

Final

Pogo Mine

Plan of Operations Approval

(F20129500)

DEPARTMENT OF NATURAL RESOURCES
Division of Mining, Land and Water

February 7, 2012

The Alaska Department of Natural Resources, Division of Mining, Land and Water (ADNR), in accordance with and subject to Alaska Statutes 27.19 (Reclamation) and 38.05 (Alaska Land Act) and the Alaska Administrative Code, Title 11 and Chapters 86.800 (Plan of Operations), 96 (Miscellaneous Land Use) and 97 (Mining Reclamation), approves the Plan of Operations for the Pogo Mine (F20129500) submitted by:

Sumitomo Metal Mining Pogo LLC
P.O. Box 145
Delta Junction, Alaska 99737

Throughout this document, unless otherwise specifically indicated, any reference to Sumitomo Metal Mining Pogo LLC, Sumitomo, Pogo or Permittee is considered a reference to Sumitomo Metal Mining Pogo LLC.

Throughout this document, unless otherwise specifically indicated, reference to the State, Department, ADNR, DNR or Division is considered a reference to the State of Alaska – Department of Natural Resources – Division of Mining, Land & Water.

Throughout this document, the Plan of Operations is considered to consist of the Pogo Plan of Operations (November, 2011) and the following Supporting Documents:

- Appendix A – Pogo Mine Claim List;
- Appendix B – Figures;
- Appendix C – Pogo Quality Assurance Plan;
- Appendix D – Pogo Mine Monitoring Plan;
- Appendix E – Pogo Reclamation and Closure Plan;
- Appendix F – Pogo DSTF Construction and Maintenance Plan;
- Appendix G – Pogo RTP Operating and Maintenance Manual;
- Pogo Project Water Management Plan (February 2002 and supplemented June 2002);
- Pogo Mine Inflow Evaluation and Control Review (Adrian Brown, April 5, 2009);
- EXCEL Pogo mine reclamation cost estimate 20100907; and,
- EXCEL Pogo ROW reclamation cost estimate 20101224.

Reference to any of these documents throughout this Plan of Operations Approval is considered to be a reference to the Plan of Operations. Likewise any and all stipulations associated with the approval of any of these individual plans are considered to be a requirement of the Plan of Operations Approval.

Effective dates of this Plan of Operations Approval are February 7, 2012 through February 6, 2017, unless sooner revoked for cause; however, Sumitomo Metal Mining Pogo LLC's obligations under the terms and conditions of this plan approval shall continue beyond the effective term of this plan approval, unless sooner terminated in accordance with the provisions of this plan approval, until completion of all requirements under and pursuant to the Plan of Operations Approval.

This Plan of Operations Approval is for activities upon State managed lands encompassed by the Pogo Mine Project Millsite Lease (ADL # 416949).

This Plan of Operations Approval does not constitute certification of any property right or land status claimed by the applicant.

The Plan of Operations was found to be complete and is approved by ADNR with the following conditions:

GENERAL STIPULATIONS

Financial Assurance. This Plan of Operations Approval does not take effect until Sumitomo Metal Mining Pogo LLC submits financial assurance in a form approved by ADNR. In accordance with terms of Pogo's financial assurance and applicable regulations, the financial assurance shall not be released until affected areas have been reclaimed and are approved by the Authorized Officer and all other terms of this Plan of Operations Approval are met. Modifications to the Pogo Mine Plan of Operations and notification of Temporary or Permanent Closure may, at ADNR's discretion, require review and update of the amount and/or the form of the financial assurance. The total initial financial assurance amount of \$44,430,000 has been approved for the Pogo Mine and \$4,810,000 for the Pogo Rights-of-Way (ADL# 416809 and ADL# 416817). ADNR may require or allow revisions to the financial responsibility cost estimates based upon: (1) monitoring results at the Pogo Mine; (2) changes in costs for labor, equipment, fuel, or chemicals; and/or, (3) changes in the scope and nature of work required under the Pogo Reclamation and Closure Plan.

