provided on other media with application packet.

Please review the following checklist and make certain all applicable items are included before submitting the application. Processing of incomplete applications is often delayed.

l	Are the applicable processing and bond pool fees enclosed?
[] Have you written "N/A", or draw 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 Notice of Operator Authorization?
[] Are all operators listed? Independent mining subcontractors and other persons not in an employment relationship listed?
[] Nome Offshore Operator Supplement?
[] 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.
[] Have you included MSDS sheets for all drilling fluids?
[] Have you included latitude and longitude coordinates for the Wastewater Discharge Permit Application?
Ī] 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 81/2" 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.
Г	1 Offshore Dredging Operations: Have you listed where your camp or support facilities are placed?

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

Single Year Multi-ye	tart:	Finish:_	APMA ([District/Year/N	lumber):		
What type activity are you planning	to pe	rform?	(1)	Surface estate of r	mineral properties:		
Exploration/Reclamation Mining/Reclamation Hardrock Exploration/Reclamat	Access Equipment Suction Dredge Reclamation State (General Private (Pater Private (Native			nted)	State (Mental Health) Federal City or Borough		
Mineral Property Owners: Company name and contact name if applicable	(3)	Lessee: Company name	and contact n	ame if applicable	Operator: Company name a	and contact name if applicable	(5)
Mailing Address for official correspondence:		Mailing Addre	ss for official	correspondence:	Mailing Address	s for official correspondence:	
Home phone# (winter):		Home phone# (winter):			Home phone# (winter):		
Work phone# (winter):		Work phone# (winter):			Work phone# (winter):		
Home phone# (summer):		Home phor	ne# (summ	ner):	Home phone# (summer):		
Work phone# (summer):		Work phon	e# (summ	er):	# (summer):		
Cell/Satellite:		Cell/Satellite:			Cell/Satellite:		
FAX:		FAX:			FAX:		
E-mail:		E-mail:			E-mail:		
Winter contact effective dates to		Winter con	tact effection	ve dates	Winter conta	act effective dates to	
Summer contact effective dates toto	_	Summer co			Summer cor	ntact effective dates to	
Project Name If Applicable:	(6)	# of Worke	rs:	(7)	Start-Up/Shu	ut Down: (Month/Day) to	(8)
Mining District:	(9)	Applicable	USGS Ma	p: (10)	On What Str	ream Is This Activity?	(11)
Legal Description of mineral properties to be worked and other projected related activities (MTRS): (12)							
Internal Use Only: Date Application Received Complete: Adjudicator: LAS Entry:							

CID:_____

Revised 10/2017

MINERAL PROPERTIES LIST

(13)

List only mineral properties with current and planned disturbance.

Attach additional sheets as necessary AND provide in electronic, tabular format if you are submitting more than 12 properties DNR template available at http://dnr.alaska.gov/mlw/forms/18apma/AHEA ReclamationSpreadsheet.xls

<u> </u>	ADL/BLM/USMS # PROPERTY NAME ADL/BLM/USMS # PROPERTY NAME 1.				
	ADL/BLM/USMS #	PROPERTY NAME		ADL/BLM/USMS #	PROPERTY NAME
1.			7.		
2.			8.		
3.			9.		
4.			10.		
5.			11.		
6.			12.		

INVENTORY OF EQUIPMENT	(14)
<u>List all mechanized equipment</u> to be used (make, model, type, size, purpose, and number of each, including pumps). Attach additional sheets as necessary. Check this box if the equipment is currently located within the claim block:	

IN-STREAM ACTIVITIES and STREAM	(15)
List any equipment that will be crossing streams or used in-stream.	` ,
List all atroom erossings, quotion drodge or nump locations, including unpomed atrooms	

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

	otrocomigo, odeti	NAD 83 Datum (app	roximate) Coordinates sing Alaska Mapper py/mapper/controller	MTRSC ½ ½	Check boxes to indicate type(s) of activity		
	Stream Name/ Water Source	Latitude ddd.mmmm	Longitude -ddd.mmmm	Ex: F001S001N01 SWSW	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).

ACCESS OUTSIDE OF CLAIM BLOCK

Access across surface estates not owned by the State requires approval of the managing agency. It is the responsibility of the applicant to contact the owners of private property to obtain authorization for access.

Summer Cross Country Travel: Easements are needed to construct access outside of a claim block. "Construction" is the use of mechanized equipment to create or improve access, including dropping the blade or bucket, and/or adding gravel to the surface. 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 may be needed before a permit will be issued and will only be released after travel is completed and no negative trail impacts have occurred. As-built surveys after work is completed may be required as well.

All season roads may be an improved dirt road intended to be used during all seasons of the year without causing long term damage to the road. NOTE: it is strongly recommended that you contact the appropriate Regional Land Office as certain roads are subject to Generally Allowed Uses, and special permitting may be required for use of the route with off-road vehicles greater than 1500 lbs curb weight (like mining equipment).

