

Response to Comments Document
Draft Waste Management Permit No. 2011DB0012 and
Draft Plan of Operations Approval (F20129500) for the
Pogo Mine

This document summarizes and addresses comments received on the Alaska Department of Environmental Conservation (DEC), draft Waste Management Permit (WMP) No. 2011DB0012 and the Alaska Department of Natural Resources (DNR), draft Plan of Operations Approval (F20129500). The WMP regulates the containment and disposal of mine tailings, waste rock, wastewater, and other mine-related wastes at Pogo Mine. Sumitomo Metal Mining Pogo LLC (Pogo) operates the Pogo Mine on state land located 38 miles northeast of Delta Junction, Alaska and 85 miles east-southeast of Fairbanks, Alaska. The state received comments from three parties: 1) the Center for Science in Public Participation (CSP2), 2) Sumitomo Metal Mining Pogo LLC, and 3) Mr. Kevin Walker.

Permit-specific comments on the draft DEC permit and draft DNR approval and the state's responses to those comments are contained in the table on the following pages.

Responses to Comments on draft Waste Management Permit No. 2011DB0012 and draft Plan of Operations Approval (F20129500) for Pogo Mine

Comment #	Commenter	Comment	Comment Response
1	CSP2	Update the reclamation cost estimate dated September 2010 to reflect inflation using the Anchorage consumer price index for the first half of 2011.	<p>The bond amount is an estimate. Increasing the bond for a year's inflation will not change the amount appreciably.</p> <p>Additionally, the public notice bulletin stated that Pogo has notified the state agencies of plans for expanding the drystack tailings facility from the current seven million to 20 million tons, and a separate public comment period will be used to address this proposed amendment to the Pogo Plan of Operations, likely within the 1st quarter of 2012. This will require updating the Pogo Mine Reclamation and Closure Plan and the associated closure cost estimate. During the public comment period a revised bond amount will be presented that will include the additional costs for closing a larger drystack, inflation adjustment, and other adjustments to the September 2010 bond amount.</p> <p>In the event that the application for the expansion of the drystack tailings facility is significantly delayed, DNR may require revisions to the financial responsibility cost estimates based upon changes in costs for labor, equipment, fuel, or chemicals.</p>
2	CSP2	Consider adding another year, bringing the total to two years, for state holding costs if Pogo defaults.	Under Alaska Statute (AS) 27.19.040(a), the state requires one year of holding time in all of its bonds for large mines. If the holding time costs were expanded to two years, it would have to apply not only to the Pogo Mine but all of Alaska's large mines. Currently, there is no statutory authority or a cause for a change.

Responses to Comments on draft Waste Management Permit No. 2011DB0012 and draft Plan of Operations Approval (F20129500) for Pogo Mine

3	CSP2	It would be prudent for the state to require additional bonding for long term water treatment.	Under AS 27.19.040(a), the state is authorized to estimate and collect the financial assurance for mine reclamation and closure not to exceed “reasonable” and “probable” costs. The closure cost estimate includes funding for ten years of water treatment at eight months per year after reclamation and revegetation have stabilized the drystack tailings facility so that major additional earthwork is not anticipated. Given current water quality at Pogo Mine, ten years of seasonal water treatment after the physical reclamation of the drystack tailings facility seems reasonable and probable. The DNR Plan of Operations Approval requires completion of a drystack tailings facility closure study by December 31, 2014; the results of this study will be used to evaluate the need for revision to the reclamation and closure plan and cost estimate.
4	CSP2	Maintenance costs for the water treatment plant after termination of mining and milling are estimated at \$2,000 per month for 80 months totaling \$160,000. That seems low.	The inclusion of \$2,000 for maintenance parts during each month of operation is considered adequate. Additional funds are available from the contingency allocation. However, the public notice stated that Pogo has notified the state of plans for expanding the drystack tailings facility from the current seven million to 20 million tons, and a separate public comment period will be used to address this proposed amendment to the Pogo Plan of Operations, likely within the 1 st quarter of 2012. Approval of the expansion will include an update to the reclamation and closure costs. At that time, maintenance costs for the water treatment plant will be reviewed again.