Terms of this Plan Approval. The Terms and Conditions contained within the Pogo Plan of Operations (November 2011), and the following Supporting Documents are hereby incorporated by reference as stipulations of this Plan of Operations Approval:

- Appendix A – Pogo Mine Claim List;
- Appendix B – Figures;
- Appendix C – Pogo Quality Assurance Plan;
- Appendix D – Pogo Mine Monitoring Plan;
- Appendix E – Pogo Reclamation and Closure Plan;
- Appendix F – Pogo DSTF Construction and Maintenance Plan;
- Appendix G – Pogo RTP Operating and Maintenance Manual;
- Pogo Project Water Management Plan (February 2002 and supplemented June 2002);
- Pogo Mine Inflow Evaluation and Control Review (Adrian Brown, April 5, 2009);
- EXCEL Pogo mine reclamation cost estimate 20100907; and,
- EXCEL Pogo ROW reclamation cost estimate 20101224.

If there is a difference between the Plan of Operations as submitted and the terms contained within this Plan of Operations Approval, the terms contained within this Plan of Operations Approval take precedence. Changes to the documents incorporated herein must be approved by ADNR if they affect this Plan of Operations Approval. If ADNR approves the changes, they become terms of this Plan of Operations Approval.

Authorized Officer. The Authorized Officer for ADNR is the Director of the Division of Mining, Land and Water or his designee. The Authorized Officer is designated as Joe Wehrman. The Authorized Officer may be contacted at 550 West 7th Avenue, Suite 900D, Anchorage, Alaska 99501-2577, Attention: Joe Wehrman, or joe.wehrman@alaska.gov, telephone (907) 269-8630, and fax (907) 269-8930. Sumitomo Metal Mining Pogo LLC will be notified of changes to the authorized officer as needed.

Alaska Historic Preservation Act. Sumitomo Metal Mining Pogo LLC will comply with the stipulations of the Programmatic Agreement By and Among The Advisory Council on Historic Preservation, The U.S Environmental Protection Agency, The U.S. Army Corps of Engineers, The State of Alaska, and The Alaska State Historic Preservation Officer Regarding the Pogo Mine Project, executed on August 12, 2003.

Forestry Resources. All timber on the Millsite Area that will be cleared to allow Millsite Operations shall be salvaged in accordance with the stipulations contained in the Early Entry Authorization for the Pogo Mine Access Road Right-of-Way (ADL # 416809 & 417066).

Monitoring. Monitoring shall be conducted in accordance with the Pogo Mine Monitoring Plan (November, 2011) as approved by the Department.

Reporting. The results of monitoring, required by the Pogo Mine Monitoring Plan and any other monitoring required by this Plan of Operations Approval, obtained during a reporting period shall be summarized and submitted to the Authorized Officer quarterly, no later than 60 days after the last day of the first through third calendar quarters, in hard copy and electronic format acceptable to ADNR. Any other monitoring required by state or federal authorizations shall be provided upon request of the Authorized Officer. An annual report will be due by March 1st that summarizes activities (surface disturbance, mining, construction, reclamation, monitoring, research, and water treatment / discharge) conducted during the previous calendar year, includes fourth-quarter monitoring data, and that discusses relevant plans for the upcoming year. The annual report shall also address the adequacy of the financial assurance, including, but not limited to, inflation, significant changes in reclamation activity costs, concurrent reclamation, expansion or other changes to the operation of the facility, and monitoring results.

An annual meeting with ADNR will be held in conjunction with ADEC and open to the public in which the annual report will be presented. The annual report shall be available to ADNR two weeks prior to the annual meeting.

Electronic copies of all quarterly reports and electronic and hard copies of the annual report should also be sent to ADNR, 3700 Airport Way, Fairbanks, AK 99709-4699 (Steve McGroarty at steve.mcgroarty@alaska.gov and Jim Vohden at jim.vohden@alaska.gov), ADNR Office of Project Management and Permitting, 550 West 7th Avenue, Suite 900D, Anchorage, AK, 99501 (Sharmon Stambaugh at

sharmon.stambaugh@alaska.gov), ADF&G Habitat Division, 1300 College Road, Fairbanks, AK 99701-1551 (Bill Morris at william.morris@alaska.gov), and ADEC, Wastewater Discharge Program, 610 University Avenue, Fairbanks, AK 99709-3643 (Tim Pilon at tim.pilon@alaska.gov). Amendments to this distribution list will be provided to Sumitomo Metal Mining Pogo LLC as needed.