A completed access map must be submitted with your application. Copies of USGS topographic maps at a scale of 1"=1 mile must clearly indicate the proposed access route from start to finish and include appropriate legal descriptions (township and range) on each map sheet. The quadrangle map name should also be indicated (Healy A-3, etc.). Paper size should be limited to $8 \frac{1}{2}$ " x 11". Do not tape maps together.

Access is:	Existing	To be	constructed o	off claim blo	ock	Both	
Access outside City/Bord		ock crosses w Federal	hat type of lar Private				State (Mental Health) te (Native Corp. Land)
		oute of travel i has a State of					
If not, do	you wish to	nominate the	route for RST	Γ assertion	? Yes	No.	
Indicate type(s)	of existing a	ccess:					
Summer Co Airstrip River	ross Country	Travel off of o	claim block th			ŕ	Allowed Uses
Indicate type(s) Access Roa	of access to					ŕ	
Airstrip							
Please describe (A map outlining					n measures	to protect	water, fish and game resources.

WINTER CROSS COUNTRY TRAVEL (17)								
Vinter 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 ravel must be limited to areas where ground frost and snow cover are adequate to prevent damage to the vegetation nat and underlying substrate. A completion report is required within 30 days of travel completion. Travel is generally not authorized after April 15 th of each year (extensions may be granted as conditions allow).								
A Winter Cross Country Travel Route is required to obtain authorization. Is a winter travel access map attached?								
Will water be needed to construct ramps/ ice bridges? Yes No								
If Yes, estimated quantity of water will be used gallons/day WaterSource:								
List all equipment and vehicles being transported:								
Are you transporting fuel? Yes No If "yes ", indicate type and amount:								
Are you transporting other petroleum products? Yes No If "yes", indicate type and amount:								
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.)								
Indicate proposed dates for each period of cross country travel:								
FUEL AT MINE SITE (18)								
Describe the total volume of fuel stored on site: [BLM Operators Only - Spill Worksheet is Required]								
0-1,320 gallons (secondary containment recommended, but not required)								
1,321-10,000 gallons (Self Certified Spill Prevention, Control and Countermeasure Plan (SPCC) required)								
10,000+ gallons (Certified Engineered Plans required)								
Indicate Distance Stored From Flowing Waters: Feet (Minimum distance from naturally occurring water bodies required by DNR is 100 feet).								
Are fuel containment berms around storage containers? Yes No Is berm area lined? Yes No								
STRUCTURES/FACILITIES (19)								
Request use of existing facilities (Indicate number and size of each):								
Area of Camp: LengthFeet WidthFeet								
Frame Trailer Tent/Tent Frame								
Request authorization to place temporary structures (Indicate number and size of each):								
Area of Camp: LengthFeet WidthFeet								
Frame Trailer Tent/Tent Frame								
Camp authorization not needed								
If camp is on private land, provide camp name: and camp location:								

Estimat	ed cubic yards	s processed ar	nually:	erations with do		or, etc.)	(2
Suction dred st all suction ar				cavator or clam- ot applicable, wri		extra sheet if	necessary.
			dge 1		dge 2		dge 3
Vessel ID (Na	ame or Number)						
Ves	ssel Dimensions						
	e Intake Nozzle eter / Pump Size	Inches:	HP:	Inches:	HP:	Inches:	HP:
Mechanica	Dredge Bucket Volume	Cubic Yards:		Cubic Yards:		Cubic Yards:	
Processing Rate Wastewater Discharge Rate		Yds. ³ /Hr.: GPM:		Yds. ³ /Hr.:		Yds. ³ /Hr.:	
				GPM:		GPM:	
Maximu	ım Water Depth	Feet:		Feet:		Feet:	
Average Daily (Operating Hours						
Operation on S	ea Ice (Yes/No)	Yes	/ No	Yes	/ No	Yes	/ No
Vessel Regis	stration # / State	#:	State:	#:	State:	#:	State:
Location:	Offshore /	Salt Water		Pond connect	ted to stream	1"	
	Stream Mine cut is	solated from st	tream	Pond isolated	from stream		
				ON TRENCHING			(2
				sheet and/or top	pographic map)	
timated numbe	r of trenches t	o be excavate	d:	·			

		L ORATION TRENCHING on sketch sheet and/or topographic ma	(21)
Estimated number	of trenches to be excavated:		
Average Size: Ler	ngth: Feet Width	: Feet Depth:	Feet
How long will trench	hes be open?		
	Trench Locat	tion and Mining Claim Information	
Trench ID on	ADL/BLM/USMS NUMBER		be obtained using Alaska Mapper
Мар		Latitude	Longitude (approximate)

If more than 8 trenches, please provide data in tabular format (http://dnr.alaska.gov/mlw/forms/18apma/AHEA_ReclamationSpreadsheet.xls.)

