

Passing the Buck:

How the Mining Industry Used Outdated Rules
to Pass Environmental Cleanup Costs to Taxpayers

and

How the Bush Administration Would Roll Back Updated
Mining Rules to Allow Industry to Do It Again



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“Of all those expensive and uncertain projects
which bring bankruptcy upon the
greater part of the people that engage in them,
there is none perhaps more perfectly ruinous
than the search after new silver and gold mines.”

*Adam Smith,
The Wealth of Nations*

Adam Smith would have supported strong federal and state
bonding regulations.

FOREWORD.

The General Mining Law of 1872, passed when Ulysses S. Grant was president, governs how mining companies extract precious minerals from our nation's taxpayer-owned public lands. This antiquated law allows the mining industry to rake in billions of dollars from public lands by subsidizing the industry in myriad ways:

1. The law permits mining companies to patent, or "take title to", taxpayer-owned public lands for \$2.50 to \$5.00 an acre.
2. The companies then extract precious metals and minerals from this land for free, paying no royalties back to taxpayers.
3. Then, mining companies too often add insult to injury by sticking taxpayers with the cleanup tab.

Combined, these policies have resulted in billions of dollars worth of subsidies for the hardrock mining industry.

Throughout the history of the 128-year-old law, events have illustrated the need for increased taxpayer protection. It is estimated that there are 550,000 abandoned mines scattered around the American West that will cost between \$32 billion and \$72 billion to clean up. Because mining companies have repeatedly walked away from cleaning up those mines, federal taxpayers are stuck with the cleanup costs. This is not just a problem of the past – on the contrary, a recent report by the Center for Science in Public Participation and the National Wildlife Federation found that currently operating mines in the western United States could cost taxpayers \$254 million to more than \$1 billion for cleanup should mining companies abandon the responsibility.

The federal government now has an important new tool that protects taxpayers and the environment from bearing the burden of irresponsible mining. After a four-year regulatory process that included thousands of public comments, last November the Department of the Interior published updated rules that govern mining on public lands, rules that have been in effect since January 2001. Among other things, the new rules require mining companies to post adequate bonds before mining commences. Left in place, these strengthened protections ensure that the mining industry, not the taxpayer, pays for environmental cleanup of modern mines.

But, as this report goes to press, the Bush Administration has proposed to suspend these mining reforms, and reinstate the old rules that left behind a legacy of pollution and taxpayer funded environmental cleanups.

Reforming the regulations by requiring companies to post adequate cleanup bonds before mining begins acts as an insurance policy for taxpayers and helps to fix these outrageous loopholes. *Passing the Buck*, a new report by Mineral Policy Center and Taxpayers for Common Sense, demonstrates that taxpayers need these reforms, and outlines how they should be implemented.

EXECUTIVE SUMMARY.

The American taxpayer is potentially liable for between \$250 million and \$1.1 billion to clean up and prevent pollution at today's metals mines in the West. And, based upon a rash of bankruptcies in the mining industry over the past year, actual taxpayer liability for mining-industry pollution could increase by hundreds of millions of dollars this year. Yet, even as the situation worsens, the Bush Administration is proposing to reverse earlier efforts by the Department of the Interior to fix the problem.

Passing the Buck, a report by Mineral Policy Center and Taxpayers for Common Sense, uses federal and state government data and bonding formulas to explain why taxpayers are on the hook today for hundreds of millions to more than a billion dollars in mine cleanup costs, describes how and why this liability is likely to grow if old mining rules are reinstated, and offers common-sense prescriptions that would hold the mining industry financially accountable for its environmental impacts. If the new reforms are reversed, mining companies will continue to pass the buck for mine cleanup to taxpayers.

Each year, the modern metals mining industry extracts billions of dollars worth of minerals in the U.S. Modern mines operate on a vast scale. Open-pit mines can be miles across and thousands of feet deep; they employ mineral-extraction processes that use millions of pounds of toxic chemicals such as cyanide to extract metals from crushed ore. As a result, significant surface water and groundwater impacts are common. Remedying the environmental damage caused by these massive operations can cost tens of millions of dollars, and sometimes hundreds of millions of dollars, per mine.

Common sense dictates that a mining company that owns or operates a mine should clean up (reclaim) the mine site after depletion of the mineral deposit. But common sense does not prevail today with our public-lands policies nor does it prevail in our most active mining states.

Mining regulations should protect the taxpayer from cleanup liability via a financial instrument called a reclamation or cleanup bond. Reclamation bonds, secured by a mine owner before mining begins, are intended to provide regulatory authorities with sufficient assets to clean up a mine if the mine owner is unable or unwilling to do so. Regulations that the Bush administration wants to revert to are inadequate. These outdated federal bonding regulations, and state regulations, are filled with gaps and loopholes. As a result, under the old rules bonds often failed to cover reclamation costs, leaving taxpayers holding the bill.

Reclamation bonds fail for two reasons: Either the estimated cleanup cost is too low – so that the bond amount fails to cover the full cleanup cost; or the asset provided to fund the cleanup is not guaranteed – so that when the time comes to collect the bond, the funding simply isn't there.

These regulatory weaknesses become glaringly obvious when mining companies go bankrupt. Bankruptcies occur for a variety of reasons – they can result from fluctuations in mineral prices,

poor corporate management, a depleted ore body, changes in the business climate, or other causes.

By guaranteeing that full cleanup funds are set aside before mining begins, the new strong bonding regulations are a remedy for unexpected events such as bankruptcies. This report shows that today's bankruptcies expose significant weaknesses in both the regulations the Bush administration wants to return to and current state bonding regulations. In just one state, Nevada, there are currently 36 bankrupt sites with a total unbonded cleanup liability that could run into the hundreds of millions of dollars.

For bonding regulations to be effective, the bond must be adequate to cover the complete cost of mine closure and cleanup. This report finds that on our taxpayer-owned public lands and in many western states, under the old rule regulators had been accepting bonds that were millions of dollars less than required for adequate mine closure and cleanup.

Often cleanup costs were underestimated because the old regulations allowed the mining company to do the estimating. It is not surprising that some mining companies would seek to minimize cleanup projections in an effort to lessen the impact on their bottom lines. Consequently, their estimates were too often based on best-case scenarios, where environmental damages are predicted to be minimal and nothing ever goes wrong. It is the role of regulators, working in the public's interest, to prevent such practices. Yet these best-case estimates, consistently proposed by mining companies, were still accepted by regulators even when this practice flew in the face of years of hard evidence.

Cleanup costs were also underestimated because the old federal regulations and most current state rules do not require bonds to cover the cost of long-term water treatment after the mine is closed and other reclamation is complete. Long-term water treatment is one of the most costly aspects of reclamation because treatment may be required for many years – in some cases, thousands of years.

Many bonding programs also contain other weaknesses that should be corrected. Primary among them are corporate guarantees, otherwise known as self-bonding. A corporate guarantee is exactly what it sounds like – in lieu of cash or some other concrete financial surety, the mining company simply promises that it will make good on cleanup costs when the bills come due. Although self-bonding is generally permitted only for large companies, size is no guarantee of financial viability. Metals markets tend to be erratic and unstable. Today's low gold prices provide the best evidence of how market dynamics can change, jeopardizing the financial health of even the biggest operators. Further, a single mine operates for anywhere from 5 to 50 years. Even goliaths of industry can fall in that time, as they have in the past.

To address these and other problems of the modern mining industry, the Department of the Interior reformed the rules that govern hardrock mining on public lands. The new rules have eliminated the inadequacies of the old bonding regulations. Corporate guarantees have been prohibited, and reclamation cost estimates will be made using more realistic assumptions of expected impacts and cleanup requirements. Similar improvements in state-based bonding

regulations are also necessary to protect the public. This report outlines the dangers involved in overturning the updating mining rule, and replacing it with the old rule written in 1980.

The solution to the taxpayer liability for mine cleanup costs is simple. The improved mining regulations must not be weakened. The new bonding regulations must be maintained so that mining companies are required to guarantee the full cost of reclamation, before mining begins, as a cost of doing business. Motorists are not allowed to drive without adequate auto insurance. If a mining company is unable to insure that it will pay to clean up a mine, through a legitimately estimated and funded reclamation bond, it should not be allowed to mine.

If the new mining regulations are gutted, taxpayers will continue to foot the bill for the mining industry.

SECTION I.

BONDING FOR ENVIRONMENTAL AND TAXPAYER PROTECTION AT TODAY'S MINES – A PRECONDITION FOR RESPONSIBLE MINING

Why do thousands of abandoned mines litter the country, creating eyesores, safety hazards, and polluting our rivers, lakes and streams? Because for decades mining companies operated with little concern for the post-mining landscape, and governments failed to require adequate planning and funding for mine cleanup.

Today, in an era when the public values open space, wilderness preservation and clean water, things should be different. After all, it is not uncommon to hear mining company executives espouse a commitment to environmentally and fiscally responsible mining. By law, federal regulators are required to prevent unnecessary or undue degradation of public lands. And many state laws and regulations mandate protection of public resources such as clean water.

Yet today, despite the espoused changes in corporate attitude and laws that have been put on the books to protect our natural resources, too often mining companies operate with little concern for the post-mining landscape and governments fail to require adequate planning and funding for mine cleanup.

Why? The answer is simple. Despite their lofty environmental rhetoric, most mining companies will not spend a dime more on mine cleanup than they are required to. The bottom line is this: state bonding regulations and the old federal bonding regulations to which the Bush administration wants to return, are simply too weak or are not adequately enforced.

The concept of reclamation bonding is quite simple – the polluter pays. The mining company assures regulators, before mining begins, that sufficient funds exist to pay for mine cleanup when the mineral deposit runs dry and the mine closes. This assurance should come in the form of a guarantee either through a bond, a letter of credit or another ironclad financial instrument. This financial guarantee or bond should adequately cover the costs of cleanup and closure should a mine operator become insolvent, or is otherwise unable or unwilling to complete all necessary environmental reclamation and monitoring.