The quarterly and annual reports required by this Plan of Operations Approval and those required by the ADEC Waste Management Permit and ADEC APDES Permit refer to the same reports, conducted to fulfill the requirements of the authorizations.

As-Built Maps. Sumitomo Metal Mining Pogo LLC shall submit to ADNR an “as built” map in conjunction with each annual report (unless otherwise approved by ADNR). The map (or maps) shall illustrate the current development of all facilities within the project area as described in the Pogo Mine Plan of Operations. The plan maps shall show: cleared and grubbed areas; topsoil and growth medium stockpiles; waste rock stockpiles; roads; tailings facility; material sites; facility construction; and any unreclaimed exploration disturbance. Maps shall be 1”=500’ or other appropriate scale necessary to review the development of individual facilities. AutoCAD maps and drawings shall be provided to ADNR upon request.

Temporary Closure. Sumitomo Metal Mining Pogo LLC shall notify the Authorized Officer in writing at least thirty (30) days prior to any planned Temporary Closure (suspension of mining and milling/processing operations) of ninety (90) days or longer. Sumitomo Metal Mining Pogo LLC shall notify the Authorized Officer of any unanticipated Temporary Closure expected to last ninety (90) days or more within ten (10) days of the first day of the Temporary Closure. The notice shall state the nature and reason for the Temporary Closure, the anticipated duration of the Temporary Closure, what actions will be taken to maintain compliance with project permits and plan approvals, and any event which would reasonably be anticipated to result in either the resumption of mining or milling activities or the permanent cessation of mining or milling activities. The notice shall include a Temporary Closure Plan reflecting current site conditions. The Temporary Closure Plan shall also include the following:

- Reclamation or construction activities anticipated to occur during the period of closure;
- The procedures, methods, and schedule to be implemented for the treatment, disposal, and storage of RTP and Mine waters;
- The control of surface and groundwater drainage to and from the facility and the surrounding area;
- The control of erosion from the tailings area, material sites, waste rock disposal areas, and any other disturbed areas within the facility boundary;
- The secure storage of chemicals during the period of closure;
- Procedures for continuing maintenance and monitoring of the RTP Dam including seepage collection and water balance;
- Procedures and schedule for continuation of site monitoring; and,

- Procedures for maintaining containment of all water at the facility and providing continuing treatment of that water in accordance with APDES Permit AK0053341 or subsequent discharge permit.

ADNR shall have fifteen (15) days to review and approve or require modifications to the Temporary Closure Plan. Once a Temporary Closure Plan has been approved, it becomes enforceable under the conditions of this Plan of Operations Approval and full implementation of the approved specific plan is required. The Temporary Closure Plan can be amended by submitting a revised plan to ADNR for approval.

Mining or milling operations must resume for not less than ninety (90) consecutive days in order to terminate the running of the Temporary Closure. If a Temporary Closure extends beyond three (3) years, the Department may deem mining and milling operations to be permanently abandoned or ceased, whereupon final reclamation must commence unless otherwise agreed by the Department.

Sumitomo Metal Mining Pogo LLC shall ensure that the project area and facilities are maintained in a safe condition during a Temporary Closure. Sumitomo Metal Mining Pogo LLC shall not allow the project area and facilities to be degraded or eroded or allow facilities to fall into a state of disrepair during or as a result of the Temporary Closure. Action shall be taken to prevent or mitigate any impacts to ground or surface waters from project facilities. All collection, treatment, maintenance, and monitoring activities required under project permits or plan approvals shall be performed under any Temporary Closure. Water treatment and discharge from the facility shall be continued in any Temporary Closure to ensure that water levels are maintained at a safe elevation in the RTP Dam and that water level in the underground mine is maintained such that the approved Pogo Mine Reclamation and Closure Plan can be executed.

Written Department approval is required before resuming operations after a period of temporary closure.

