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MINERAL RESOURCES

Hardrock Mining Reclamation

James Duffus III, Director,
Natural Resources Management Issues,
Resources, Community, and Economic
Development Division



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Messrs. Chairmen and Members of the Subcommittees:

I am pleased to be here today to discuss our work on the reclamation of federal land disturbed by hardrock mining operations. Over the years, GAO has reported on several aspects of the Mining Law of 1872 and on the extent of reclamation needed for mining operations on federal land conducted under this law.¹

In April 1988, we reported that it would cost about \$284 million to reclaim abandoned, suspended, or unauthorized hardrock mining operations on federal land in 11 western states. Since then, others have estimated the total costs of cleaning up hardrock mine sites on federal, state, and private land. These have ranged from an estimate by the Department of the Interior's Inspector General of about \$11 billion² to an estimate by the Mineral Policy Center of between \$32.7 and \$71.5 billion.³ There is currently no federal program or funding source to ensure that past hardrock reclamation problems on federal, state, or private land are remedied. While proposals to create a fund to reclaim lands damaged by hardrock mining operations have merit, any public policy decision on establishing a hardrock reclamation program and funding source will have to consider several issues.

BACKGROUND

Federal land covers approximately 688 million acres, primarily in the western United States. The principal federal land-managing agencies--the Department of the Interior's Bureau of Land Management (BLM) and the Department of Agriculture's Forest Service--manage about 270 million acres and 191 million acres, respectively.

Under the Mining Law of 1872, U.S. citizens and businesses may freely prospect for hardrock minerals--such as gold, silver, lead, and copper--on federal land not specifically closed to or withdrawn

¹See appendix I for a listing of GAO reports and testimony on the reclamation of hardrock mining operations.

²U.S. Department of the Interior, Office of Inspector General, Noncoal Reclamation, Abandoned Mine Land Reclamation Program, Office of Surface Mining Reclamation and Enforcement (Report No. 91-I-1248, Sept. 9, 1991).

³Mineral Policy Center, Burden of Gilt (June 1993).

from mining.⁴ Once a claim is filed, the claim holder has the right to use the land covered by the claim for mining-related activities. Although all mining claims must be filed with BLM, each agency is responsible for the surface management of mining-related activities on its land.

BLM and Forest Service regulations require that once mining activities are completed, mine operators must reclaim, as soon as possible, all areas disturbed by their operations. However, operators are not required to reclaim disturbances that occurred before the land-managing agencies implemented their respective reclamation regulations. The Forest Service's reclamation regulations apply only to mining disturbances created after August 1974. BLM's reclamation regulations apply only to mining disturbances created in 1981 or later.

EXTENT OF RECLAMATION PROBLEMS

Mining operations, by their very nature, disturb the land and, without reclamation, can create problems, including environmental and public safety hazards. In 1988, we reported that over 424,000 acres of federal land in 11 western states were unreclaimed as a result of hardrock mining operations. Of this number, almost 282,000 acres were unreclaimed following abandoned, suspended, or unauthorized mining operations. The remaining 142,000 acres of federal land were being mined and would need reclamation once mining operations ceased.

To determine how much federal land was left unreclaimed after hardrock mining operations ceased, we sent questionnaires to federal officials responsible for managing federal land in the 11 western states where most hardrock mining occurs. About 98 percent of the questionnaires were completed and returned to us. We statistically projected the results of the sample to estimate the total amount of unreclaimed federal land resulting from hardrock mining. At the time of our review, we estimated the cost to reclaim abandoned, suspended, or unauthorized mining operations on federal land at about \$284 million.

Much of the unreclaimed mining occurred before BLM and the Forest Service implemented reclamation regulations. For example, at the time of our 1988 report, we found that it would require

⁴The Surface Resources Act of 1955 removed mineral materials-- often referred to as common variety minerals, such as sand, stone, gravel, and cinders--from coverage under the Mining Law of 1872. However, when these materials have properties that give them special and distinct value, they are considered uncommon and are subject to the mining law.