Responses to Comments on draft Waste Management Permit No. 2011DB0012 and draft Plan of Operations Approval (F20129500) for Pogo Mine

5	Pogo	Please revise the permit to include a description of how 18 Alaska Administrative Code (AAC) 60.243 and 18 AAC 60.825(a) are inapplicable or clarify which requirements specifically apply to Pogo's operations.	<p>18 AAC 60.243 states that it does not apply to a facility that has a permit under Alaska Statute (AS) 46.03.100, and Pogo's Waste Management Permit is issued under AS 46.03.100 making 18 AAC 60.243 inapplicable.</p> <p>18 AAC 60.825(a) requires that a solid waste disposal facility install a groundwater monitoring system "with a sufficient number of wells." This applies to Pogo, and the seven compliance wells listed in section 1.1.4 constitute sufficiency.</p>
6	Pogo	Go through 18 AAC 60, Solid Waste Management regulations listing regulations that apply and do not apply to Pogo.	DEC's Solid Waste Management regulations, 18 AAC 60, are divided into eight sections or numbered articles. Articles 1, 2, 4, 7, and 8 apply, and Articles 3, 5, and 6 do not apply to Pogo.
7	Pogo	To be consistent with the previous permit, Waste Disposal Permit No. 0131-BA002, the requirements of 18 AAC 60.830(f-j) should be excluded from the permit.	<p>This permit is consistent with the previous permit in that both apply the requirements of 18 AAC 60.830(f-j). Additionally, regulations apply even without a permit. Consequently, omitting 18 AAC 60.830(f-j) from the permit does not overturn those regulations.</p> <p>18 AAC 60.820(a) states, "...the groundwater monitoring and corrective action requirements of 18 AAC 60.820 – 18 AAC 60.860 apply to all solid waste disposal facilities except..." The regulation lists automatically exempted facilities, and Pogo Mine is excluded from that list making it subject to 18 AAC 60.820 – 18 AAC 60.860.</p>
8	Pogo	Waive the intermediate cover requirements of 18 AAC 60.243.	See response 5. Since 18 AAC 60.243 does not apply to Pogo Mine, a waiver is unnecessary.
9	Pogo	The provisions of 18 AAC 60, Article 4 - Monofills do not apply to Pogo Mine.	18 AAC 60.990.(80) states, "'monofill' means a landfill or drilling waste disposal facility that receives primarily one type of solid waste and is not an inactive reserve pit.' By regulatory definition, Article 4 - Monofills applies to Pogo's Filtered Tailings Disposal Facility, underground workings, and waste rock dumps.

Responses to Comments on draft Waste Management Permit No. 2011DB0012 and draft Plan of Operations Approval (F20129500) for Pogo Mine

10	Pogo	Remove the requirement in section 1.2.7 prohibiting statistically significant increases of aqueous constituents above background concentrations for monitoring wells MW11-001A, MW11-001B, MW04-213, and MW11-216.	18 AAC 60.820(a) states, "...the groundwater monitoring and corrective action requirements of 18 AAC 60.820 – 18 AAC 60.860 apply to all solid waste disposal facilities except..." The regulation lists automatically exempted facilities, and Pogo Mine is excluded from that list.
11	Pogo	Insufficient background data from monitoring wells MW11-001A, MW11-001B, MW04-213, and MW11-216 makes statistical analysis of data meaningless.	Based on location, number, and depth of monitoring wells, the DEC determined that Pogo satisfies the requirement for "a sufficient number of wells" with its groundwater monitoring system, and 18 AAC 60.825(a) is satisfied. Regarding background data from MW11-001A, MW11—001B, MW04-213, and MW11-216, each well's water quality dataset provides background information indicating the development of any troublesome trends relative to that well.
12	Pogo	Revise permit section 1.3 to include a reference to the current facility-specific method detection limit (MDL) and minimum level of quantification (ML) for weak acid dissociable (WAD) cyanide at Alaska Pollutant Discharge Elimination System (APDES) permit outfall 001.	<p>The APDES permit and this Waste Management Permit are independent and not interdependent authorizations. The MDL and ML for WAD cyanide in the APDES permit are site-specific and only apply to the water, based on its unique chemical signature, at outfall 001. The MDL and ML in the APDES permit are "site-specific" for outfall 001 and not "facility-specific."</p> <p>Based on location, origin, and chemical analyses, groundwater sampled from monitoring wells at Pogo has a different chemical signature from that found at outfall 001. However, section 1.3 of the permit has been revised and language added specifying that the procedures used to develop outfall 001's "site-specific" MDL and ML may be applied to determine "site-specific" MDLs and MLs for monitoring wells.</p>

Responses to Comments on draft Waste Management Permit No. 2011DB0012 and draft Plan of Operations Approval (F20129500) for Pogo Mine