Abandonment or Cessation of Operations. Not later than ninety (90) days after the permanent cessation or abandonment of mining and milling operations at the Pogo Mine, Sumitomo Metal Mining Pogo LLC shall notify the Authorized Officer of the cessation of operations. Within ninety (90) days of the permanent cessation of mining and milling operations, an updated final Reclamation and Closure Plan, schedule and cost estimate, and Monitoring Plan must be submitted to ADNR for approval. The updated plans must address current conditions at the site. Permanent reclamation of individual facilities must be implemented and completed in accordance with the conditions of this Plan of Operations Approval.

Permanent reclamation of a facility will be complete when the following criteria are met:

- All terms of the current Pogo Reclamation and Closure Plan and conditions of this Plan of Operations Approval have been met;

- All performance standards under 11 AAC 97.200 and 11 AAC 97.240 have been achieved;
- Active water treatment is not required for any water discharged from the facility, surface water discharged from the mine site or facilities meets water quality criteria, and all groundwater discharge below the facilities meets or does not exceed triggers as defined by the Alaska Department of Environmental Conservation for the Pogo Mine; and,
- A stable vegetative cover is established per the requirements of this Plan of Operations Approval.

Post-Closure. After mining and milling operations have permanently ceased and after completion of reclamation of the site in accordance with the Pogo Reclamation and Closure Plan and conditions of this Plan of Operations Approval, Sumitomo Metal Mining Pogo LLC shall maintain the site during the Phase V Reclamation, correcting any erosion, settlement or other degradation of the dry stack tailings facility, waste rock disposal sites, dry stack tailings facility diversion ditches, and any other facilities that may impair water quality or threaten the environment.

Individual facilities and the overall site shall be maintained in a manner that prevents the generation of acid rock drainage or prevents the offsite discharge of acid rock drainage.

Post-closure monitoring of the groundwater, surface water and visual monitoring for settlement and erosion shall continue according to the monitoring schedule set out in the current Pogo Mine Monitoring Plan approved by ADNR. This schedule and the parameters monitored may be modified by ADNR based on the monitoring results.

Environmental Audit. Periodic third-party environmental audits are required to verify: 1) Sumitomo Metal Mining Pogo LLC's compliance with plan approvals, permits, and applicable environmental laws and regulations; 2) that Sumitomo Metal Mining Pogo LLC's controls provide reasonable assurances that environmental objectives in the current Reclamation and Closure Plan, and relevant permits and plan approvals are being met; 3) that the controls are functioning as intended; 4) that the state permit and plan approval conditions provide environmental protection as required; 5) that both the facility management and regulatory oversight provide reasonable assurances that the facility and controls are functioning as intended to protect environmental resources; and, 6) the adequacy of the financial assurance provided to ensure reclamation.

The next audit shall occur in 2015 or prior to final closure if final closure occurs prior to 2015. Subsequent environmental audits shall occur every five years. Audits shall be timed so that the auditor's site visit occurs during the snow-free season, far enough in advance of the deadline for the submittal of an updated Plan of Operations and associated supporting documents including Basis of Estimate Reports and EXCEL spreadsheets for Pogo Mine and Pogo ROW cost estimates, so that the results of the audit can be taken into account in that update and in the permit renewal process.

In January of the audit year, the parties shall confer to discuss the minimum qualifications of and process for selecting an independent, third-party auditor, and the minimum requirements for the scope of the audit. The third party contractor and the scope of the audit should be mutually agreed upon by ADNR, ADEC, and the Sumitomo Metal Mining Pogo LLC, but in the event that agreement cannot be reached, the agencies retain the final contractor selection and scope of audit decisions. The environmental audits required by this Plan of Operations Approval and those required by the ADEC Waste Management Permit refer to the same audits, conducted to fulfill the requirements of both authorizations.

The audit results will be used by Sumitomo Metal Mining Pogo LLC to assist in updating policies, plans, procedures, and cost-estimates and by the ADNR in determining compliance with the Plan of Operations Approval and in evaluating the adequacy of the financial assurance. The audit will be an objective, systematic, documented review of the conditions, operations, and practices related to plan approval and permit requirements and facility management conducted under this Plan of Operations Approval. The audit will include all aspects of the Pogo Mine Project, including, but not limited to, the access roads, material sites, development rock dumps, mine, dry stack tailings facility, RTP, and the Off-River Treatment Works. The audit will be paid for by Sumitomo Metal Mining Pogo LLC.