- about \$196 million to reclaim approximately 160,000 acres of land disturbed before the date that reclamation requirements took effect,
- about \$49 million to reclaim approximately 49,000 acres of land disturbed after the date that reclamation requirements took effect, and
- about \$39 million to reclaim over 70,000 acres of land for which federal officials were unsure when the disturbance occurred.

Recently, others have estimated the total amount of federal, state, and private land disturbed by hardrock mining operations and the estimated costs of reclamation. For example, in September 1991, the Department of the Interior's Office of the Inspector General estimated that it would cost about \$11 billion to reclaim abandoned noncoal mine sites. More recently, the Mineral Policy Center estimated that it would cost between \$32.7 billion and \$71.5 billion to clean up abandoned hardrock mine sites. Both of these studies went beyond the scope of the work that we previously reported in that they were not limited to federal lands and they included the estimated costs of off-site damage to surface water and groundwater.

NATURE OF OPERATIONS NEEDING RECLAMATION

In the course of our work, we have observed unreclaimed open pit mines, open trenches and mine shafts, unreclaimed cyanide leaching operations, and abandoned mining equipment and other litter. Some of these sites present hazards to public safety and to wildlife whereas others are just unsightly. The cost to reclaim these sites includes relatively inexpensive actions--such as reshaping or recontouring the surface, reseeding, and replacing top soil and vegetation--to far more expensive measures--such as removing and disposing of toxic mine wastes or other harmful materials and controlling erosion, landslides, and water runoff.

In addition to legitimate mining operations that are abandoned and unreclaimed, unauthorized activities on hardrock mining claims create reclamation problems. In 1990, we reported on such problems created by unauthorized activities as environmental eyesores caused by abandoned vehicles, dumped garbage, and road construction; environmental contamination caused by the unsafe storage of hazardous wastes; and access to federal land blocked by fences and gates.

ALTERNATIVES TO HELP ENSURE RECLAMATION

Our reports have included a number of recommendations to help ensure the reclamation of federal land damaged by current and future mining operations conducted under the Mining Law of 1872.

However, we have not addressed the issue of establishing a federal program and a funding source to ensure that past hardrock mining problems on federal, state, and private lands are remedied.

Ongoing Mining Operations

In 1987, we reported that the Forest Service's requirement for financial guarantees to ensure the reclamation of hardrock mine sites was working effectively. Conversely, we found that BLM's policy at that time of requiring financial guarantees only from operators with a history of noncompliance and only for operations of more than 5 acres was not effective, and we recommended that BLM significantly strengthen its bonding requirements. BLM has since acted on this recommendation for mine disturbances of more than 5 acres but not for smaller operations that can cause severe, if not as extensive, damage. Furthermore, in March 1992, Interior's Inspector General reported that BLM had not adequately implemented bonding and inspection procedures for ensuring the reclamation of abandoned hardrock mine sites.⁵

In addition, we have made a number of recommendations to deter unauthorized activities on mining claims and thereby reduce reclamation problems. Most significant was the recommendation to the Congress in our March 1989 report that claim holders be required to pay the federal government a holding fee. The intent of this recommendation was to reduce the number of both the invalid, inactive, and abandoned claims and of the unauthorized activities occurring on them. As you are aware, the Congress implemented a \$100-per-claim holding fee for fiscal years 1993 and 1994 and is currently considering making the holding fee permanent.

Past Mining Operations

Currently, there is no federal program or funding source to ensure that past hardrock reclamation problems on federal, state, or private lands are remedied. However, the Surface Mining Control and Reclamation Act of 1977, as amended, provides, in limited circumstances, for reclaiming hardrock mining operations. The Congress established a fund, commonly called the Abandoned Mine Land or AML fund, derived from fees levied on current coal production to promote the reclamation of federal, state, and private land adversely affected by coal-mining operations that occurred before enactment of the act. However, AML funds can also be used to reclaim noncoal sites if all coal sites in a state have been reclaimed or if the noncoal sites constitute a hazard to public health or safety.