EXPLORATION DRILLING									
	(Indicate I		etch sheet and/or topographic m	nap)	(22)				
Number of Holes To Be	Drilled:		_ Type of Drill Used:	.					
Estimated Maximum Do	epth:	Feet	Diameter of Holes:	Inches					
Will water be used?	Yes	No	Water Source?						
How Will Drill Holes Be	Plugged Upon Co	ompletion?			<u>_</u> .				
	Placer I	Drill Hole Locat	tion and Mining Claim Informatic	on					
Drill Hole ID on	ADL/BLM/USMS	S NUMBER		an be obtained using Alaska Mar gov/mapper/controller	oper.				
Мар			Latitude	Longitude (approximate)					
		_							
		•	ease provide data in tabular form						
	(<u>nttp://dnr.aiaska</u>	.gov/miw/iorms/	18apma/AHEA_ReclamationSpread	isneet.xis).					
		E	XPLOSIVES		(23)				
Will explosives be used	d? Yes	No If "Yes",	Indicate: Type:	Amount:					
			DAM		(24)				
No dam required	Existin	g To b	pe constructed						
Proposed Structure:	Temporary	Perman	ent						
Purpose: Makeup w	Purpose: Makeup water pond Settling/recycle pond Stream diversion Other:								
Length: ft Height: ft Width At Crest: ft Width At Base: ft									
Note: Height should be of the dam.	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.								
Water impoundment ca	pacity (if known):		acre-feet						

Water usage (including 100% recycle systems) may require authorization by either Temporary Water Use Authorization or a Water Right Permit or Certificate. 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 M	AKE-UP WATE	<u>R:</u>						
ls water with	ndrawn from any lake	, stream, creek,	river, e	etc. (does not inclu	ude re	cycling/s	ettling ponds)?	Yes	No
What is the	name(s) of the lake,	stream, creek, ri	ver, etc	o.?					
What are the	e months of water us	e needed (for ex	ample	May 1 st through 0	Octobe	er 31 st)?			_
Start-up wa	ter: Is water require	d at the start of t	he sea	ison <u>to fill</u> your re	ecycle	settling	oond system?		
Yes (if <u>Y</u>	<u>'ES</u> , complete informa	ation below).	No						
Source:	Seepage infiltration	n from groundw	ater ga	ained from cut and	d/or st	ream			
	Diversion ditch fro	m stream. Num	ber of	days diverting fro	m stre	am for s	tart-up water:		
	Water intake rate:	gpm	-	hrs/day					
	Pump from strean	n. Number of day	ys pum	ping from stream	for st	art-up wa	ater:		
	Number of water p	oumps for start-u	ıp wate	er: Water inta	ke rat	e (list for	each pump):	gpm	
	hrs/day								
	-								
Make-up wa	ater: Is water require	ed to maintain w	ater le	vel in your recycle	e/settl	ing pond	system?		
	ES, complete informa	<u></u>	No	,		0 ,	•		
Source:	Seepage infiltration	,		nined from cut and	d/or st	ream			
	Ditch from stream	_	_				vater:		
	Water intake rate:			_		up			
	Pump from stream			•	n for m	nake-un v	vater		
	Number of water p		-			-		anm	
	hrs/day				rate (1131 101 01	ion pamp)	9pm	
	1113/day	ump intake size	J						
B. RECY	CLE/SETTLING PON	ID SYSTEM.							
Beaver pond	ds or other natural wa	ter features will	not be	permitted for use	as se	ettling po	nds.		
·				•		01			
ls a pre-sett	ling pond used?:	Yes No	ls rec	cycle used?:	Yes	No			
How many p	oonds are used in the	recycle system	?						
Recycle por	nd is pond #	Settling p	ond is	pond #		_			
C. RECY	CLE/SETTLING PON	ID SYSTEM (co	ntinue	ed).					
	igth (L), Width (W), a								
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	
Pand # 5.1.	ft \//	ft D·	fŧ	Pand # 6: 1:		ft \//·	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/dayinchesgpmdays/month
Pump #2: hrs/dayinchesgpmdays/month
Pump #3:hrs/dayinchesgpmdays/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: gpmhrs/day
E. EXPLORATION ACTIVITIES.
Is water required for exploration activities? Yes No
If <u>YES.</u> What types of exploration activities are being performed? Trenching Drilling
If <u>YES.</u> How many pumps are used in the exploration activities?
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/dayinchesgpmdays/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) PLACER MINING METHOD.

WASTEWATER DISCHARGE PERMIT APPLICATION

(26)

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 Page Two 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.

F - 7		
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 gene	eral 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 c Multi-Sector General Permit for Storm Water. Contact DEC to terminate a permit.	_	
Optional* - Mixing Zone Request or Termination for Mechanical Placer Mine		
Do you wish to apply for a mixing zone and modified turbidity limit from DEC?	Yes	No
f 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	n 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. F	Permittees with	out 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 au (required for all DEC permit or mixing zone applicants)		
certify under penalty of law that this document and all attachments were prepared under my diaccordance with a system designed to assure that qualified personnel properly gather and evaluations. Based on my inquiry of the person or persons who manage the system, or those perfor gathering the information, the information submitted is, to the best of my knowledge and belicomplete. I am aware that there are significant penalties for submitting false information, included and imprisonment for knowing violations.	uate the info ersons directli ief, true, acc	· rmation y responsibl urate, and
Signature of Responsible Party:		
Responsible Party Name (First Last, Position) - Printed:		
Business Name (if applicable) - Printed:		

SECTION 404 WETLANDS PERMIT

JURISDICTIONAL DETERMINATION (CORPS JD) and MITIGATION STATEMENT

All Placer Mining applicants are required to contact the Corps of Engineers for submittal requirements.