If a mine operator lacks the financial resources to post a sufficient bond to cover the costs of these responsibilities, then mining should not be allowed to proceed. To ensure the mining companies' responsibilities are met, bonds should not be released until reclamation is complete. The polluter pays principle should underpin all bonding regulations. Yet too often the polluter does not pay, the taxpayer does. State bonding rules and the old federal rules are weak, outdated, contain regulatory gaps, and in some cases are not enforced. Consider these two examples:

- Before the new mining regulations took effect in January, the federal government had not modernized its bonding regulations in almost twenty years. They had not been modernized even though most of today's mines use techniques, such as cyanide leaching, that were not

prevalent when the old regulations were first written. As a result, no additional bonding was required for mines that use the cyanide process. And the regulations failed to address the problems of long-term water treatment that will be required by many of today's mines. Consequently, taxpayer liability significantly increased in the past two decades. It will further increase if the Bush Administration's attempt to roll back the old rule is successful.

- The state of Nevada, home of many of today's biggest mines, many on federal lands, allows mining companies to self-bond for a majority of mine cleanup costs. This means the taxpayers guarantee these costs.

The current bonding rule, which Bush wishes to revoke, inserts some common sense into our mining regulations. When you're on the road you expect the government to require other drivers to carry collision insurance that is adequate to pay the full cost of a potential auto accident. The same logic and wisdom should underpin our mining laws and regulations. A sober assessment of the potential long-term environmental and taxpayer impacts of a mining operation must translate into a bond that protects taxpayers and the environment, whatever the condition of the mining company. The current mining rule does this, the old rule did not.

Full-cost bonding should be a regulatory precondition of responsible mining. The purpose of the bond should be to guarantee that mining companies fully close, clean up (reclaim), and perform all necessary post-closure pollution abatement and monitoring. While responsible mining companies should follow this practice voluntarily, it is the task of regulators, representing the public interest, to guarantee that mining companies actually do so. Where this is not the case, regulators must have the authority to deny mine proposals. To do otherwise is to create the conditions for more abandoned mines and greater taxpayer liability for mine cleanup.

The attitude of Richard DeVoto, president of Canyon Resources, demonstrates the need for the strong regulations and tough enforcement. "We won't post bond if we believe it's an inappropriate number and we would appeal it," he said in an industry-press article referring to Montana's increase on the cost-of-cleanup estimate at his company's Kendall Gold Mine. "And I can tell you without even seeing it (the estimate), we know those numbers aren't necessary."¹

Today's public liability for mine cleanup, due to the old bonding regulations, represents a massive subsidy by taxpayers to irresponsible and inefficient mine operators. And it represents a black eye, one that the entire industry suffers from. Therefore it's in the interest of responsible mining companies to support the current mining regulations.

In a perfect world, mining companies would reclaim their mines without regulatory oversight. We don't live in a perfect world. The bulk of hardrock mining in the United States has occurred since the onset of the California gold rush in 1849. Before 1980, there were no federal regulations governing hardrock mining on public lands, and extremely weak or nonexistent state regulations. Over that 132-year period, more than 500,000 abandoned mines accumulated across the United States. In most cases, after a mine was depleted, the mining operator simply left it. Consequently, the American taxpayer is liable for \$32 billion to \$72 billion in reclamation costs

¹ Pay Dirt, July 2000, pp. 36.

to clean up these abandoned mines.² However, this report is not about the problems of yesterday's "pre-regulation" abandoned mines. This report reveals how this problem occurred again at today's mines under the old bonding rule, how the size and impact of today's mines result in massive environmental damage, and how the current rules require the necessary steps to ensure that mining companies, not the taxpayers, pay for cleaning up today's and tomorrow's mines.

² James Lyon, et al., Mineral Policy Center, *Burden of Gilt*, 1993.

SECTION II. THE COST OF MINING TODAY

Why does mining pose such a threat to clean rivers, streams, and lakes? Why does it have a sometimes-devastating impact on pristine landscapes and sensitive ecosystems? Why does cleanup of just one mine site sometimes cost federal taxpayers more than \$150 million?

U.S. hardrock or metal mining operations produce more toxic waste than any other industry sector. According to the Environmental Protection Agency (EPA), the ecological risk of mining waste is second only to global warming and stratospheric ozone depletion.³ Mines are some of the most difficult toxic waste sites to reclaim. Mines in the U.S. have contaminated 12,000 miles of rivers and streams and 180,000 acres of lakes.⁴ Why?

Mining today is an industrial enterprise. The romantic image of yesterday's pick-and-shovel prospector has been replaced by machines that can gather more than 40 tons of material in one scoop and in five minutes load a 330-ton capacity truck. As the modernization and mechanization of mining technology has progressed, mines have become larger and larger.

Today's technology gives mines the capacity to devour entire mountains and create toxic pits that can be miles in diameter and thousands of feet deep. Chemical-based mining methods, such as the use of cyanide to extract gold from crushed rock, have allowed mining companies to lower production costs, making it more economical for companies to process huge magnitudes of low-grade ore. Lower-grade ores require that more rock be crushed to obtain the same amount of mineral. The result is that for each ounce of metal produced, multiple tons of rock have to be processed.⁵ In processing the rock, massive quantities of chemicals, such as cyanide, are used. Using such chemicals in large quantities increases the risks of spills and mishaps as well as the possibility of increased taxpayer liability.

Each step of the mining process generates additional waste, much of it potentially toxic. In 2000, the EPA reported that the metal mining industry released more toxic material than any other industry in the United States, almost half of all toxics reported.⁶ This is due in part to the character of the rock in which a mineral is discovered.

A mineral is not found in isolation. Mineral deposits are almost always a mix of different metals. Besides the target mineral, usually gold or copper, toxic heavy metals such as lead and arsenic are often found in the same deposit. Once the target mineral is extracted, the rock

³ U.S. EPA, *Unfinished Business: A Comparative Assessment of Environmental Problems- Overview Report*, Washington D.C., Feb. 1987, p.79.

⁴ Robert L.P. Kleinmann, "Acid Mine Drainage," *Engineering and Mining Journal*, p.161, July 1989.

⁵ For example, at the Zortman and Landusky mines in Montana, 60 tons of rock must be excavated for every ounce of gold produced.

⁶ 1998 Toxics Release Inventory (TRI) Public Data Release Report (EPA 745-R-00-007), U.S. EPA, September 2000.

bearing these toxic heavy metals is dumped as waste – where it is available to wind or rain. Often, these toxic heavy metals find their way into ground water and surface water.

Heavy metals get into watersheds through a process known as acid mine drainage, which is environmentally devastating in its own right. Besides heavy metals, ore deposits often contain sulfur. When sulfur is exposed to oxygen and water (wind and rain) in a waste dump, sulfuric acid forms. This acid leaches heavy metals from the waste and into rivers and streams, where they poison fish and wildlife. The acid also substantially lowers the pH of the water into which it enters – in some cases lower than battery acid.

Once created, the problem of acid mine drainage is hard to stop. A modern mine can create millions of tons of acid generating waste – waste that can produce acid and leach heavy metals in watersheds for thousands of years. Treating such wastes is a very expensive proposition.

In other words, what large-scale mining means for the taxpayer and the environment is this: It will cost a lot of money – probably billions of dollars – to effectively address the environmental damage that results from today's mines. If mining companies are not required to cover the full cost of mine reclamation and cleanup, then with each new ton of ore that is processed, the already heavy burden on taxpayers could increase.

SECTION III. THE ENVIRONMENTAL AND TAXPAYER IMPLICATIONS OF A BILLION-DOLLAR BONDING GAP

At today's operating mines, mostly located in the western United States, there is a bonding gap that could be more than a billion dollars. This gap represents the likely difference between reclamation funds (bonds) held by federal and state regulators for mine closure and cleanup and what that reclamation is likely to actually cost according to independent experts. Regulatory agencies simply do not require mine operators to post sufficient bonds to properly cover mine reclamation. The problem exists in almost all states with significant hardrock mining activity. Wherever the hardrock mining industry has operated under a regulatory regime for sufficient time to build a track record, significant bonding shortfalls exist.

There are two reasons for public concern. First, if bonding levels are inadequate, and if a mining company goes bankrupt or is otherwise unable to pay for cleanup, mine cleanup costs are likely to be borne by taxpayers. Therefore taxpayers, in most western states and nationally, face growing liability for mine cleanup. In essence, the result will be that citizens will be taxed for mine cleanup.

Second, all western states and the federal government have failed to require adequate mine closure and cleanup plans. Thus, significant water pollution and environmental degradation are the likely result even if mines are cleaned up to current regulatory standards.

A 2000 report by the Center for Science in Public Participation and the National Wildlife Federation, "Hardrock Reclamation Bonding Practices in the Western United States," demonstrates the extent of the problem. According to NWF, the nationwide cumulative gap between financial sureties posted and the actual mine clean up costs at approximately 150 major metal mines in the U.S. is likely to be at least \$254 million and could be more than \$1 billion dollars.⁷

⁷ James R. Kuipers, P.E., *Hardrock Reclamation Bonding Practices in the Western United States*, Center for Science in Public Participation and National Wildlife Federation, February 2000.

**Potential Unfunded Metal Mine Reclamation Costs in the United States
June 1999⁸**

State	Potential Unfunded Liability
Alaska	\$7 - \$57 million
Arizona	\$73 - \$292 million
California	\$17 - \$68 million
Colorado	\$20 - \$50 million
Idaho	\$20 - \$160 million
Montana	\$20 - \$50 million
Nevada	\$96 - \$480 million
New Mexico	too soon to tell under new rules
South Dakota	\$6 - \$15 million
Utah	\$10 - \$50 million
Washington	\$5 - \$10 million
Total unfunded liability	\$254 million – \$1.087 billion

Actual taxpayer liability may increase by hundreds of millions of dollars in 2001 due to a rash of mine bankruptcies over the past year. In Nevada alone, there are more than 36 bankrupt mining sites. At one Nevada site, the Yerington mine, Bureau of Land Management officials have estimated cleanup costs to be between \$60 million and \$100 million. Although most of these mines were bonded to some degree, much of the cleanup liability was not accounted for. A loophole in bonding regulations allowing corporate guarantees or self-bonding is at least partially to blame. See section IV for a discussion of corporate guarantees.