Erosion Standard: Erosion features which form in areas that have been recontoured and covered with topsoil must be stabilized if they affect the long-term stability of the reclaimed area or may result in additional erosion or sedimentation. Actions to stabilize erosion features shall be conducted in a manner that minimizes disturbance to adjacent areas. Subsequent inspections shall be completed to verify that rills and gullies do not persist. If chronic or long-term erosion features are identified, then remediation of the site drainage that is contributing to the formation of the rills and gullies shall be completed.

Invasive Weed Control: Sumitomo Metal Mining Pogo LLC shall inspect revegetated areas to identify invasive plant species and eradicate these species to the extent practicable. If invasive plant species are identified, Sumitomo Metal Mining Pogo LLC shall notify the Authorized Officer. If equipment is brought into the area from regions with known populations of invasive plant species or noxious weeds, that equipment should be inspected and thoroughly cleaned to remove soil, plant and seed contaminants prior to use at the mine site. If a population of noxious weeds is found at the mine site, equipment should be inspected and thoroughly cleaned to remove soil, plant and seed contaminants prior to use at another area at the mine site.

PROJECT - SPECIFIC STIPULATIONS

POGO PLAN OF OPERATIONS:

1. The placement of tailings over, or beyond, the current diversion ditches at the dry stack tailings facility is prohibited, unless specifically approved by ADNR.
2. Waste rock shall not be removed from the millsite boundary.
3. Construction drawings for new material sites and gravel pits must be provided to ADNR for approval before development of these sites.
4. Riparian Buffer. Within fifty (50) feet of the Goodpaster River, permittee shall avoid grubbing of vegetative mat in all areas; minimize clearing of shrubs and small trees where this will not compromise aircraft safety; and trim shrubs and small trees to no less than 3-foot height in areas where aircraft safety is a concern. If merchantable timber must be salvaged within fifty (50) feet of the river, extra care should be taken to adhere to the above specifications.

POGO RECLAMATION AND CLOSURE PLAN:

1. Final specific reclamation plans for each gravel pit, material site, and the Off-River Treatment Works shall be submitted to ADNR for approval prior to initiation of reclamation of these facilities. Plans should consider the placement of fill removed from pads, roads, and the airstrip during wetlands restoration into portions of the Off-River Treatment Works or other gravel pits to create additional shallow water habitat, where feasible.
2. At closure, a channel shall be cut through the shallow bar between the two cells of the 1525 Portal Area material site, unless otherwise approved by ADNR.
3. Permittee shall provide ADNR a draft of the proposed revegetation test trial program by May 1, 2012. The first trial shall be initiated by the end of 2013.
4. More detailed procedures and plans for underground mine closure, including final portal plugs, assessment of the need for backfilling and accelerated re-flooding of the underground workings (including costs for these activities), shall be developed and provided to the agencies prior to the end of 2013 or with any amendment to the Plan of Operations that involves significant modifications to the underground development.
5. Final dry stack tailings facility closure plans shall include rip-rap durability requirements.

6. RTP liner covering the section of the RTP dam removed during reclamation shall not be disposed of in the dry stack tailings facility, unless specifically approved by ADNR.
7. Permittee shall complete a dry stack tailings facility closure study approved, by ADNR, to evaluate the hydrologic, geochemical and geotechnical characteristics of the facility and proposed cover design. The study should model impacts to post-closure down-gradient water quality. The study should be submitted to ADNR by the end of 2014.

POGO DSTF CONSTRUCTION AND MAINTENANCE PLAN:

1. Table 1 (Material Placement Schedule at the DSTF) and the “year-by-year” drawing in Appendix C shall be updated to reflect twelve-month per year construction schedule in the next revision to the Pogo DSTF Construction and Maintenance Plan, unless otherwise approved by ADNR.

STANDARD STIPULATIONS

Fuel and Hazardous Substances. Secondary containment shall be provided for fuel or hazardous substances.