A complete application for a Department of the Army (DA), U.S. Army Corps of Engineers (Corps) Section 404 permit includes a description of project impacts (contained in the APMA), a Jurisdictional Determination (JD) and a Mitigation Statement. The applications for the JD and the Mitigation Statement are contained in two Corps Supplements, which may be attached to this APMA. The Supplements may be downloaded from the Corps and DNR websites, or obtained directly from a Corps office in paper copy, by email, or mail. Please contact the Corps to determine what supplements are required.

<u>Corps Supplement, Attachment 1, Jurisdictional Determination:</u> Attachment 1 must be filled in and submitted to the Corps for all new placer applications (New and Existing Operations). Photos of your mine site are required. Your JD will be valid for five years. Your photos will be used only for the purpose of conducting an offsite JD.

<u>Corps Supplement, Attachment 2. Mitigation Statement:</u> Alaska District regional mitigation policy for placer mining operations under this General Permit (GP) emphasizes avoidance and minimization of impacts; **compensatory mitigation is not required**. However, by regulation, a Mitigation Statement covering measures for avoidance, minimization, and compensatory mitigation, or, a reason why compensatory mitigation is not proposed, must be submitted to the Corps with each new APMA for projects that impact waters of the U.S.

Note:

- If your APMA requires, but does not include a JD or Mitigation Statement, your application will be considered incomplete. The Corps may also contact you for additional information. Please ensure your contact information on the front page is current.
- For BLM Operators: A complete 404 Wetland Permit Package with additional photos of the upland areas to be mined will be sufficient to meet the requirement for the uplands reclamation baseline data and riparian mitigation measures as required by § 43 CFR 3809.

Provide the Latitude a	and Longitude of the operation location (DD, NAD83	: 3):
Latitude:	Longitude:	
Source (e.g., DNR	- Alaska Mapper):	
Please list Corps perm	nits previously issued for this site: POA	, POA
	Certification Statement	
Application is herebing information in the A	will accept the APMA as a pre-construction notification, p by made for a permit to authorize the work described in this APMA, and any required Supplements, is complete and accept to undertake the work described herein or am acting as exant.	s APMA. I certify the curate. I future certify that I
Operator or Agent:		
Print Name	Signature	Date

STREAM DIVERSION	(28)
DIVERSION IS DESCRIBED. Discribed of Constitution of the Linds of Diversion in the Linds of Dive	

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).

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 <u>YES</u> ,	complete information	n below). No	
Existing (Date Constructed	l)	To Be Constructed (Date)	
If a diversion is required or pr Permitting information. To fa				
Is Stream Diversion? Pern	nanent Temp	oorary	_year(s)	_ months
Will diversion be reclaimed annu Annually reclaimed/returned			roughout the mine life? throughout mine life	
Dimensions of existing stream in Length(ft) Top Width(_(ft) Depth(ft) Flo	oodplain Width(ft)	
Dimensions of proposed diversi	on:			
Length(ft) Top Width((ft) Bottom Width	_(ft) Depth(ft) F	oodplain Width(ft)	
Dominant substrate type (Choose	se Two): Bedroo	k Boulder	Cobble Gravel	Sand Silt/Clay
Note: Diversion should approx floodplain width. (Please provide plan a			meander bends, length,	

PLAN MAP OF OPE	RATION		
			(29)
		VICINITY MAP	
	Date Prepared:	Applicant Name:	
		STATE OF ALASKA RTMENT OF NATURAL RESOURCES ON OF MINING, LAND AND WATER	
	MAP:	<u> </u>	
	Sec.(s)Town	ship, Range, Meridian	
	Scale: 1" =	ADLs:	
	SHEET OF	A DMAA #	

CRUSS SECTION S	KEICH	
BEFORE MINI	NG	(30)
DURING MINII	NG	
AFTER MININ	NG	
	Date Prepared:	Applicant Name:
	DEPA	STATE OF ALASKA RTMENT OF NATURAL RESOURCES
	DIVIS	ION OF MINING, LAND AND WATER
	MAP:	
		nship, Range, Meridian
	Scale: 1" =	ADLs:
	SHEET OF	APMA#

NARRATIVE

protection measures a	ration is required. Please and reclamation measure	e use this space to de es to be used for the	escribe the access, multiple describe the access, multiple describes the access, multiple describes access.	nining process, enviror it. Use multiple sheets	(31) nmental if
necessary.					