These regulatory weaknesses of the old federal regulations and of the current rules in many states are exposed when mining companies go bankrupt. Bankruptcies occur for a variety of reasons: drops in mineral prices; poor corporate management; a depleted ore body; or changes in the business climate.

For example, the recent plummet of gold prices to a 20-year low⁹ and a coincident slump of copper prices provide useful instruction on the precarious nature of mineral commodity markets.

⁸ Summary Report, *Hardrock Reclamation Bonding Practices in the Western United States*, Center for Science in Public Participation and National Wildlife Federation, February 2000.

⁹ On September 14, 2000, gold traded at \$272 per ounce, down from historic highs of \$800/oz in the early 1980s.

Such large declines in mineral commodity prices can disrupt or close mine operations. Without adequate bonding, environmental reclamation and monitoring work are jeopardized. For example, in 1998 Pegasus Gold mining company filed for Chapter 11 bankruptcy and canceled a planned expansion of its Zortman-Landusky Mine in Montana. Acid mine drainage problems and violations of the Clean Water Act had plagued the mine. As a result, taxpayers are likely to pay a multimillion-dollar cleanup bill because the reclamation bond was inadequate.

The case of Zortman-Landusky illustrates how state taxpayer liabilities can become a burden for federal taxpayers. As the unfunded cleanup bill grows at this mine, it is likely that state officials will turn to the federal government for help. For more on the Zortman-Landusky/Pegasus bankruptcy, see Section V.

The new reclamation mining regulations are designed to protect taxpayers against just this series of events. By guaranteeing that full cleanup funds are set aside before mining begins, the current strong bonding regulations serve as inoculation against these unexpected events. Yet the Bush Administration proposes to revoke the new bonding rules, and reinstate the old rule whose weaknesses these recent bankruptcies reveal.

SECTION IV. THE BONDING GAP – ROOT CAUSES

State bonding rules and the outdated federal regulations that could soon be revived are riddled with gaps, loopholes, and inadequacies. The current regulations close these holes. However, if the old regulations are reinstated, the bonding gap will reopen. Successful, bonding regulations must address two root causes:

1. Current state regulations and the old federal regulatory practices permit cleanup estimates that are insufficient to reclaim most mine sites. This problem is particularly acute when bonding for long-term water treatment. The end result is that bonds fail to pay for adequate reclamation, leaving taxpayers to fund the difference.
2. Current state regulations and the old federal regulations allow bonding in a form that is not guaranteed. Some “bonds” are nothing more than a corporate promise to pay. When the time comes to collect the bond, the funding intended to be there simply is not, even if the reclamation cost was properly estimated. The end result, again, is taxpayers are forced to pay for cleanup.

The current mining rules address these issues. The old rules did not.

The Perils Of Underestimating Reclamation Costs

Under the old rules, cleanup costs, and therefore bond amounts, were often significantly under-projected because regulatory practices often allow mining companies to prepare the estimate of likely impacts and remediation expenses.

According to Dirk van Zyl, director of the Mining Life-Cycle Center at the Mackay School of Mines at the University of Nevada, Reno, mine closure can be an expensive proposition. “Mines are finding out what they thought would be routine is turning out to be more difficult. People ask how much it will cost to close a mine, and I always say ‘twice as much.’”¹⁰

Accurately predicting the extent of potential contamination and degradation from mining is a difficult and problematic process under the most objective circumstances. Mining companies have an obvious conflict of interest. They seek to keep expenses to a minimum and to maximize profits. A bond, even if a company plans upon retrieving after mining ends, is a substantial pre-mining expense. Consequently, a mining company’s estimates are too often based on best-case scenarios, where they predict environmental damages to be minimal and project that all will go as planned. In their models, nothing unforeseen ever happens. Allowing a mining company to estimate its own bond establishes a dynamic where a conflict between what is in the interest of the mining company and what is in the best interest of taxpayers and the environment is settled in favor of the mining company.

¹⁰ “Van Zyl promotes Mining Life-Cycle Center,” *Elko Daily Free Press*, June 12, 2000, p. 25

Under the old rules, regulators consistently accepted best-case estimates, even such estimates contradicted years of evidence that things can and do go wrong and that bonding programs should use a conservative set of assumptions.

The most prominent and costly consequence of the best-case scenario bond-estimation methodology is the long-term water damage that can result from acid mine drainage.¹¹ Acid pollution from mines is recognized as one of the most significant and long lasting environmental problems caused by hardrock mining.

The occurrence and severity of acid mine drainage depends on myriad factors, including amounts of acid-generating and acid-neutralizing material, climate, the presence of bacteria, and hydrological and geological character of area surrounding the ore body. Consequently, accurately predicting acid mine drainage is very difficult.

In fact, a recent report by an independent geochemistry consultant casts skepticism on many of the predictive techniques used by the industry – in particular, the computer-driven “modeling” that yields specific hard numerical data on future water quality.¹² Such modeling forms the basis of many of the environmental assessments that justify the approval of mining projects in the United States and other developed countries. Usually the results are untenably optimistic.

This same report cautions that such predictive techniques may be biased in favor of optimistic results because the geochemists that use such models are ordinarily paid by mining companies, or work with the industry directly as consultants. Often there is little or no correlation between the concentrations predicted by the computer models and what is later observed.

The ability and inclination to predict acid mine drainage is of particular importance because it often proves to be extremely costly to remedy. Acid drainage from mines is caused by the exposure of sulfur-bearing rock to the air and water. Much rock found in open-pit mines can be sulfur bearing. This can include all the waste rock and ore removed, as well as the walls of the pit. Given the surface area and volume of modern open-pit mines, addressing the root cause can be either costly or impossible. In the event it is impossible, the only alternative is to treat the polluted water coming off the site until the source of sulfur is exhausted. This can take many years after the mine is closed and other reclamation is complete. In some cases, treatment is necessary for thousands of years.¹³ As one might expect, because long-term water treatment is expensive, mining companies do not tend to predict that it will be necessary.

Worthless Guarantees

Corporate guarantees, otherwise known as self-bonding, are one of the primary reasons that bonds often do not actually contain assets in the amount required for mine cleanup. A corporate guarantee is exactly what it sounds like – in lieu of cash, a bond, or some other concrete financial

¹¹ Acid mine drainage occurs when iron sulfide minerals, such as iron pyrite and pyrrhotite, are present in the ore. When exposed, these iron sulfides react with water and oxygen to create sulfuric acid.

¹² Robert E. Moran, “Misuse of Water Quality Predictions in Mining Impact Studies,” in *Decision Making and the Future of Nature*, D. Sarewitz, R. Pielke, Jr., and R. Byerly, Jr., eds., Washington, D.C.: Island Press, 1999.

¹³ D. Kirk Nordstrom et al., “The Production and Seasonal Variability of Acid Mine Drainage From Iron Mountain, California: A Superfund Site Undergoing Rehabilitation,” in *Acid Mine Drainage: Designing for Closure*, p.18, 21 June 1999.

surety, the mining company simply promises that it will pay for cleanup costs when the costs come due. The company pledges to retain the assets necessary for reclamation on its books.

Unfortunately, a corporate promise is not a financial guarantee. The purpose of a financial guarantee is to ensure that taxpayers do not bear the burden of cleanup costs when the mine owner/operator is unable or unwilling to do so.

Corporate guarantees are based upon an evaluation of a company's assets and liabilities and its ability to pay for the cost for reclamation. The company is typically required to demonstrate a specified ratio of assets to liability indicating the ability to pay for reclamation. The regulatory agency frequently requires regular submittals of corporate financial statements and may also require the company to establish a cash reserve to be used for reclamation.¹⁴

Although self-bonding is generally permitted only for more substantial companies, size is no guarantee of long-term viability. Metals markets tend to be erratic and unstable. Recent low gold prices provide the best evidence of how market dynamics can change, jeopardizing the financial health of even the biggest operators. A single mine operates for anywhere from 5 to 50 years, even goliaths of industry can fall in that time.

A mining company having financial difficulties will have trouble fulfilling a corporate promise. And a bankrupt mining company will not be able to fulfill its promise at all. Collecting a corporate guarantee under these circumstances would be a litigious process: exactly the situation that bonds are constructed to avoid.

New Mining Technologies Outstrip Weak State Rules and the Old Federal Bonding Regs

The Bureau of Land Management (BLM) and the Forest Service are responsible for regulating mining on public lands, primarily in the western U.S. However, the old regulations that might be reinstated for BLM land are inadequate and woefully outdated (the Forest Service regulations have not been updated). As a result of the old regulatory framework, the BLM was unable to fulfill its statutory requirement under the Federal Land Policy Management Act of 1976 to prevent "unnecessary or undue" degradation of public lands. These old regulations, which were replaced in January by much stronger rules, became outdated soon after they went into effect in 1980, when cyanide leach technology became the primary means of mining for gold in the U.S. This technology led to mining operations that use large quantities of dangerous processing chemicals leading to greater risks of significant water pollution. This and other technological "advances" have also led to a dramatic increase in the size and scale of mining operations. Today's mines can have a dramatic and detrimental impact on the landscape, water, and on other natural resources that can often lead to greater taxpayer liability.

Most mining of metals, i.e. hardrock mining, in the United States today occurs in the West. Most western states have bonding regulations that pertain to mining on non-public lands in each state. In fact, some argued that regulatory reform on a federal level was unnecessary because these state regulations could apply to public lands. This argument has two fundamental flaws:

¹⁴ James R. Kuipers, P.E., *Hardrock Reclamation Bonding Practices in the Western United States*, Center for Science in Public Participation and National Wildlife Federation, p.I-13, February 2000.