13	Pogo	Remove section 1.8.1. It applies 18 AAC 60.830(h), 18 AAC 60.850(c), and 18 AAC 60.860, which are not applicable to Pogo.	This permit is consistent with the previous permit in that both apply the requirements of 18 AAC 60.830(f-j). Additionally, regulations apply even without a permit. Consequently, omitting 18 AAC 60.830(f-j) from the permit does not overturn these regulations. 18 AAC 60.820(a) states, "...the groundwater monitoring and corrective action requirements of 18 AAC 60.820 – 18 AAC 60.860 apply to all solid waste disposal facilities except..." The regulation lists automatically exempted facilities, and Pogo Mine is excluded from that list making it subject to 18 AAC 60.820 – 18 AAC 60.860.
14	Pogo	Revise sections 1.7.1 and 1.8.2 to make reporting timelines consistent.	Section 1.8.2 has been revised to agree with section 1.7.1 and requires reporting by "...the end of the next State of Alaska working day."
15	Pogo	Under General Stipulations, Temporary Closure, the last sentence uses the term "Departmental". Pogo Believes the term should be "Department".	The Plan of Operations Approval has been modified as suggested.
16	Pogo	Under General Stipulations, Post-Closure, first sentence, last paragraph, it appears that ADNR unintentionally deleted the term "Mine" in reference to the Pogo Mine Monitoring Plan. For consistency, Pogo believes that all references to this plan should read "Pogo Mine Monitoring Plan".	The Plan of Operations Approval has been modified as suggested.
17	Pogo	Under General Stipulations, Environmental Audit, last sentence, third paragraph, Pogo understands that the permit number associated with the renewal of the Waste Management Permit to be issued by the Alaska Department of Environmental Conservation is "2011DB0012." Pogo believes the Plan of Operations Approval should reference the correct permit number.	The language in the draft Plan of Operations Approval public noticed read: "The environmental audits required by this Plan of Operations Approval and those required by the DEC Waste Management Permit refer to the same audits, conducted to fulfill the requirements of both authorizations." No change required.

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18	Walker	The people of Alaska should get a huge royalty for the resources that are removed from the state by a Japanese company.	In 1989, the Alaska State Legislature enacted a new production royalty law, AS 38.05.212, which requires holders of state mining locations to pay a production royalty on all revenues received from minerals produced on state land. The production royalty is three percent (3%) of net income as determined under the Mining License Tax Law, AS 43.65, and regulations, 15 AAC 65. The statute applies equally to all companies.
19	Walker	The environmental stakes for this type of operation are enormous. The mercury pollution alone is a huge concern, and must be corrected, or the mine should be shut down until environmental controls are established.	Focused, systematic, and ongoing environmental monitoring indicates that mercury is not a constituent of concern associated with Pogo's mining and milling activities.
20	Walker	The mine must become environmentally neutral, not a polluter.	The state's environmental protection laws and regulations are designed to protect Alaska for current and future generations. Pogo is operating the Pogo Mine under DEC and DNR permits and approvals authorized by statute and regulation. These permits and approvals require significant monitoring to ensure the operation is not discharging or operating in an environmentally irresponsible manner.
21	Walker	Large amounts of money are required to monitor and control pollution. Some of this money should go to DNR to closely monitor the mine, or shut them down if mercury, cyanide, and other lethal materials are allowed to pollute the environment.	Rents, royalties, and taxes paid by Pogo are equally split and allocated between the state general fund and permanent fund. General funds are allocated by the legislature to the resource agencies that oversee all aspects of mining operations in Alaska for compliance with laws and regulations. State permits and approvals require environmental monitoring to ensure the operation is not polluting Alaska's water or land. DEC and DNR provide regulatory oversight of environmental impacts from the Pogo Mine including review of monitoring data to confirm Pogo's compliance.

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22	Walker	A financial assurance of \$21.6 million may be inadequate for covering costs to reclaim and close the mine.	The state currently requires a financial assurance of \$44.43 million for the reclamation and closure of the mine and \$4.81 million for the reclamation and closure of the road and power line rights-of-way. Under AS 27.19.040(a), the state is authorized to estimate and collect the financial assurance for mine reclamation and closure not to exceed “reasonable” and “probable” costs.
23	Walker	If reclamation and closure costs exceed the financial assurance amount, would the State of Alaska have to pay the difference?	Under AS 27.19.040(a), the reclamation and closure costs are estimated based on “reasonable” and “probable” expectations. If Pogo is under-bonded, the state is responsible for adjusting the bond upward. As long as Pogo is solvent, they are responsible for reclamation and closure regardless of the bond amount. The bond offers financial assurance that if Pogo defaults, the state could reclaim and close the mine without bearing any financial burden. If Pogo defaulted and the state performed closure, closure activities could be matched to available funding not to exceed the bond amount. However, if that is not possible and a shortage of funding results, the state could pursue additional closure funds from the parent company of Sumitomo Metal Mining Pogo, LLC. It would be a last resort for the state to pay reclamation costs, but it could occur if all other efforts to secure funding were to fail.