- a. **Container marking.** All independent fuel and hazardous substance containers shall be marked with the contents and the Permittee's name using paint or a permanent label.
- b. **Fuel or hazardous substance transfers.** Except for hand operated equipment, secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends during fuel or hazardous substance transfers, where feasible and prudent. Appropriate spill response equipment must be on hand during any transfer or handling of fuel or hazardous substances to respond to a spill of up to five gallons. Transfer operations shall be attended by trained personnel at all times.

Vehicle refueling shall not occur below the ordinary high waterline of any waterbody. This restriction does not apply to water-borne vessels provided no more than 30 gallons of fuel are transferred at any given time.

- c. **Storing containers within 100 feet of waterbodies.** Containers with a total capacity larger than 55 gallons which contain fuel or hazardous substances shall not be stored within 100 feet of a waterbody.
- d. **Exceptions.** The Authorized Officer may under unique or special circumstances grant exceptions to this stipulation on a case-by-case basis. Requests for exceptions should be made to the Authorized Officer.

e. **Definitions.**

- 1) **"Containers"** means any item which is used to hold fuel or hazardous substances. This includes tanks, drums, double-walled tanks, portable testing facilities, fuel tanks on small equipment such as light plants and generators, flow test holding tanks, slop oil tanks, bladders, and bags. Manifolded tanks or any tanks in a series must be considered as a single container. Vehicles, including mobile seismic tanks, are not intended to be included under this definition.
- 2) **"Hazardous substance"** is defined under AS 46.03.826(5) as (A) an element or compound which, when it enters into the atmosphere, or in or upon the water, or surface or subsurface land of the state, presents an imminent and substantial danger to the public health or welfare, including but not limited to fish, animals, vegetation, or any part of the natural habitat in which they are found; (B) oil; or (C) a substance defined as a hazardous substance under 42 U.S.C. 9601(14).
- 3) **"Secondary containment"** means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest container. Double-walled tanks do not qualify as secondary containment unless valves and piping are contained within the outer double wall.
- 4) **"Surface liner"** means any safe, non-permeable container (e.g., drips pans, fold-a-tanks, etc.) designed to catch and hold fluids for the purpose of preventing spills. Surface liners should be of adequate size and volume based on worst-case spill risk.
- 5) **Notification.** The Permittee shall notify ADNR and ADEC of any spills or releases of oil or hazardous substances in accordance with AS 46.08.755, AS 46.09.010 and 18 AAC 75.300 or in accordance with a spill reporting agreement entered into between ADEC and Pogo. All surface fires and explosions must also be reported to ADNR. The ADNR 24 hour incident notification number is (907) 451-2678; the Fax number is (907) 451-2751. The DEC spill report number is (800) 478-9300. ADNR and ADEC shall be supplied with all follow-up incident reports.
- 6) **Remediation.** Should any unlawful discharge, leakage, spillage, emission, or pollution of any type occur due to Permittee's, or its employees', agents', contractors', subcontractors', licensees', or invitees' act or omission, the Permittee shall be obligated to ensure that the area is cleaned to the reasonable satisfaction of the State of Alaska.

Alaska Historic Preservation Act. The Alaska Historic Preservation Act (AS 41.35.200) prohibits the appropriation, excavation, removal, injury, or destruction of any

State-owned historic, prehistoric (paleontological) or archeological site without a permit from the Commissioner of DNR. Activities described in the Pogo Mine Plan of Operations are subject to the following stipulations:

- a. If cultural or paleontological resources are inadvertently discovered as a result of or during the activities authorized by this Plan of Operations Approval, all activities which would disturb such resources shall be stopped and measures taken to protect the site. The U.S. Army Corps of Engineers archeologist (907-753-2716) and the State Historic Preservation Officer (907-269-8722) shall be contacted immediately so that compliance with state and federal laws may begin.
- b. If burials or human remains are discovered as a result of or during the activities authorized by this Plan of Operations Approval, all activities which would disturb such remains shall be stopped and measures taken to protect the site. In addition to the U.S. Corps of Engineers Archeologist and the State Historic Preservation Officer, the State Troopers shall be contacted immediately so that compliance with state and federal laws may begin.

Reclamation Stipulations.