- State bonding regulations themselves suffer from many of the same flaws, omissions, and gaps that exist in the federal program. And where regulations have been modernized there are often enforcement problems.
- Even if some states have adequate bonding regulations, there should still be a bottom-line regulatory floor that is followed consistently on all federal lands. Bonding regulations on federal lands should not vary from state to state. Such a regulatory baseline could more consistently protect taxpayers and the environment.

What follows is a summary of the shortcomings of the old BLM bonding regulations¹⁵ that President Bush would reinstate, and a summary of state regulations¹⁶ for the states where large-scale hardrock mining typically occurs. The source for the state summaries is *Hardrock Reclamation Bonding Practices in the Western United States*, a Center for Science in Public Participation and National Wildlife Federation study by James R. Kuipers. The analysis offered in this report is not comprehensive; it is a summary of the major regulatory shortcomings. Regulatory reform would need to address these and other problems. The text of the old federal bonding regulations for the BLM and the current regulations for the U.S. Forest Service are contained in the Appendix.

Old BLM/ Current USFS:

- Loopholes allow mines to operate without a bond.
- The federal government exempts operations of five acres or less from requirements. This exemption essentially allows small mining operations in the state to be conducted without regard for reclamation and closure issues.
- Federal regulations do not require additional financial assurance for mining operations that employ cyanide leaching or other toxic chemicals.
- Federal regulations do not require additional financial assurance for long-term water treatment.
- Federal bonding regulations lack substance in terms of comprehensive and specific performance standards and other requirements. They fail to adequately address water quality and fail to consider wildlife habitat and aesthetic considerations.
- Federal regulations do not prohibit corporate guarantees on public lands.
- Federal regulations do not prohibit mining companies from estimating reclamation costs.
- Federal regulators do not have the authority to deny poorly planned mines or those that would have unacceptable environmental impacts.

ALASKA:

- A separate administration for different aspects of reclamation and closure (both among state agencies and between the state and federal agencies) presents a difficult regulatory scheme with the potential for shortcomings on water-quality issues.

¹⁵ Carlos da Rosa, J.D., *Overburdened*, Mineral Policy Center, 1999.

¹⁶ Summary Report, *Hardrock Reclamation Bonding Practices in the Western United States*, Center for Science in Public Participation and National Wildlife Federation, February 2000.

MPC & TCS REPORT: PASSING THE BUCK

- Despite a large area of tribal lands and lands affected by treaty, the state has no formal relationship with the various tribal organizations with respect to mining and reclamation issues.
- Under provision of the Alaska Reclamation Act, the amount of performance bond may not exceed \$750 for each acre of mined area. (An operator may provide a bond for more than the amount required, and most mines voluntarily exceed the \$750-per-acre limit. However, not all of them do.) In cases where the company volunteers a higher bond amount, the \$750-per-acre limit essentially compels the state to accept the original cost estimate of the company.
- The Alaska Reclamation Act exempts operations of five acres or less from bonding requirements. This exemption essentially allows small mining operations in the state to be conducted without regard for reclamation and closure issues.
- The Alaska Reclamation Act lacks substance in terms of comprehensive and specific performance standards and other requirements. Reclamation planning in the state fails to adequately address water quality and fails to consider wildlife habitat and aesthetic considerations. The limitations on topsoil, revegetation and public safety seriously compromise the statutes as well.
- Alaska's Department of Environmental Conservation does not require additional financial assurance for mining operations that employ cyanide leaching or other toxic chemicals.
- Alaska is one of two states, Arizona being the other, that permits reclamation and closure costs to be calculated on the basis of costs to the company, without regard for the indirect costs that would be necessary if the agencies were to perform reclamation.
- Alaska's bond-release statutes do not address the liability of the operator and surety provider with respect to bond release.
- Alaska's bond pools allow operators that would otherwise be unable to obtain standard bonds for various reasons, including financial difficulties, to obtain necessary bonding.

ARIZONA:

- Lack of coordination between multiple agencies compromises overall reclamation and bonding process. This includes a lack of coordination between various state agencies, between state and federal agencies and between state agencies and tribal organizations. Arizona is the only western state without any Memorandums of Understanding (MOU's) with federal agencies.
- Special consideration is allowed to any surface disturbance created, in whole or in part, before July 17, 1994. Incidentally, all of Arizona's major active copper mines existed, in whole or part, prior to 1994. In essence, nearly all of Arizona's existing major hardrock mines are, by this provision, exempted from the reclamation and closure statutes of the state.
- Any disturbance of less than five acres is also exempt from the reclamation and bonding processes.
- Reclamation plan requirements fail to include provisions for topsoil, water quality, acid mine drainage (AMD), wildlife habitat and aesthetics.
- The Arizona Aquifer Protection Permit program relies on the Arizona mining guidance manual, *Best Available Design Control Technologies* (BADCT), to define its reclamation and closure practices. Unfortunately, BADCT focuses primarily on facilities' designs; its consideration of reclamation and closure is very limited in scope. In addition, use of the manual as a sole source of Aquifer Protection Permit standards assumes that BADCT is both infallible and timeless – that there are no better technologies and never will be.

MPC & TCS REPORT: PASSING THE BUCK

- Current statutes allow for the approval of reclamation plans prior to approval of the bonding mechanism.
- Bonding amounts are determined by the mining company. These amounts are allowed to be estimated based on what reclamation would cost for the company to perform the necessary tasks. Unfortunately, if the bond is needed to complete reclamation, it won't be the company performing the tasks. This element of bond estimation is the primary reason that Arizona's average bond amount is among the lowest of the western states.
- Nearly every type of bonding is allowed in the state, including financial tests (which require only that a mine get up and running to prove its financial viability) and the corporate guarantee (self-bonding) mechanism.
- Bond-release statutes in the state return financial assurances too quickly and with little regard for proper reclamation. No inspections are required and no vegetative growth standards have been developed.
- Public participation in the reclamation and bonding process is extremely limited.

CALIFORNIA:

- The concept of separate state and county authority has served to create a confusing and inefficient bonding scheme in California.
- California has no formal relationship with various tribal organizations with respect to mining as it affects tribal lands.
- California's existing exemption for operations of under one acre and less than 1,000 cubic yards essentially allows "hobby" mining operations in the state to be conducted without regard for reclamation and closure issues.
- Acid mine drainage (AMD) considerations are not specifically required in California's Surface Mining and Reclamation Act (SMARA). This has resulted in a general lack of geochemical prediction for acid mine drainage at California mines.
- SMARA allows the amount of the bond to be determined by the company. In practice, California's counties and the Department of Conservation accept the original reclamation and closure cost estimate by the company in most cases (lacking the expertise to question the company's submittal).
- SMARA fails to require adequate review and adjustment of the bond amount so as to reflect any changes in circumstance or interpretation of the statutes.
- The practice of allowing for pledges of revenue or budget set asides allows the operator to finance reclamation and closure costs from the hoped-for revenue stream from the mine.
- California's SMARA does not contain specific provisions for public participation in bonding.

COLORADO:

- The Colorado Mined Land Reclamation Board is a typical example where pro-industry bias in the makeup of the governing body is evident. There is no representative from the environmental community nor is there anyone with specific environmental expertise included on the board.
- The separate administration of the Reclamation Act and Water Quality Control program in Colorado's regulatory scheme has resulted in an apparent gap with respect to water-quality issues. The result of this gap is a lack of ability to provide for environmental protection.

MPC & TCS REPORT: PASSING THE BUCK

- Colorado's Mined Land Reclamation Act lacks comprehensive and specific provisions for recontouring, revegetation, stability, hydrology, acid mine drainage prediction or management, and wildlife-habitat consideration.
- Colorado does not require additional financial assurance for mining operations that employ cyanide leaching or other toxic chemicals, except for detoxification of heap leach pads.
- Colorado's statutes allow for incremental bonding.
- Colorado allows for nearly every possible form of financial assurance, including a corporate financial test, corporate guarantees (self-bonding) and equipment salvage value.
- Only general closure regulations are contained in the act. General regulations are often insufficient to ensure proper closure and acceptable water quality.
- Colorado allows for the partial release of bonds as requirements are performed. No provisions are included that allow the state to modify or extend the surety agreement to fulfill closure/post-closure requirements.
- Colorado's Mined Land Reclamation Act contains limited provisions for public participation in bond permitting, review and release.

IDAHO:

- The administration of the various acts by separate agencies presents a difficult regulatory scheme—one with the potential for a number of shortcomings.
- Despite significant areas of tribal lands in the state, Idaho has no formal relationship with the various tribal organizations with respect to mining issues that affect those lands.
- Idaho's regulatory scheme is the only one in the western U.S. that exempts underground mines from normal reclamation and closure provisions. The exemption leaves a serious gap in Idaho mine regulation. Idaho has several large underground operations with the potential to impact hydrology and water quality.
- Idaho's reclamation scheme fails to adequately address hydrology, water-quality and geochemical acid mine drainage issues. It also fails to consider public-safety, wildlife habitat, and aesthetic considerations. These limitations essentially preclude the ability of the state to require responsible mining practices.
- Although Idaho, under Rules for Ore Processing by Cyanidation, does allow the Board of Health and Welfare to require additional bonding for the use of toxic chemicals, the agency is limited to a bond of \$100,000. The limitation essentially makes the rules ineffective to ensure closure, as costs reach significantly beyond \$100,000.
- Closure requirements are not included in the Surface Mining Act.
- Idaho allows incremental release of bonding as specific aspects of reclamation are performed. Statutes do not address the liability of the operator or surety provider and there are no provisions that allow the state to modify the surety agreement to fulfill requirements.
- Idaho's statutes do not include emergency response or reclamation funds.
- No specific provisions for public participation are provided in the Idaho Surface Mining Act.