2017 ANNUAL RECLAMATION STATEMENT (32)**Placer Mining** Suction Dredging APMA # : ______. Hardrock Exploration Complete and return this statement by December 31, 2017. If you did not operate, fill in name, check bottom box, sign and return form. In accordance with AS 27.19 (Reclamation Act): hereby file an annual reclamation statement for the 2017 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 2017: _____ cubic yards (includes strippings and processed material). Sluice days last season: Cubic yards of material processed daily: Annually: . . Total acreage disturbed in 2017: _____ 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 Permanent (check one). Stream diversion: Temporary Total area reclaimed in 2017: _____ acres. Total un-reclaimed acres: _____ (This should match "total acreage currently disturbed" on the 2018 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:

Relationship to Claim(s) Owner

Date

Agent For: _____

Lessee

Operator

Signed

I did not operate in 2017 and therefore did not conduct reclamation.

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/18apma/AHEA_ReclamationSpreadsheet.xls (electronic copies can be submitted via
e-mail to 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.

RECLAMATION PLAN

(33)

RECLAMATION PLAN

(Disturbed Area 5 Acres Or Greater or BLM Notices)

LETTER OF INTENT TO DO RECLAMATION (Disturbed Area Less Than 5 Acres)

In accordance with Alaska Statute 27.19, reclamation is required of all mining operation. 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 "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, please provide additional information concerning your plans for reclamation under separate attachments.

BLM operators - The APMA reclamation plan does not include all required information, to ensure your plan or notice is complete and processed as quickly as possible, please submit a complete supplement worksheet. The supplement worksheet will ensure all additional information required by §43 CFR 3809 is submitted. Contact your local BLM field office for a copy of the worksheet (see page APMA cover page for BLM contact information).

CFR 3809 is submitted. Contact your local BLIVI field office for a co	opy of the worksheet (see page APMA cover page for BLIV	i contact information).
Total acreage currently disturbed: acres. This sh Statement for Small Mines, or line #7 on your 2018 Bond F exploration activity (excluding camps and roads) since Octo	Pool Renewal Form. Disturbed ground includes all ur	nreclaimed mining and
New acres to be disturbed in 2018 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 2018: acres; a Reclamation conducted concurrently with the exploration		f the exploration season
Total volume of material to be disturbed in 2018:	hese measures are required by law. Those that do a sures are not necessary at your site.) Ity redistributed to an area being reclaimed, will be in a from erosion and from contamination by acidic or surrounding area using tailings, strippings, and over the contoured exploration sites to promote naturathin five years. Stockpiled vegetation will be spread umps, topsoil, and other organics will be spread on the present of the exploration trenches shall be flagged and signs posted to establish be reclaimed by the end of the exploration solons. It is a beackfilled with drill cuttings or other locally at mans, livestock and wildlife. Delow, ground level. All drill holes shall be plugged beach slurry, for a minimum of 10 feet within the top 20 with drill cuttings. If water is encountered in any drill ed immediately above the static water level in the drilling or equivalent slurry is also permitted and is constantes otherwise specifically approved by the DMLW artesian well may require additional authorizations. If Geis 907-451-2790) and DEC (Allan Nakanishi at 90 oved, on State land, will be removed, dismantled, or apsite will be cleaned up and left free of debris. In comply with AS 27.19 Reclamation measures presented above. For BLM, submit supplement worksheet. It is a previously a mined area of ≥five acres on State and operations having a mined area of ≥five acres on State and operations having a mined area of ≥five acres on State and operations having a mined area of ≥five acres on State and constantes and operations having a mined area of ≥five acres on State and constantes and constantes are and area of ≥five acres on State and constantes are and area of ≥five acres on State and constantes are and area of ≥five acres on State and constantes are and area of ≥five acres on State and constantes are and area of ≥five acres on State and constantes are and area of ≥five acres on State and constantes.	not apply may be crossed individually separated and toxic materials and will not rounded and be stabilized. All plant growth such that a lover topsoils. The backfilled surface to condify the public of the season in which they are evailable material in such a copy the end of the feet of the drill hole. The hole, a minimum of 7 feet rill hole. Complete filling of sidered to be the preferred for the top the properly consideration of potentially to objects, or artifacts that in not not propose to land managers may
Statewide bonding pool has been established and may be joined be effect until the bonding pool deposit and annual nonrefundable fee bond form to calculate area of disturbance for bonding.	by completing the bond pool application form. No reclama-	tion plan approval goes into
	Relationship to Claim(s)	Date:
Printed name (Applicant)	Owner Lessee Operator	
	Agent For:	APMA #:

Signature (Applicant)

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
WINTER 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 WINTER TRAVEL – may label as A to A' or simply "start" and "stop."