- a. Topsoil and overburden, not promptly redistributed to an area being reclaimed, shall be separated and stockpiled for future use. This material shall be protected from erosion and contamination by acidic or toxic materials and shall not be buried by development rock or surface construction activities.
- b. The area to be reclaimed shall be recontoured or reshaped to blend with surrounding topography using approved development rock or overburden, and then be stabilized to a condition that shall retain sufficient moisture to allow for natural revegetation.
- c. Stockpiled topsoil, overburden fines and brush or other organic material shall be spread over the recontoured areas to promote natural plant growth.
- d. Exploration trenches shall be backfilled and the surface stabilized to prevent erosion. Brush piles, stumps, topsoil, and other organics shall be spread on the backfilled surface to inhibit erosion and promote natural revegetation. Reclaimed exploration trenches shall have water bars installed as needed for erosion control.
- e. Shallow auger holes (limited to depth of overburden) shall be backfilled with drill cuttings or other locally available material in such a manner that closes the hole to minimize the risk to humans and wildlife.

- f. All surface drill holes shall be plugged by the end of the exploration season during which they are drilled, unless otherwise specifically approved by the Division of Mining, Land & Water.
- g. All surface drill holes shall be plugged with bentonite holeplug, a benseal mud, or equivalent slurry, for a minimum of 10 feet within the top 20 feet of the drill hole in competent material. 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, a benseal mud, or equivalent slurry shall be placed immediately above the static water level in the drill hole. Complete filling of the drill holes, from bottom to top, with a bentonite holeplug, benseal mud, or equivalent slurry is also permitted and is considered to be the preferred method of hole closure.
- h. If artesian conditions are encountered in surface drill holes, the operator shall contact the Division of Mining, Land & Water (Steve McGroarty – (907) 451-2795) or the Department of Environmental Conservation (Tim Pilon – (907) 451-2136) to advise the agencies of proposed hole plugging methodology and receive approval for the hole plugging plans.

Upon completion of drilling activity, drill pads shall be reclaimed as necessary to encourage natural revegetation of the sites and protect them from erosion.

Inspection and Entry. Sumitomo Metal Mining Pogo LLC shall permit authorized representatives of ADNR to enter the area and facilities covered under this Plan of Operations Approval at all reasonable times without notice for the purpose of inspecting the area and activities covered under this Plan of Operations Approval. Inspectors shall observe Sumitomo Metal Mining Pogo LLC safety and security procedures.

Upon ADNR's written request, Sumitomo Metal Mining Pogo LLC shall promptly make any and all records, documents, or other information required to be kept or maintained by law, regulation, ordinance, permit, or this Plan of Operations Approval, available to ADNR for inspection and copying as reasonably required by ADNR to determine Sumitomo Metal Mining Pogo LLC is in compliance with local, state and federal laws governing the operations authorized under this Plan of Operations Approval.

Upon ADNR's written request, Sumitomo Metal Mining Pogo LLC shall promptly make any and all records, documents, or other information required to determine if site environmental controls are functioning as designed available to ADNR for inspection and copying as reasonably required by ADNR.

Upon ADNR's written request, Sumitomo Metal Mining Pogo LLC shall promptly make any and all records, documents, or other information required to evaluate

reclamation and closure cost estimates available to ADNR for inspection and copying as reasonably required by ADNR.

In any response to ADNR's written request, Pogo may assert that any and all records, documents, or other information is subject to the attorney-client privileges recognized under Alaska law or should be maintained as confidential business information in accordance with State law.

Violations. If the permittee fails to comply with applicable statutes and regulations, or to comply with the provisions of the Plan of Operations Approval, and the failure continues for thirty (30) days after service of written notice and an opportunity to be heard, the director will, in his or her discretion, (1) suspend production until compliance is achieved, or (2) terminate the millsite lease as allowed by applicable statute, regulation and terms of the Pogo Mine Project Millsite Lease (ADL 416949).

Adverse Impact. Sumitomo Metal Mining Pogo LLC shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this Plan of Operations Approval, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. Sumitomo Metal Mining Pogo LLC shall cleanup and restore all areas adversely impacted by the noncompliance.

Permittee Responsibility for Actions of Contractors. Sumitomo Metal Mining Pogo LLC is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved project, and shall ensure that workers are familiar with the requirements of this authorization.