MONTANA:

- Despite a large area of tribal lands in the state, and a history of significant issues with tribal entities and mining operations, the state has no formal relationship with the various tribal organizations with respect to issues affecting those lands.
- Montana's existing exemption for operations of less than five acres allows small mining operations to be conducted without adequate regard for reclamation issues.
- The Metal Mines Reclamation Act (MMRA) lacks substance in terms of comprehensive and specific performance standards. The act fails to address key issues and leaves others open to wide interpretation. (The state has developed additional guidelines and policies, but they are not included as specific and enforceable regulations.)
- Montana does not require additional bonding for mining operations that employ cyanide leaching or other toxic chemicals. (Bonding is required for detoxification of heap leach pads.)
- Closure requirements are not specifically addressed in the MMRA. (Montana's Department of Environmental Quality, however, has developed closure policies with respect to the state's water-quality statutes for heap leach detoxification.)
- MMRA allows for the incremental release of bonding as activities are performed. This does not address the liability of the operator or surety provider. Also, no provisions allow the state to modify or extend the surety agreement to fulfill closure/post-closure requirements.

NEVADA:

- Despite a large area of tribal lands in the state, Nevada has no formal relationship with the various tribal organizations with respect to mining and reclamation issues.
- Nevada allows for most forms of financial assurance, including corporate guarantees (self-bonding). As a result of this wide discretion, up to 75 percent of Nevada's financial assurance is represented by non-liquid and essentially unenforceable guarantees.
- Nevada statutes allow for the exemption of operations of five acres or less that do not remove more than 36,500 tons per year of material from bonding requirements.
- Reclamation planning in Nevada fails to adequately address recontouring, hydrology, water quality, acid mine drainage, public safety, wildlife habitat, and aesthetic considerations.
- The limitation on reclamation provided in the state, which states that "reclamation activities must be economically and technologically practicable in achieving a safe and stable conditions suitable for the use of the land," essentially prohibits the state from requiring any measures which the company determines "economically" impractical.
- Nevada does not have the authority to bond for closure requirements on private land. As a result of this lack of authority, many operations locate heap leach and tailings ponds on private land to avoid the requirements and cost-of-closure regulations required on state and federal land.
- No specific provisions for public participation are provided in the Nevada Mined Land Reclamation Act.

NEW MEXICO:

- The New Mexico Mining Act needs to more specifically and substantively address recontouring, stability, water quality, acid mine drainage, public safety, wildlife habitat, and aesthetic considerations.
- Despite a large area of tribal lands in the state, New Mexico has no formal relationship with the various tribal organizations with respect to mining and reclamation issues affecting tribal lands.
- New Mexico exempts operations under two acres and less than 200 cubic yards. This exemption essentially allows “hobby” mining operations to be conducted without regard for reclamation and closure issues.
- New Mexico does not require additional bonding for mining operations that employ cyanide leaching or other toxic chemicals.
- New Mexico is lacking specific and substantive closure and post-closure criteria and standards, as in the recommended regulatory model.

SOUTH DAKOTA:

- The state has no formal relationship with the various tribal organizations with respect to mining and reclamation issues affecting tribal treaty rights areas and tribal lands.
- The South Dakota Mined Land Reclamation Act (MLRA) applies to lands affected by surface mining operations conducted after July 1, 1971, and to lands affected by underground mining operations after July 1, 1980. The Homestake Mine, which has been operating since the 1800’s, is essentially exempt from the act, so reclamation issues there may go unaddressed.
- South Dakota’s MLRA allows for a bond limit of \$2,500 per acre on operations if they are ten acres or less and they remove no more than 25,000 tons of ore or overburden per year. No provisions are made for site-specific features in the consideration of whether the limit should apply. This exemption does not allow adequate regard for reclamation and closure issues.
- The MLRA, which is partially responsible for a lack of proactive treatment of water-quality issues, lacks any provisions to deal with specific acid mine drainage considerations.
- The MLRA allows the amount of the bond to be estimated by the company. The estimate is not specifically required to be based on the lead agencies costs or costs for third party contracting. (The state carefully considers the estimate, but the estimate is based on company costs, not agency costs.)
- The MLRA is not specific with respect to surety forms. The Act infers that the operator might assume financial responsibility with sufficient assets.
- While the MLRA requires that the amount of the bond be revised periodically to reflect any changes in the cost of the state performing reclamation, in practice, bond amounts lag significantly behind actual costs.
- The MLRA does not specifically address the events that might lead to forfeiture of the bond, or a time period in which forfeiture might take place.
- While the MLRA’s bond release provisions address the liability of the operator and surety provider, no provisions allow the state to modify the surety agreement to fulfill requirements.
- While South Dakota does have an established reclamation fund, the fund is inadequate to perform significant reclamation or address issues such as emergency response.
- The MLRA does not contain specific provisions for public participation in bonding.

UTAH:

- The separate administration of the Mining Act and water-quality issues in Utah's regulatory scheme has resulted in an apparent gap. The Department of Environmental Quality program lacks authority to require bonding relevant to water treatment and other water-quality issues.
- Despite a large area of tribal lands in the state, Utah has no formal relationship with the various tribal organizations with respect to mining and reclamation issues affecting those lands.
- Utah's Mined Land Reclamation Act (MLRA) allows for the exemption of operations of five acres or less. Essentially, this exemption allows small mining operations to be conducted without adequate regard for reclamation and closure issues.
- The Bingham Pit, which covers an area of 23,000 acres in the Bingham Canyon copper operations, is excluded from modern reclamation and closure statutes. Although from the standpoint of surface disturbance and water-quality impact the pit is the most significant modern mining feature in the entire country, it remains unbonded.
- The Utah MLRA lacks substance in terms of comprehensive and specific performance standards and other requirements. It also fails to substantively address many key issues relative to the reclamation and closure requirements of most other western states.
- Utah does not require additional bonding for mining operations that employ cyanide leaching or other toxic chemicals, except for detoxification of heap leach pads.
- The Division of Oil, Gas and Mining does not specifically require use of verifiable sources in determining reclamation and closure costs.
- Utah bases the cost of reclamation and closure on the acreage to be disturbed over a five-year period (rather than over the life of the project.) The fact that bonding is allowed on an incremental basis further exacerbates the potential for shortfalls in bond amounts during the life of the project.
- Utah allows most forms of financial assurance, including corporate guarantees (self-bonding). In the event of foreclosure, these guarantees will probably not enable the state to perform reclamation and closure activities without taxpayer funding.
- Monitoring and compliance inspections are not specifically addressed in the Utah MLRA or Minerals Rules. (It has, however, been the practice of the Division of Oil, Gas and Mining to conduct periodic inspections of ongoing operations and to monitor sites for a period of three years after the completion of reclamation.)
- A bond review period is not specifically addressed in the MLRA or Minerals Rules. The bond reviews are typically limited to changes in acreage disturbed and inflationary adjustments.
- Closure requirements are not addressed in the MLRA or Minerals Rules.
- Bond release is not addressed in the MLRA or Minerals Rules.
- Utah's statutes do not include emergency response or reclamation funds.
- No specific provisions for public participation are provided in the MLRA.

WASHINGTON:

- The Washington Surface Mining Act (SMA) allows operations of three acres or less to be exempt from reclamation and bonding requirements. This exemption allows small mining operations to be conducted without regard for reclamation and closure issues. (However, the lack of exemptions under the Metal Mining and Milling Act (MMMA) at least allows the Department of Ecology to recognize the impact of small mines on site-specific bases.)
- Provisions for topsoil, stability, hydrology, water quality and acid mine drainage are not specific enough. Bonding – particularly for acid mine drainage considerations – is inadequately addressed.
- Washington allows an incremental approach to bonding that is inconsistent with the regulatory model. This approach, though based over the project's expected life, is likely to yield insufficient bonding at some period of the project.
- There are no specific provisions for bonding to fund interim operations provided in the SMA or MMMA. (However, the language in both Acts infers that funding for interim operations could be included in the bond amounts.) There are no bond-release provisions that require inspections to approve reclamation activities. Also, no specific performance standards have been developed to measure revegetation efficacy.
- No specific provisions for a reclamation funds are included in the acts.
- Washington's acts do not contain specific provisions for public participation in bonding.

SECTION V.

EVIDENCE OF A PROBLEM: BRIEF CASE STUDIES

The following case studies illustrate the growing environmental impacts and taxpayer liabilities resulting from weak federal and state reclamation bonding laws and regulations.

CASE STUDY: 36 sites (and counting) in Nevada.

The entire state of Nevada is a case study for why the new bonding requirements must not be rolled back. With 36 sites across the state in bankruptcy, Nevada is the black sheep of all mining states when it comes to increasing taxpayer liability for mine cleanup. Of these sites, 29 are on lands administered by the Bureau of Land Management (BLM). According to BLM staff, another handful were operating on National Forest lands in the state, including Rea Gold's Mt. Hamilton project, Alta Gold's Griffin mine, and mines operated by Aurora Partners. Arimetco filed for bankruptcy in January 2000, with four mines underbonded. Arimetco's mine sites in Nevada are now the responsibility of the Nevada Division of Environmental Protection (NDEP) and the BLM.¹⁷

The worst site left abandoned by Arimetco is the MacArthur/Yerington project. The state had to use emergency funds to control polluted water pouring off a portion of the Yerington mine operation where Arimetco was processing the ore on an existing site originally disturbed by ARCO. Original costs for just containing and treating the water pollution were as high as \$70,000 per month.¹⁸ Today, the state is spending around \$30,000 a month, and the company that originally mined the area (ARCO) is covering the costs of keeping the pumps running, estimated to be another \$20,000 to \$25,000 a month. According to BLM officials in Nevada, the cost for cleanup of the Yerington site could be \$60 million to \$100 million,¹⁹ and there are still questions about groundwater contamination at the site that remain unanswered. These concerns could increase the reclamation costs even more. Given the complex history of ownership on this site, it is unclear who will ultimately carry the responsibility for cleanup. Until that is resolved, the state of Nevada is footing the bill through funds generated by a tax on other mining companies operating in Nevada today.