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 in wetlands and uplands.
- 2) 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:

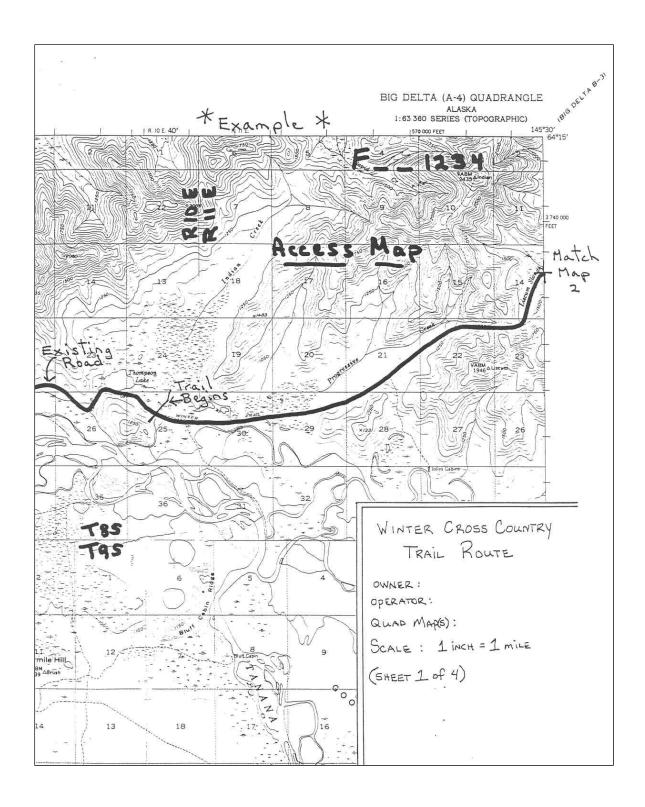
The mining operation is designed to economically recover gold and complete acceptable reclamation. The mine layout is directly related to reclamation. Mining will progress in the following steps -- see sketch:

- 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 adiacent bottom surface.