⁵U.S. Department of the Interior, Office of Inspector General, Hardrock Mining Site Reclamation, Bureau of Land Management, (Report No. 92-I-636, Mar. 30, 1992).

In April 1988, we reported that, through 1987, only about \$2 million in AML funds had been spent to reclaim federal land disturbed by hardrock mining in the 11 western states included in our report. In July 1991, we reported that about \$138 million in AML funds had been spent to reclaim noncoal sites on federal, state, and private lands. However, AML funds cannot continue to be the source for reclaiming hardrock mine sites. As we reported previously, by the year 2004 when the authority to collect AML fees expires, there will be an estimated \$27 billion shortfall between the estimated costs to reclaim lands around coal mines abandoned before 1977 and the fees collected. Furthermore, spending funds that are derived from the fees paid by coal producers to reclaim noncoal mining operations raises the question whether the Congress should consider establishing a similar fund for hardrock mining reclamation that is derived from fees collected on the production of hardrock minerals.

Deliberation on whether to establish a separate fund to promote the reclamation of areas damaged by past hardrock mining operations, from fees levied on hardrock mineral production should address several issues. For example, there is currently no federal regulatory oversight or requirement for reporting, monitoring, or verifying hardrock mineral production. In addition, the sheer number of hardrock minerals involved and the differences in how production is measured, as compared to coal, will create complexities for equitably assessing a reclamation fee.

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In summary, Messrs. Chairmen, the damage from past hardrock mining operations clearly goes beyond the damage that we have identified on federal land. Reclaiming these lands will require a significant commitment of funds. There is currently no federal program or funding source to ensure that past hardrock reclamation problems on federal, state, and private land are remedied. Accordingly, any public policy decision on how best to address these reclamation needs will have to carefully consider, among other things, the workability of such a program and a source of funding.

Messrs. Chairmen, this concludes my statement. We will be happy to answer any questions that you or other Members of the Subcommittees may have.

GAO REPORTS AND TESTIMONY ON HARDROCK
MINING ON FEDERAL LANDS

Natural Resources Management Issues (GAO/OCG-93-17TR, Dec. 1992).

Surface Mining: Management of the Abandoned Mine Land Fund
(GAO/RCED-91-192, July 25, 1991).

Mineral Resources: Increased Attention Being Given to Cyanide
Operations (GAO/RCED-91-145, June 20, 1991).

Abandoned Mine Reclamation: Interior May Have Approved State
Shifts to Noncoal Projects Prematurely (GAO/RCED-91-162, June 7,
1991).

Hardrock Mining on Federal Lands (GAO/T-RCED-90-106, Sept. 6,
1990).

Federal Land Management: Unauthorized Activities Occurring on
Hardrock Mining Claims (GAO/RCED-90-111, Aug. 17, 1990).

Federal Land Management: The Mining Law of 1872 Needs Revision
(GAO/RCED-89-72, Mar. 10, 1989).

Importance of Financial Guarantees for Ensuring Reclamation of
Federal Lands (GAO/T-RCED-89-13, Mar. 7, 1989).

Federal Land Management: An Assessment of Hardrock Mining Damage
(GAO/RCED-88-123BR, Apr. 19, 1988).

Federal Land Management: Limited Action Taken to Reclaim
Hardrock Mine Sites (GAO/RCED-88-21, Oct. 21, 1987).

Federal Land Management: Financial Guarantees Encourage
Reclamation of National Forest System Lands (GAO/RCED-87-157,
Aug. 24, 1987).

Public Lands: Interior Should Ensure Against Abuses From
Hardrock Mining (GAO/RCED-86-48, Mar. 27, 1986).

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