Arimetco's MacArthur project presents its own problems with only \$47,000 in secured assets to complete the reclamation of this site. The dirt moving, fencing and reseeding could cost hundreds of thousands of dollars, according to the BLM; and the four miles of roads would also need to be reclaimed, further adding to the cleanup bill. These funds will have to come from taxpayers because the state allowed the company to "guarantee" clean up, or self-bond, without putting up any assets.

¹⁷ Personal communication with officials of Bureau of Land Management – Nevada state office, September 2000.

¹⁸ Personal communication with David Gaskin, Nevada Bureau of Mining Regulation and Reclamation, April 2000.

¹⁹ Personal communication with officials of Bureau of Land Management – Nevada state office, September 2000.

Arimetco is only one of 10 companies that have recently declared bankruptcy in Nevada, and is not the only one with problem sites. Alta Gold walked away from its responsibilities at 12 mine sites in the state, disturbing almost 1,400 acres. Two of these mines (Kinsley, Olinghouse) have ongoing water pollution problems that require daily management. Today, there are people on-site to keep the pumps working at these mines, but the future management and reclamation of these sites are uncertain. No formal assessments have been completed on the total costs for reclamation of any of these 12 mine sites once operated by Alta Gold. This has created uncertainty about the gap between the funds available for cleanup and the true costs of reclamation.

One BLM official put it bluntly, saying that it has been quite an eye-opening experience to wake up to the fact that companies are here today and gone tomorrow. No federal dollars have been spent on completing reclamation work at any of these mines, but that could change any day, leaving taxpayers squarely on the hook.

Corporate Guarantees

Nevada allows companies to “guarantee” costs of reclamation by using their corporate name, and few assets, to suggest that they can pay the bills for reclamation. These “corporate guarantees” account for as much as 50 percent of the existing costs associated with mine reclamation in Nevada, or \$360 million of the existing reclamation bonding liability in the state.

In an August 30, 2000, letter to the Bureau of Land Management, Nevada Department of Conservation and Natural Resources Administrator Allen Biaggi indicated that corporate guarantees were functionally worthless. According to Biaggi, the state will continue to accept corporate guarantees, but the state will not assume any liability if the reclamation obligations are not met. If the state does not back these guarantees, they no longer have value.

Failing Companies/Failing Sureties

The continued failure of companies to meet their reclamation obligations in Nevada is also straining the surety (bonding) companies that are supposed to have assets available to clean up the mine sites in the event the company fails. All but two of the Alta Gold mine sites are “secured” by Frontier Securities, which holds the surety bonds for these mines. Today, Frontier Securities can no longer do business with the federal government after the U.S. Treasury Department “decertified” Frontier from writing any new federal government bonds.

Taxpayer Liability

In addition to the outstanding liability from “corporate guarantees,” which amounts to at least \$360 million, the State of Nevada often underestimates the cost of reclaiming mines in the state by 20 percent to 100 percent, leaving taxpayers to potentially cover additional costs of \$96 million to \$480 million.²⁰

Therefore, the total unfunded taxpayer liability is \$450 million to \$840 million, and could be greater if more companies walk away from their responsibilities.²¹

²⁰ *Ibid.*

²¹ *Ibid.*

Conclusion

Weaknesses in state and federal reclamation bonding regulations have created the conditions for a major mining liability crisis in Nevada. Yet few steps have been taken to address the fundamental regulatory problems. In fact, public officials in Nevada have held up the state as a model for mining regulation and consistently argued against necessary reforms. According to U.S. Sen. Harry Reid (D-Nev.), speaking at a 1998 Senate subcommittee hearing: “Nevada’s history of reclamation is very good. There is no need for the federal government to supersede state involvement.”²²

Potential Taxpayer Liability
\$450 million to \$840 million.²³

²² S. HRG. 105-668, April 28, 1998, p. 11.

²³ 450 to 850 million dollar figure includes new bankruptcies.

CASE STUDY: Zortman-Landusky Mine, Montana

The now-defunct Zortman-Landusky (Z-L) gold mine in north central Montana could take years to clean up and cost taxpayers millions of dollars. On January 16, 1998, Z-L's owner, Pegasus Gold Inc., declared bankruptcy. As a result, a substantial portion of the necessary cleanup and reclamation costs are likely to be paid by taxpayers. The Z-L mine well illustrates the shortcomings of the old federal bonding regulations.

Z-L was one of the world's first large-scale cyanide heap leach gold mines. The mine was the lowest-grade gold mine in the United States and the largest gold mine in Montana when operations began in 1979.²⁴ However, the Z-L mine has a dubious record that includes numerous environmental violations, disregard for culturally significant sites, potential health problems related to the mine at the immediately adjacent Fort Belknap Reservation, and poor regulatory oversight of mine-plan amendments and expansions.

The Assiniboine and Gros Ventre Tribes of Fort Belknap have a strong cultural and spiritual connection with the Little Rockies, where the mining operation has destroyed or harmed several of the tribes' traditional sacred grounds. Spirit Mountain, for example, which was a mountain peak of cultural significance to the Assiniboine and Gros Ventre people is essentially gone, replaced by a huge open pit. There has been a lack of discretion by regulators to prohibit mining in environmentally, or culturally important and fragile areas. Under the old BLM mining rules, regulators did not have the authority to prohibit or limit the operations in order to protect the cultural resources of the Assiniboine and Gros Ventre tribes. BLM also did not have the ability to protect other environmental, wildlife, and cultural values that may outweigh those of hardrock mining.

The Z-L mine has experienced a litany of cyanide solution leaks and spills, stability failures, acid mine drainage, surface and groundwater contamination, wildlife fatalities, and other problems. Failure of federal regulations and state laws to mandate testing procedures for acid mine drainage led the BLM to conduct only cursory tests, indicating mining would take place in oxide ore. However, it soon became clear that the company was mining in substantial amounts of acid-generating sulfide ores. Today, half of all streams emanating from the mine area have been seriously polluted with acid and heavy metals.²⁵

As a result of two Clean Water Act lawsuits filed by the EPA on behalf of the State of Montana, and by two Fort Belknap tribes against Zortman Mining Company and Pegasus Gold, Inc., a \$37.5 million settlement agreement was reached.²⁶ The settlement, the largest in Montana for violation of the state's water-quality standards, requires the mining company to pay fines to the state, federal, and tribal governments, and to undertake water treatment, improved ground and surface water monitoring, and other environmental remediation work at the mine. Despite the additional resources for environmental remediation required as a result of this legal settlement, weak federal bonding regulations will still result in a multimillion-dollar shortfall in cleanup

²⁴ The Denver Post, *Montana mine had nine cyanide leaks*, November 2, 1993

²⁵ Phone conversation, Montana Water Quality Bureau, September 1999

²⁶ Claire Johnson, *Paying the Price*, The Billings Gazette, 23 July 1996, p.1A.

funds. State regulators estimate that the shortfall is likely to be at least \$8 million.²⁷ However, Native American tribes who live near the mine have commissioned an independent assessment that predicts the shortfall for complete reclamation could be as high as \$90 million.²⁸

The Z-L mine demonstrates the taxpayer liabilities and environmental degradation that result from weak bonding regulations. The old federal regulations did not require a comprehensive and realistic assessment of the potential impacts of this large-scale cyanide heap leach mine, nor did it require a comprehensive and realistic assessment of the potential reclamation costs. Thus, weak and insufficient bonding requirements have left the taxpayer at risk. Bonds are and should be used as a tool that allows regulators to guarantee that the mining company pays for reclamation and cleanup, rather than the taxpayers.

Conclusion

The old, weak BLM mining regulations that President Bush would reinstate led to the problems at Zortman-Landusky. If the new regulations are gutted, taxpayers will not have adequate protection from the recurrence of these problems.

Potential Taxpayer Liability

\$8 million to \$90 million.

²⁷ James Kuipers, P.E. for the Ft. Belknap Tribes, based upon the report, *Alternative Final Reclamation and Closure Plan, Zortman and Landusky Mines, Montana*, Center for Science in Public Participation, January 1999.

²⁸ James Kuipers, P.E. for the Ft. Belknap Tribes, based upon the report, *Alternative Final Reclamation and Closure Plan, Zortman and Landusky Mines, Montana*, Center for Science in Public Participation, January 1999

CASE STUDY: Summitville Gold Mine, Colorado

The abandoned Summitville Gold Mine in Colorado provides an illustration of the dangers posed by inadequate bonding of mining projects. The Summitville Mine began operations in 1986 with a fairly new technology that involved spraying ore with cyanide solution to extract minute amounts of gold.

Almost from the inception of operations, the mine experienced difficulties – the processing facilities began to leak cyanide through a poorly engineered liner system (ineptly placed over frozen ground), and the mining operation worsened a pre-existing acid mine drainage problem caused by historic mining in the area.

In 1992, the company's Canadian owner, Galactic Resources, declared bankruptcy and abandoned the mine property. Despite the glaring risks at this site, state regulators held only \$4.7 million in bonds when the operator abandoned the property. At the request of the state of Colorado, the EPA assumed emergency control of the site to treat the serious cyanide contamination and acid mine drainage.²⁹

Now a national Superfund site, reclamation and treatment at Summitville are costing federal taxpayers approximately \$30,000 per day. The EPA estimates that total cleanup of the site may eventually cost more than \$140 million.³⁰

Conclusion

Overall, Colorado has taken steps to strengthen its bonding regulations. However, even with these changes, current mines in Colorado underestimate the cost of reclamation by 20-50 percent, leaving a potential unfunded liability of \$20 million - \$50 million. Because the state allows for “collateral” to take the place of sound financial guarantees and does not require bonding for long-term water treatment, there may be greater taxpayer liabilities in the future.

Potential Taxpayer Liability

At least \$140 million.

²⁹ Luke Danielson, et al., *The Summitville Story, A Superfund Site it Born*, ELR.

³⁰ U.S. Environmental Protection Agency, *Liquid Assets 2000*, EPA-840-B-00-001, p.10.