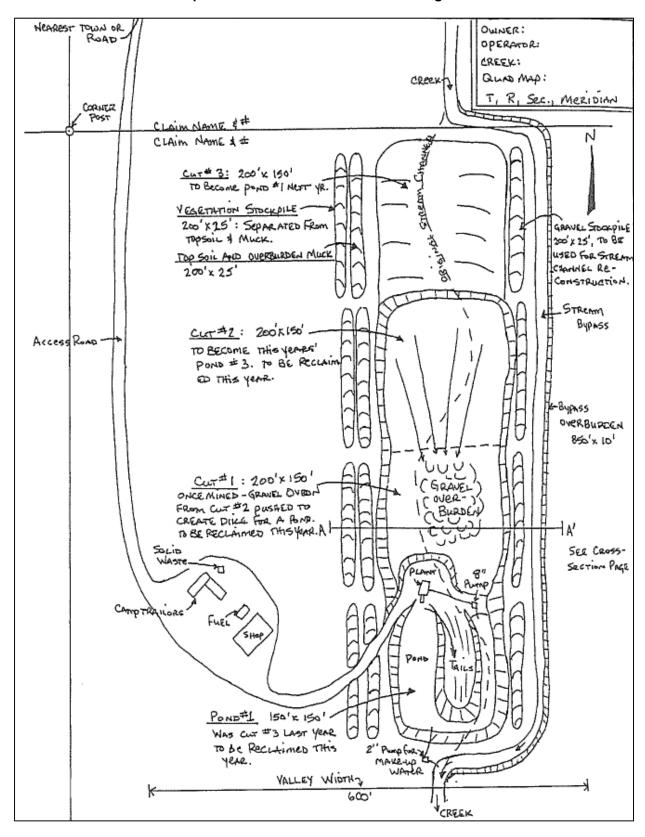


Example of Access Map

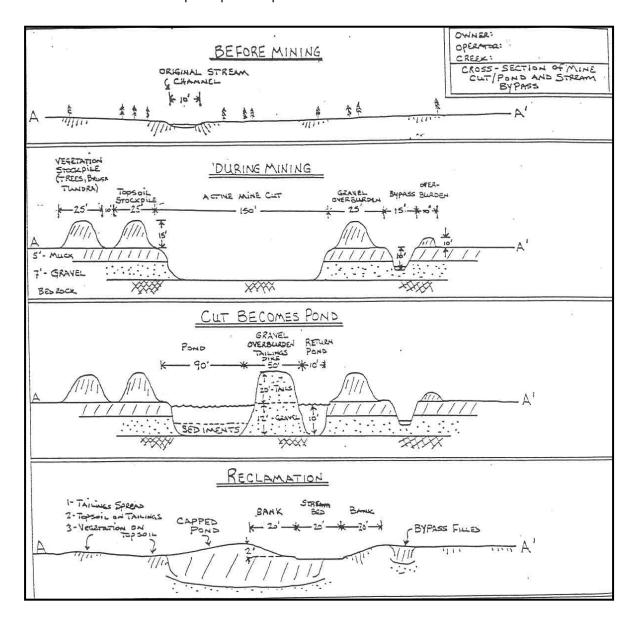


Example of Claim Location Map

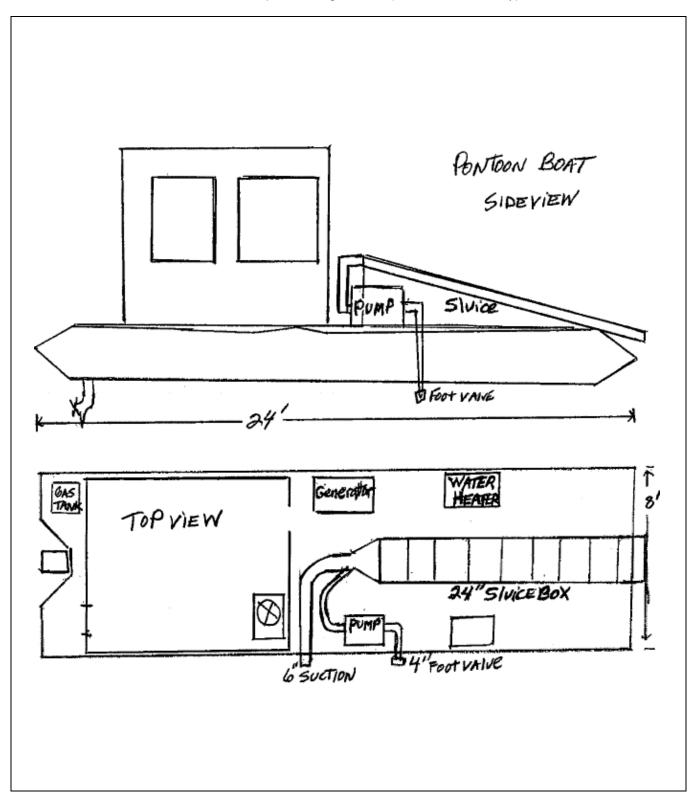
Example of Plan of Mechanical Placer Mining



(Attach additional sheets and narrative as necessary)



(Attach additional sheets and narrative as necessary)



Nome Offshore Operator—Supplemental Information Supply this information to your mineral property holder for submission to DNR.

Mineral Property Owner (s):			APMA #:
Lease Tract or Mining Claim N	Number (s):		
Operator Name: Operator Summer Mailing Ad		Operator Winter Mailin	ng Address:
City: State: Summer Phone #:		-	State: Zip:
Email:Name and Phone Numbers of		on dredge (if more than or	ne):
Name:	*		
Name:		Phone Number:	
Name:		Phone Number:	
Location of Operator Housing	While in Nome:		
List All Equipment to be Perm	itted:		
	Dredge 1	Dredge 2	Dredge 3
Vessel ID (Name or Number)			
Vessel Dimensions		-	
Vessel Registration # and State	#: State:	#: State:	#: State:
DEC APDES Permit	#:	#:	#:
Suction Dredge Intake Nozzle Diameter / Pump Size	Inches: HP:	Inches: HP:	Inches: HP:
Mech. 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 / No
***Operations using equipm open waters are not requ	ent with a nozzle intake or ired to have an APDES r		and solely operating in
Authorization for this Operator	r Valid from/_	_/ to/	
Mineral Property Owner Signa	ture:		Date:
Mineral Property Owner Printe	ed Name:		

Nome Offshore Operator—Supplemental Information DEC Alaska Pollutant Discharge Elimination System (APDES) Application

Mineral Property Owner (s): APMA #:
Lease Tract or Mining Claim Number (s):
Operator Name:
WASTEWATER DISCHARGE PERMIT APPLICATION
All 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.
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 .
Do you want this supplement to act as an application or renewal for the following APDES general permit (GPs):
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:
Approximate coordinates of mine site:
Latitude: Longitude:
Source (e.g., DNR - Alaska Mapper): Datum:
Please attach a drawing of the operation.
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 (Operator/Vessel Owner):
Responsible Party Name (First Last, Position) - Printed:
Business Name (if applicable) - Printed:

Nome Offshore Operator—Supplemental Information Operation Sketch

Mineral Property Owner (s):	APMA #:
Operator Name:	