Assignment. This plan approval may be transferred or assigned with prior written approval from DNR. DNR will only disapprove a transfer with good cause and will evaluate whether the proposed assignee (1) is qualified to hold interests in state mining rights under AS 38.05.190 and to acquire all other permits and authorizations necessary to conduct operations under the plan; (2) is on notice of default or subject to an enforcement action by any state agency on any lease, reclamation bond, or other permit within the state. Any assignee must commit in writing to be bound by this plan approval to the same extent as Sumitomo Metal Mining Pogo LLC, and must provide to DNR all proofs of insurance, bonds, or undertakings required by this plan approval. Transfer of this plan approval may, at DNR's discretion, require bond review and update.

Other Authorizations. The issuance of this authorization does not alleviate the necessity of Sumitomo Metal Mining Pogo LLC to obtain and comply with authorizations required by other agencies including, but not limited to, Alaska Department of Environmental Conservation, Alaska Department of Natural Resources – Division of Mining, Land and Water – Land and Water Sections, and Alaska Department of Fish & Game.

Valid Existing Rights. This authorization is subject to all valid existing rights in and to the land under this authorization. The State of Alaska makes no representations or warranties whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.

Reservation of Rights. DNR reserves the right to grant additional authorizations to third parties for compatible uses on the land under this authorization per terms of the Millsite Lease (ADL 416949) and the Upland Mining Lease (ADL 674057).

Change of Address. Any change of address must be submitted in writing to the Authorized Officer.

Modifications. Any request for modification of the Pogo Mine Plan of Operations and any affected permits or authorizations must be made by written application to ADNRR and may require the updating of related Supporting Documents. Requests for modification must be made no later than 30 days before the planned effective date of the modification. Modification to the Pogo Mine Plan of Operations may, at the discretion of ADNRR, require review and update of the financial assurance provided to ensure reclamation.

Application for Renewal. Applications for renewal of this Plan of Operations Approval must be made no later than 30 days before the expiration date of the Plan of Operations Approval. Unless otherwise approved by ADNRR, the periodic five-year renewal of the Pogo Mine Plan of Operations will require the submission of the following updated Supporting Documents (SD) or the information must be incorporated into the body of the Plan of Operations:

- Appendix A – Pogo Mine Claim List;
- Appendix B – Figures;
- Appendix C – Pogo Quality Assurance Plan;
- Appendix D – Pogo Mine Monitoring Plan;
- Appendix E – Pogo Reclamation and Closure Plan;
- Appendix F – DSTF Construction and Maintenance Plan;
- Appendix G – Pogo RTP Operating and Maintenance Manual;
- Pogo Project Water Management Plan (February 2002 and supplemented June 2002);
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- EXCEL Pogo mine reclamation cost estimate 20100907; and,
- EXCEL Pogo ROW reclamation cost estimate 20101224.

Statutes and Regulations. This plan approval is subject to all applicable state and federal statutes, including state, federal, and any local statutes and ordinances in effect on the effective date of this plan approval, new statutes, regulations, and ordinances enacted or promulgated after said effective date, and changes to existing statutes and regulations made after the effective date, to the extent constitutionally permissible.

Severability. If any clause or provision herein contained shall be adjudicated to be invalid, it shall not affect the validity or effect of any other clause or provision of this plan approval, nor constitute any cause of action in favor of either Sumitomo Metal Mining Pogo LLC or DNR as against the other.

Save Harmless. The recipient of this Plan of Operations Approval (permittee) shall indemnify, save harmless, and defend the Department, its agents and its employees from any and all claims, actions or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or Sumitomo Metal Mining Pogo LLC's performance under this Plan of Operations Approval. However, this provision has no effect, if, and only if, the sole proximate cause of the injury is the Department's negligence.

Commencement of permitted activities will be considered an acceptance by Sumitomo Metal Mining Pogo LLC of these stipulations.

Approved: Joe Wehrman
Joe Wehrman
Department of Natural Resources

Feb. 7, 2012
Date

Appeal Right and Procedure

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 days of the date of issuance and may be mailed or delivered to Daniel S. Sullivan, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31st day after the date of issuance. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.