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December 12, 2011

The Honorable Doug Lamborn
Chairman
The Honorable Rush Holt
Ranking Member
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
House of Representatives

Subject: *Hardrock Mining: BLM Needs to Revise Its Systems for Assessing the Adequacy of Financial Assurances*

In a July 2011 testimony before your subcommittee, we summarized the key findings of our prior work on hardrock mining, including the adequacy of financial assurances.¹ At this hearing, we stated that the Department of the Interior's Bureau of Land Management (BLM) had taken actions to strengthen its processes, but the financial assurances that it had in place, when we last reported on this issue in 2008, were inadequate to cover estimated reclamation costs from hardrock mining operations, and the agency's Bond Review Fiscal Report (Bond Review Report) inaccurately calculated this shortfall. At the July 2011 hearing, the BLM witness testifying for the department stated that the agency had corrected these issues in response to the concerns we identified in the past.

As a result, you asked us to update our prior work assessing the hardrock mining financial assurances held by BLM and determine (1) the value and adequacy of financial assurances that operators use to guarantee reclamation costs for hardrock mining operations on BLM land and (2) the status of BLM's efforts to address issues we previously identified regarding the Bond Review Report and supporting documentation used to determine the adequacy of hardrock mining financial assurances.

To determine the value and adequacy of financial assurances for hardrock mining operations on BLM land, we obtained financial assurance data from BLM's Bond Review Report, which aggregates data from BLM's LR2000 database and includes data on bonds covering a single operation, as well as bonds covering all of an operator's mining operations within one state (known as statewide bonds) or all of its mining operations in the United States (known as nationwide bonds). Because LR2000 data is updated daily, we took steps to ensure that we only analyzed data on mining operations that had progressed past the preliminary stages of BLM's mine approval process by collecting data from LR2000 on those operations where the bond amount had been estimated, determined, or accepted as of December 1, 2010, or earlier. We chose December 1, 2010, as a cutoff date in consultation

¹GAO, *Abandoned Mines: Information on the Number of Hardrock Mines, Cost of Cleanup, and Value of Financial Assurances*, [GAO-11-834T](#) (Washington, D.C.: July 14, 2011).

with BLM officials because they suggested this date would yield the most accurate data and would reflect corrections and revisions made by BLM state office and field office officials in response to guidance contained in various instructional memoranda (IM). We analyzed these data to summarize the number of hardrock mining operations, the total number and value of financial assurances, and the number of operations with inadequate financial assurances and the value of those financial assurances. Data for Alaska are not maintained in LR2000 and not reported in the Bond Review Report and are, therefore, not included in this analysis. To assess the reliability of LR2000 data and the Bond Review Report, we spoke with BLM information technology officials in Lakewood, Colorado, who are responsible for administering the system; BLM state and field office staff who enter information into the system; and BLM managers at its Washington, D.C., headquarters office who use information from the system. We discussed the structure and history of LR2000 and obtained a copy of BLM's Bond Review Report specifications that were used to create the Bond Review Report. We also conducted electronic testing of these data by, for example, counting records and looking for outliers in the data, to identify obvious errors in accuracy and completeness. We present data from LR2000 in this report and believe these data are sufficiently reliable for this update. To determine whether BLM addressed issues we previously identified regarding its bond adequacy reporting, we obtained the fiscal year 2010 state director certifications and the related corrective action plans for the 11 BLM states with hardrock mining operations—Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming. We analyzed the certifications to determine whether BLM's policies in IM 2009-153 were implemented. Specifically, we determined whether the states had submitted a certification that addressed whether financial assurances were reviewed within the specified time frames and whether financial assurances were adequate. We also analyzed the certifications to see if the BLM state offices had submitted a corrective action plan to address any deficiencies.

We conducted this performance audit from July 2011 to December 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The General Mining Act of 1872 encouraged the development of the West by allowing individuals to stake claims and obtain exclusive rights to the gold, silver, copper, and other valuable hardrock mineral deposits on land belonging to the United States. Since then, thousands of operators have extracted billions of dollars worth of hardrock minerals from land managed by BLM.²

BLM issued regulations in 1981 requiring all operators of hardrock mines to reclaim the land disturbed by mining when operations cease.³ BLM amended the regulations in 2001 to require all mining operators to provide bonds or other financial assurances before beginning exploration or mining operations on BLM land for both notice-level hardrock mining

²BLM and the U.S. Department of Agriculture's Forest Service are the two principal agencies responsible for managing the federal land open for hardrock mining.

³An operator is a person who conducts operations under the mining laws, including exploration, mining, and processing hardrock minerals.

operations—those disturbing 5 acres of land or less—and plan-level hardrock mining operations—those disturbing over 5 acres of land and those in certain designated areas, such as the national wild and scenic rivers system.⁴ These financial assurances must cover, among other things, the estimated cost as if BLM were to contract with a third party to reclaim the operations according to the reclamation plan.⁵ Having adequate financial assurances to pay reclamation costs for BLM land disturbed by hardrock operations is critical to ensuring that the land is reclaimed if the mining operators fail to do so.