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

	APMA #
Name	·
Mailing Address	<u> </u>
City State	Zip Code
Submits unto the State of Alaska, Department of Natural R	esources, the sum ofDOLLARS
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	o, 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 iswhole acre. This acreage must include all areas disturbed been approved as reclaimed by BLM. If a mining operation included in the acreage to be bonded. For State and Patented Claims : The active mining disturb (acreage should be rounded to the next whole acre). This is including stripped areas, mining cuts, overburden and tailin stream diversions, and settling ponds. This acreage must in October 15, 1991 that have not been approved as reclaimed mined area, that area must also be included in the acreage	by mining operations after January 1, 1981, that have not disturbs a previously mined area, that area must also be ance, not including camp and access roads is acres includes all areas that are part of the mining operation; g stockpiles and disposal areas, temporary or permanent include all areas disturbed by a mining operation after d by ADNR. If a mining operation disturbs a previously
Refundable bond deposit (new):	acres X \$112.50 = \$
Nonrefundable bond pool annual fee (new):	_ acres X \$ 37.50 = \$
Make check payable to 'Department of Natural Resources' Mining: 550 W. 7 th Ave. Suite 900B, Anchorage, AK 9950	Total \$ Sign and return form with applicable fees to: DNR - 1-3577 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			<u>-</u>
City	State	Zip Code	<u>-</u> •
Φ.	· · · · · · · · · · · · · · · · · · ·	of Natural Resources, the sum of	DOLLARS
for payment into t	he State Wide Bonding Pool	to meet the bonding requirements	of Alaska Statute 27.19 for mining activity located on .
These claims are	located within legal description	on (Township, Range, Section, Meri	idian
For Federal Clain stripped for mining acres. Acreage sl January 1, 1981, t must also be inclu For State and Par should be rounded cuts, overburden a must include all ar	g next season is	whole acre. This acreage must incl as reclaimed by BLM. If a mining op ided. ining disturbance, not including can s includes all areas that are part of cosal areas, temporary or permanel	access roads, unreclaimed areas, and areas to be lude all areas disturbed by mining operations after peration disturbs a previously mined area, that area mp and access roads is acres (acreage the mining operation; including stripped areas, mining nt stream diversions, and settling ponds. This acreage have not been approved as reclaimed by ADNR. If a d in the acreage to be bonded.
Original acreage b	oonded:		
New acreage b	oonded:		
		Refundable bond deposit (n	new): acres X \$112.50 = \$
	Noni	refundable bond pool annual fee (n	ew): acres X \$ 37.50 = \$
			Total \$
Grand total of bon Make check payal Suite 900B, Ancho	ole to 'Department of Natural	Resources'. Sign and return form 00 Airport Way, Fairbanks, AK 9970	with applicable fees to: DNR - Mining: 550 W. 7 th Ave 09-4699.
Signed – Miner		Date	
ADNR - Division o	of Mining, Land & Water	Date	
BLM - Bureau of L	and Management	Date	

STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES STATE WIDE BOND POOL RENEWAL FORM FOR 2018 OPERATIONS

APMA # ______.

Name			
Mailing Address			
Submits to the State o	f Alaska, Departr	nent of Natural Resources,	a renewal of reclamation bonding in
accordance with AS 27	7.19 for mining a	ctivity on claim's:	
located in T	,R	, Sections	M.
The amount of the refu	and or amount ow	ved was calculated as follow	ws:
1. Number of acres bo	onded in 2017:		acres
2. Total number of ac	res disturbed in 2	017?	acres
			1991 to present, for state or private lands, and ude area of camp and access roads.
Bonding credits carr	ied forward fron	n 2017 to 2018:	
3. Number of acres bo (1 minus 2 abo		t not disturbed:	acres x \$ 112.50 = \$
4. Number of acres re	claimed in 2017	and approved by BLM/	
DNR (must submit	Bond Release Ap	oplication for State claims,	acres x \$ 112.50 = \$
		eted for reclaimed area	
(PHOTO/VIDEO DO	OCUMENTATION	N REQUIRED.)	
5. Dollar total of lines	3 + 4:		\$
Bonding obligations	for 2018:		
6. Number of acres di	sturbed but not b	onded in 2017:	acres x \$ 150.00 = \$
7. Total number of all	unreclaimed acre	es:	acres x \$ 37.50 = \$
(line 7 should matc	h "total acreage o	currently disturbed"	
on your 2018 Recla	amation Plan. (2 r	minus 4 above)	
8. New acres to be dis	sturbed in 2018:		acres x \$ 150.00 = \$
9. Dollar total of lines	6 + 7 + 8:		\$
10. Total acreage bond	ded in 2018 (7 +	8):	acres
If line 5 is larger than I	ine 9 enter the di	fference here \$	This amount will be refunded.
If line 9 is larger than I OF NATURAL RESOL		nce is due DNR \$	Make check payable to: DEPARTMENT
Signed – Miner			Date
ADNR - Division of Mir	ning, Land & Wat	er	Date
BLM - Bureau of Land	Management		Date

NOTICE OF OPERATOR AUTHORIZATION -- STATE MINERAL LOCATIONS

All operators or lease holders submitting APMAs 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 stat	e claim(e) ·	
Claim Name ADL Number Claim Name	ADL Number	Claim Name	ADL Number
(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 ar	e not the same, both s	ections must be comp	oleted)
I,, LESSEE of	state claim(s):		
Claim Name ADL Number Claim Name	ADL Number	Claim Name	ADL Number
(Attach additional sheet if necessary)	<u> </u>		
•			
have authorized	to operate on these	claims from / /	to / /
THAT GARDINEOU		ланно пон <u>т</u> / /	
Lessee's Signature		Date	
Lessee's Address			
NOTARY:			
Subscribed and sworn to before me this day of	, 20 .		
For (Lessee)	<u>, </u>		
(Signature of Notary)	·		
My commission expires:			orization (10/17)