CASE STUDY: Gilt Edge Mine, South Dakota

Shortly after Dakota Mining began mining for gold at its Gilt Edge Mine in South Dakota, cyanide leaked into local ground water and surface waters. Problems then developed with acid mine drainage. In May 1998, Brohm Mining Company, and its parent Dakota Mining, attempted to abandon Gilt Edge Mine, and the state of South Dakota was forced to file an emergency temporary restraining order to prevent the company from abandoning the site. The company threatened to walk away from the environmentally troubled operation, abruptly ending water treatment and other operations necessary for the protection of human health and the environment. The state argued that if the company abandoned the site, small collection ponds filled with acid mine drainage would overflow between 48 hours and 72 hours, entering local creeks and harming aquatic life and water quality. State Court Judge Scott Moses granted the state's request, ordering the company to continue water treatment and reclamation at the site. Judge Moses said the company's abandonment of the site would "constitute an environmental emergency under state and federal law."³¹

The Gilt Edge Mine is notorious for its environmental problems, violations, and lack of compliance with pollution permits. It has had cyanide spills and acid mine drainage problems since 1992. Despite all of these problems, in 1996 the Brohm Mining Company received approval for an expansion of mining operations from the state and the U.S. Forest Service.³²

Today, the Gilt Edge mine is a Superfund site. Taxpayers, not the mining industry, will pay to clean up the mine. Brohm Mining is now bankrupt, and the state of South Dakota did not hold enough in cash bonds to fund the cleanup and ongoing treatment at Gilt Edge. Brohm's reclamation bonds will cover only \$6 million of the cleanup costs; EPA now estimates total cleanup costs could exceed \$30 million. And with the potential need for perpetual water treatment, costs could increase substantially.

Conclusion

State and federal regulations were not adequate to prevent the expansion of this troubled mine, and even with its troubled past the mine was not required to post an adequate bond. State and federal regulators should have the authority to reject proposals that will endanger the environment and that could leave taxpayers liable. Further, bonding regulations did not require the company to adequately assess the potential for the generation of acid pollution and the need for long-term water treatment.

Potential Taxpayer Liability

\$4 million and growing.

³¹ Carlos Da Rosa, J.D., *Overburdened*, Mineral Policy Center, 1999, p. 14.

³² Lawrence County Centennial, August 23, 1997.

CASE STUDY: Grouse Creek Mine, Idaho

Originally proclaimed a state-of-the-art mine by then Idaho Governor Cecil Andrus, the now-defunct Grouse Creek Mine located next to the largest wilderness complex in the lower 48 states, the Frank Church-River of No Return Wilderness, is chronically leaking cyanide, threatening endangered salmon and trout habitat. The mine has been plagued with mishaps throughout its short life, from a major landslide in 1994, which buried nearby Jordan Creek, to numerous cyanide leaks and spills. Today, 450 million gallons of cyanide-laced water sit behind the Pinyon Lake Tailings Impoundment. Additionally, there are 4.3 million tons of heavy metals at the bottom of the dam. If exposed to air, the tailings sediment could cause massive acid pollution. This dam is perched above a tributary to the Salmon River.³³

In 2000, according to *The Cascadia Times*, federal officials expressed fears that the situation could become catastrophic, much like the January 2000 cyanide spill in Romania that sent a toxic plume devastating 250 miles of the Danube and its tributaries and causing a massive fish kill. According to Helen Hillman of the National Oceanic and Atmospheric Administration, “If we don’t do something about it (Grouse Creek), it could get worse. The amazing thing was this mine was permitted in the first place. Eventually it would overflow and you would have highly toxic water flowing into the Yankee Fork (of the Salmon River). It would kill everything in the Yankee Fork for miles.”³⁴

Hecla Mining Co., the mine’s owner, has refused to sign a consent agreement providing for cleanup. According to *The Cascadia Times*, “federal officials worry that if they push Hecla too hard, the company may go out of business. It may anyway: Hecla has lost money in each of the last nine years, including a \$38.6 million loss in 1999, and says it may never again become profitable. Hecla carries a \$7 million bond, an amount that probably won’t come close to covering cleanup costs at Grouse Creek.”³⁵

Hecla also has environmental cleanup liabilities at seven other sites in Idaho, including two Superfund sites that federal taxpayers are already paying for. If Hecla walks away from these obligations, the responsibility to pay for them would shift to taxpayers.

According to Mike Medberry of the Idaho Conservation League, “Hecla came crowing into central Idaho a few years ago promising first-rate environmental compliance. It broke that promise.” And now, without adequate bonding for mine cleanup, Hecla can walk away from a their promise leaving in the taxpayers hands a potential environmental nightmare and a cleanup bill to match.³⁶

Conclusion

Weak Forest Service mining regulations allowed this mine to be approved in a location that is unsuitable for a mine of this size and type. Further, it now appears likely that reclamation bonds, should Hecla go bankrupt, would be woefully inadequate, exposing the taxpayer to significant

³³ Paul Koberstein. *Greetings from Cyanide Lake Idaho*, *Cascadia Times*, Vol. 5 No. 1, May-June 2000, p. 8.

³⁴ Paul Koberstein. *Greetings from Cyanide Lake Idaho*, *Cascadia Times*, Vol. 5 No. 1, May-June 2000, p. 8.

³⁵ Paul Koberstein. *Greetings from Cyanide Lake Idaho*, *Cascadia Times*, Vol. 5 No. 1, May-June 2000, p. 9.

³⁶ Paul Koberstein. *Greetings from Cyanide Lake Idaho*, *Cascadia Times*, Vol. 5 No. 1, May-June 2000, p. 11.

liability. As it stands now, due to the small bond amount, federal and state authorities are unable to take appropriate remediation measures, fearing that Hecla will walk. This amounts to environmental blackmail, perpetuated by weak bonding regulations. Yet, federal mining regulations have not been changed to prevent these problems from occurring again.

Potential Taxpayer Liability

Tens of millions of dollars.

SECTION VI.

HOW TO FIX THE BONDING GAP – IMPLEMENT THE CURRENT RULE, DON'T REVOKE IT

With common-sense reforms now in place, the bonding gap can be fixed in a way that protects taxpayers, preserves our environment and natural resources, and rewards responsible mining companies. Closing the bonding gap will require the implementation of the new regulations – so that adequate reclamation bonds are set aside, before mining starts, as ironclad guarantees. And it will require regulators that follow the new regulations when assessing mining companies' mine reclamation plans – so that the plans are based on realistic, rather than best-case, assumptions about a mine's potential impact.

There is a simple concept that should underpin reclamation bonding regulations: **mine cleanup is a cost of doing business.** Those who cannot or will not financially commit to an adequate cleanup should not be allowed to mine. A financial surety for a mining project should provide regulatory authorities with sufficient funding or assets to complete a mine's reclamation and other cleanup obligations in the event the mine owner/operator is for any reason unable or unwilling to discharge its responsibilities.

Effective bonding regulations should create incentives for responsible mine operators and disincentives for irresponsible operators. The prospect of the bond's release should act as an incentive for the operator to finish cleanup by allowing it to recover cash or collateral it has posted.

Properly designed bonding regulations should meet the following criteria to adequately protect the taxpayers from assuming the environmental costs associated with mining projects. Regulators should ensure that the bond amount is properly calculated to cover all reasonable reclamation contingencies, and to ensure that the quality of the assets in the bond are such that the full amount of the bond is readily accessible upon an operator's failure to complete its cleanup obligations.

Financial assurances should cover the full spectrum of reclamation costs. All financial assurances must cover the cost of reclamation and closure, as well as redress any impacts the mining operation causes to wildlife, soil, and water quality. Bonds should also cover the cost of a prudent post-closure monitoring period to ensure that the mine's reclamation has met environmental standards before a bond is released. To accurately compute financial assurance amounts, reclamation and mitigation activities should be clearly spelled out in the mine proposal. In addition, the financial assurance should cover the costs of addressing impacts that stem from the operator's failure to complete reclamation, such as the need for long-term treatment of surface water and ground water, environmental monitoring, site maintenance, administrative costs, and overhead. During mining, assurance levels should be subject to periodic reviews to allow adjustment of assurance amounts upward or downward as cleanup requirements, environmental risks, or economic factors such as inflation, dictate.

Financial assurances must be liquid. All forms of financial assurance should be reasonably liquid, or convertible to cash. Cash is the most liquid asset, but high-grade securities, surety bonds, and irrevocable letters of credit can serve as acceptable forms of assurance. However, assets that are less liquid, particularly the mine's own property, equipment, or self-guarantee, should not be considered adequate assurance since these items may quickly become valueless in the event of an operator default or bankruptcy.

Financial assurances should be readily accessible, dedicated, and only releasable with the specific assent of the regulatory authorities. Financial assurances should be payable to regulators; maintained under their control or in trust for their benefit; and earmarked for reclamation and closure so that regulators can promptly obtain funding to initiate reclamation and remediation. Such financial assurances must be discrete legal instruments or sums of money releasable only with the regulatory authority's specific consent.

For their part, regulators must obtain financial assurance before a mine project is approved; waiting until late in the mining process to obtain substantial assurance is unwise since reduced cash flows at this stage may make it difficult for operators to secure bonding from a surety, bank, or other guarantor.

Financial guarantors must be financially healthy, and any form of risk pooling must be operated on an actuarially sound basis. To ensure that guarantors have the financial capacity to assume an operator's risk of not performing its reclamation obligations, regulators must carefully screen guarantors' financial health before accepting any form of assurance. Any risk-sharing pools should also be operated on an actuarially sound basis. Regulators should require periodic certification of these criteria by independent third parties.

A public notice must precede any release of financial bonds, with opportunity for comment or objection. Since the public runs the risk of bearing the environmental costs not covered by inadequate or prematurely released bonds, the public has an essential role in advising authorities on the setting and releasing of bonds. Therefore, regulators must give the public notice, and an opportunity to comment, both before the setting of a bond amount and prior to any decision on whether to release or roll over a bond post-closure.