In June 2005, we reported that some current hardrock operations on BLM land do not have adequate financial assurances in place, and some had no or outdated reclamation plans or cost estimates on which the financial assurances should have been based.⁶ In that report, we concluded that BLM lacked a process and critical management information needed for ensuring that adequate financial assurances are actually in place, as required by federal regulations and BLM guidance. As a result, we recommended that BLM strengthen its management of financial assurances for hardrock operations on its land. At that time, BLM did not concur with our recommendations.

However, subsequently in June 2006, BLM took actions to respond to our recommendations by issuing IM 2006-172, which, among other things, provided guidance for generating the Bond Review Report in LR2000—an automated information system BLM uses to manage financial assurances.⁷ BLM uses this report to determine if adequate financial assurances are in place for mining operations. IM 2006-172 also directed BLM state directors to annually review the Bond Review Report to determine if all reclamation cost estimates are adequate, take action to address inadequate cost estimates, and submit a certification to BLM's Washington, D.C., headquarters office that the financial assurances are adequate to cover reclamation costs.

In 2008, we again reviewed BLM's oversight of hardrock mining operations and found that the financial assurances that it had in place were inadequate to cover estimated reclamation costs by about \$61 million and that the agency's Bond Review Report inaccurately calculated this shortfall.⁸ Specifically, the Bond Review Report did not separately calculate the value of each inadequate financial assurance but instead calculated an aggregate value of all financial assurances across all operations (including those that were inadequate and those that were greater than required). Because a financial assurance that is greater than the amount required for an operation cannot be transferred to a different operation with inadequate financial assurances, the Bond Review Report incorrectly depicted the degree to which some financial assurances were inadequate. At that time, BLM officials agreed to take steps to modify LR2000.

⁴43 C.F.R. Part 3809. Operators may also provide a single bond to cover all mining operations statewide or nationwide.

⁵When BLM identifies a need for it, the operator must also establish a trust fund or other funding mechanism to ensure the continuation of long-term treatment to achieve water quality standards and for other long-term, postmining maintenance requirements.

⁶GAO, *Hardrock Mining: BLM Needs to Better Manage Financial Assurances to Guarantee Coverage of Reclamation Costs*, [GAO-05-377](#) (Washington, D.C.: June 20, 2005).

⁷BLM, *Bond Review Report—LR2000*, IM 2006-172 (Washington, D.C.: June 2006).

⁸GAO, *Hardrock Mining: Information on Abandoned Mines and Value and Coverage of Financial Assurances on BLM Land*, [GAO-08-574T](#) (Washington, D.C.: Mar. 12, 2008).

BLM’s Financial Assurances for Some Hardrock Operations Continue to Be Inadequate

Based on the data we reviewed from BLM’s Bond Review Report, mine operators had provided financial assurances valued at approximately \$1.5 billion to guarantee reclamation costs for 1,365 hardrock operations on federal land managed by BLM. We determined that 57 hardrock operations had inadequate financial assurances—amounting to about \$24 million less than needed to fully cover estimated reclamation costs. Nevada had the largest number of hardrock mining operations and the largest number of inadequate financial assurances. Table 1 shows the number and value of BLM-held financial assurances and the number and value of inadequate financial assurances, by state.

Table 1: The Number and Value of Hardrock Financial Assurances, and the Number and Value of Inadequate Financial Assurances, by State

State	Total operations ^a	Value of financial assurances	Operations with inadequate financial assurances	Total value of inadequate financial assurances
Arizona	140	\$9,759,003	2	(\$755)
California	135	14,423,442	8	(98,142)
Colorado	84	2,572,706	1	(153,400)
Idaho	57	1,529,926	2	(22,500)
Montana	64	68,264,970	0	0
South Dakota	4	104,908	0	0
Nevada	491	1,152,432,561	24	(23,853,662)
New Mexico	27	1,109,596	0	0
Oregon	92	2,211,033	7	(36,775)
Washington	11	3,026,072	2	(35,300)
Utah	127	11,003,275	6	(11,953)
Wyoming	133	185,712,192	5	(89,613)
Total	1,365	\$1,452,149,685	57	(\$24,302,101)

Source: GAO analysis of BLM’s Bond Review Report.

Notes: These data include operations where the bond amount had been estimated, determined, or accepted as of December 1, 2010, or earlier. In addition, data for Alaska are not maintained in LR2000 and not reported in the Bond Review Report.

^aIncludes both plan- and notice-level operations.

BLM Has Not Fully Addressed Issues GAO Previously Identified

As we have reported, BLM has taken some steps to strengthen and improve its management of hardrock financial assurances but has not yet addressed the issues we identified in 2008 regarding how the Bond Review Report calculates the total value of those financial assurances that are inadequate.⁹

To improve its management of hardrock financial assurances, BLM in 2009 issued IM 2009-153, which, among other things, directs periodic review of reclamation cost estimates for all ongoing operations to ensure the current cost estimate and the amount of the required financial assurance continue to meet applicable regulatory requirements.¹⁰ However, we

⁹GAO-11-834T.

¹⁰IM 2009-152, *Financial Guarantees for Notices and Plans of Operations*.

found that only two BLM state offices—Montana and Wyoming—fully implemented IM 2009-153 by conducting timely reviews of financial assurances and ensuring that financial assurances for hardrock operations under their purview were adequate. Although some BLM state offices reported that they had not always succeeded in conducting reviews of financial assurances in a timely manner, or had not always secured adequate financial assurances, they all had submitted a certification that included an action plan for addressing these deficiencies. In addition, in reviewing the Bond Review Report, we found that the implementation of IM 2009-153 has helped BLM reduce the amount of its inadequate financial assurances since 2008 by about \$37 million. Table 2 summarizes the contents of the fiscal year 2010 state director certifications required by IM 2009-153.

Table 2: Summary of BLM Fiscal Year 2010 State Director Financial Assurance Certifications.

BLM state office	Notice-level financial assurances were reviewed every 2 years ^a	Plan-level financial assurances were reviewed every 3 years ^a	Notice-level financial assurances were adequate	Plan-level financial assurances were adequate	A corrective action plan was submitted, if necessary
Alaska	Yes	Yes	^b	^b	Yes
Arizona	No	No	Yes	Yes	Yes
California	No	No	Yes	Yes	Yes
Colorado	Yes	Yes	Yes	No	Yes
Idaho	No	No	Yes	Yes	Yes
Montana	Yes	Yes	Yes	Yes	Yes
Nevada	No	No	No	Yes	Yes
New Mexico	No	Yes	Yes	No	Yes
Oregon	No	No	Yes	No	Yes
Utah	No	No	No	No	Yes
Wyoming	Yes	Yes	Yes	Yes	Yes

Source: GAO analysis of BLM's Fiscal Year 2010 state directors' financial assurance certifications.

^aNotice-level operations are those causing a surface disturbance of 5 acres or less; plan-level operations are those disturbing over 5 acres of land or those in certain designated areas.

^bData for Alaska are not maintained in LR2000 and not reported in its annual financial assurance certification.

Regarding the issue with the Bond Review Report that we identified in 2008, BLM has not modified LR2000 to correct how it calculates the value of inadequate financial assurances. Consequently, the Bond Review Report, as currently designed, provides inaccurate summary information by offsetting the shortfalls of some operations' financial assurances with surpluses from the financial assurances of other operations. For example, the Bond Review Report we examined estimated that the total financial assurances in place were about \$7 million more than needed to fully guarantee estimated reclamation costs. However, we found that the report's estimated financial assurances were incorrect. By separately assessing the adequacy of financial assurances on an operation-by-operation basis, we determined that BLM's hardrock financial assurances, when aggregated, were about \$24 million less than needed. As we have previously noted, higher-than-needed financial assurances for particular operations—which total \$7 million by BLM's own calculation—cannot be used to offset the shortfall in other financial assurances for other operations. Hence, the Bond Review Report that we examined misrepresents the overall adequacy of the financial assurances by about \$31 million.

Conclusions

Having adequate financial assurances to pay for reclamation costs for BLM land disturbed by hardrock operations is critical to ensuring that the land is reclaimed if operators fail to complete the reclamation as required. Since we first reported on these issues in 2005, BLM has taken important steps to improve its processes for ensuring that adequate financial assurances are actually in place by issuing two IMs that detail the steps BLM offices should take to ensure that hardrock financial assurances are adequate. However, the Bond Review Report—a key management tool supporting these processes—still provides misleading summary-level data on the overall adequacy of BLM-held financial assurances. Without separating the operation-specific calculations from summary-level data on adequate and inadequate financial assurances, Congress and the public cannot be assured that they have an accurate picture of BLM's efforts to ensure that enough funds are in place to fully cover estimated reclamation costs at each hardrock mining operation.

Recommendation for Executive Action

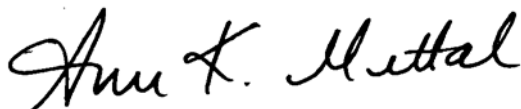
To ensure that BLM's Bond Review Report provides reliable and accurate data on the total value of inadequate financial assurances, we recommend that the Secretary of the Interior direct the Director of BLM to revise LR2000 and its Bond Review Report to calculate and report the value of inadequate hardrock financial assurances on an operation-by-operation basis in order to more accurately represent the adequacy of BLM's hardrock financial assurances.

Agency Comments

We provided a draft of this report to the Department of the Interior for review and comment. Interior did not provide written comments to include in this product. However, in an e-mail received November 28, 2011, the agency liaison stated that Interior concurs with the recommendation and is beginning to implement it. Interior also provided technical comments in its e-mail response, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of the Interior, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or mittala@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report were Elizabeth Erdmann (Assistant Director), Andrea W. Brown, Casey L. Brown, and Jacqueline Wade.



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