Financial assurances should not be regarded as a substitute for a company's legal liability for cleanup, or for application of the strictest regulatory scrutiny and standards to proposed mining plans and operations. Rather, a financial assurance is only intended to provide the public with a buffer against shouldering costs for which the operator should be liable.³⁷

The new regulations address of these issues. The old regulations, to which the Bush Administration wishes to return, did not.

³⁷ Carlos da Rosa, J.D., *Overburdened*, Mineral Policy Center, 1999.

SECTION VII. RESPONSIBLE ACTION TAKEN ... AND OVERTURNED?

Federal Attempts to Strengthen Bonding Regulations

Due to taxpayer outcry over the bonding gap and government concern over growing taxpayer liability for abandoned mine cleanup, the federal government attempted to resolve the problem with updated regulations.

The Department of the Interior's Bureau of Land Management (BLM) is responsible for oversight of hardrock mining on public lands. Although the U.S. Forest Service regulates hardrock mining in national forests, it typically takes regulatory cues from the BLM.

The federal government's authority to regulate the environmental impacts of mining on BLM-managed land is found in the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA, dictates that “[i]n managing the public lands the Secretary [of the Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the [public] lands.”³⁸ Until FLPMA was passed, there were no federal regulations to govern hardrock mining on public lands.

The mining regulations authorized by FLPMA were published in 1980 as 43 CFR 3809 (title 43 in the Code of Federal Regulations, part 3809 – known as the “3809” regulations). Upon issuance, BLM announced its intention to review the adequacy of the regulations periodically, essentially recognizing that the nature of mining was changing and that the regulations would need to be updated and revised. Yet despite growing evidence of a problem, these reviews did not occur.

Many argued that the initial regulations were outdated when published due to the rapidly changing nature of mining. For example, the industry wide adoption of chemical leach technology during the 1980s enabled the modern hardrock mining industry to construct mines on the vast scale mentioned throughout this report. The existing 3809 regulations were not intended to regulate mines thousands of feet deep and miles wide.

Recognizing the ineffectiveness of current regulations, Secretary of the Interior Bruce Babbitt initiated a process in January 1997 to update and revise the 3809 regulations. After nearly four years of drafts, thousands of public comments and dozens of public hearings, an updated final rule was published in November 2000.

The final rule addresses the most significant of problems with the existing bonding regulations. Corporate guarantees are eliminated, reclamation estimates are to be made from the perspective of the regulatory agency seeking to protect the public interest, and provisions for long-term water treatment are required

³⁸ 43 U.S.C. §1732(b)

Bush/Norton/Industry Seek Return to the Old Rules

Many critics of the revised 3809 regulations argued that the states adequately regulate the environmental impacts of hardrock mining on federal land. Therefore the new regulations are burdensome and superfluous, they say.

There are two responses to that argument:

- There is mounting evidence to the contrary. The bonding gap exists. Taxpayer liability for bankrupt mine cleanups is increasing. The evidence in this report discredits arguments that state regulations are adequate. Perhaps the clearest example is the State of Nevada. See section V.
- Federally managed lands are public lands; they are lands owned by all Americans, not just residents from a particular state. The level of environmental protection accorded to public land should not depend on state boundaries. At a minimum, the federal government should set a regulatory floor that that states must meet in order to execute bonding on public lands. It is the federal government that is charged to "prevent unnecessary or undue degradation" on our public lands. Consequently, all Americans are entitled to decide, through the federal government, how their lands are managed. Moreover, federal taxpayers often pay the costs associated with cleanup across the country, not just taxpayers in a few select states.

Undaunted, industry advocates relentlessly attempted to block the strengthening of the 3809 regulations. Every year since 1997, mining industry advocates in the U.S. Senate attached legislative riders to "must-pass" bills that fund the federal government.

All told, there were five riders introduced by industry advocates to block stronger bonding and environmental regulation of hardrock mining on taxpayer-owned public lands.

Ultimately, these riders did not stop the new rules. They were published in the Federal Register on November 21st, 2001, and became effective on January 20th, 2001. Without accounting for industry-sponsored delays, BLM originally estimated the final rule would be effective in March 1999.

On December 15th, the mining industry sued in federal district court to overturn the regulations. Industry also requested a preliminary injunction to prevent the rule from taking effect. Although the larger suit remains to be resolved, industry's petition for a preliminary injunction was rejected: *the judge ruled that it was not in the public interest to block the implementation of the new mining regulations.*

However, on March 23rd, 2001, the Bush administration published a federal register notice proposing that the new regulations be suspended. Bush and Interior Secretary Gale Norton recommend replacing the new rules with the old, discredited rules after a 45-day comment period. In the Federal Register notice, the Bush administration baldly states its disregard for the public interest when weighed against mining industry profits. Clearly disregarding the ruling of the district court, Bush/Norton state: "nevertheless [despite the court ruling], ... BLM believes

that ... the legal, economic, and environmental concerns that the plaintiffs ... raise could prove unnecessarily disruptive and confusing to the mining industry[.]”³⁹

Without any context, the Bush Administration’s action might seem reasonable. Within context, it borders on criminal. With the March 23rd proposal to replace the new rules with the old, Bush/Norton would –

- discard thousands of public comments gathered over four years at dozens of public hearings across the country;
- ignore the demonstrated impacts of the old rules – 20 years of mining disasters costing taxpayers hundreds of millions of dollars;
- claim that the opinion of an administration funded by mining industry campaign contributions is a better judge of the public interest than a U.S District Court judge, the public, and the BLM itself, which argued vociferously in favor of the new rule on January 19th.

The final insult, however, is the reasoning the Bush Administration uses in the Federal Register explaining the proposed mining rule rollback. They justify revoking the current new mining rule as a means of reducing confusion to the industry, confusion caused by “legal, economic, and environmental concerns [raised by] *the plaintiffs*.”⁴⁰ [emphasis added] *The primary plaintiffs are the mining industry, and state governments which support the mining industry.* They are causing their own “confusion.” If they drop their lawsuits, the “confusion” disappears. At present, confusion only exists because it is uncertain as to whether the industry lawsuit against the rules and its lobbying campaign within the Bush administration are going to bear fruit.

³⁹ 66 FR 16164

⁴⁰ *Ibid.*

CONCLUSION.

For too long mining companies have abused weak and outdated mining regulations to transfer cleanup liabilities to the taxpayer. As a result of this abuse, and inaction on the part of many elected officials and regulators, the bonding gap has grown to between \$254 million and \$1.1 billion.

Twenty years after enactment of the original mining regulations that have left taxpayers in this state, a new mining rule promises that the bonding gap will be closed. The new rule comes just in time. Minerals prices are dropping lower and lower, and more and more large-scale mines are nearing the end of their useful life – under the new rule they will have adequate bonds.

Just as help for taxpayers and the environment has arrived, President Bush and Secretary Norton would roll it back. In an arbitrary repudiation of a four-year rulemaking, thousands of public comments, and a federal judge, Bush/Norton propose to replace the new rule with the old one after a 45-day comment period.

Because of the old, weak bonding regulations, many of mining's environmental impacts (those that should be borne by mining companies), are unacceptable long-term taxpayer liabilities. If the new rules are replaced with the old, taxpayers and local communities will continue to underwrite the cleanup and reclamation costs of many hardrock mining operations.

Financial assurances should cover the full spectrum of mining costs. All forms of financial assurances must be liquid. In addition, financial assurances should be readily accessible, dedicated, and releasable with the specific assent of the regulatory authorities – and only upon complete evaluation of an operation's environmental performance.

Financial guarantors must be financially healthy, and any form of risk pooling must be operated on an actuarially sound basis. A public notice must precede release of financial bonds, with opportunity for comment or objection.

In addition, financial assurances should account for the uncertainties in acid mine drainage prediction and the flawed or suspect nature of environmental predictive methods. Bonding can provide communities with a security buffer by guaranteeing resources to redress pollution problems at today's mines. And governments should be aware that deficiencies in mining regulations – such as lax enforcement and monitoring, poor training of regulators and insufficient personnel – and volatility in prices of mineral commodities, compound the environmental and financial risks for the public. Mining companies should also be required to carry insurance, or create trust funds for clean up of potential catastrophic environmental damage.

While mining can play an important role in economic development, that contribution – as well as

public support for the industry – will erode unless financial assurances are in place that protect communities and taxpayers from becoming the unwanted inheritors of the mining industry’s cleanup obligations.

We can either keep effective reclamation bonding requirements in place – those that protect the environment and are fair to taxpayers – or we can revert to the old rules and expect more mining bans and the continued growth of public opposition to mining. Reverting to the old rules will simply fuel outrage and frustration because the old rules promote such blatant abuse of the land and of the taxpayers.

APPENDIX.

BUREAU OF LAND MANAGEMENT: OLD Reclamation and Closure Bonding Provisions (to which the Bush Administration wishes to return)

Reclamation and Bonding Provisions

43 CFR 3809.1 -9 Bonding requirements .

(a) No bond shall be required for operations that constitute casual use (§ 3809.1 - 2) or that are conducted under a notice (§ 3809.1 - 3 of this title).

(b) Any operator who conducts operations under an approved plan of operations as described in § 3809.1 - 5 of this title may, at the discretion of the authorized officer, be required to furnish a bond in an amount specified by the authorized officer. The authorized officer may determine not to require a bond in circumstances where operations would cause only minimal disturbance to the land. In determining the amount of the bond, the authorized officer shall consider the estimated cost of reasonable stabilization and reclamation of areas disturbed. In lieu of the submission of a separate bond, the authorized officer may accept evidence of an existing bond pursuant to State law or regulations for the same area covered by the plan of operations, upon a determination that the coverage would be equivalent to that provided in this section.

(c) In lieu of a bond, the operator may deposit and maintain in a Federal depository account of the United States Treasury, as directed by the authorized officer, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having a market value at the time of deposit of not less than the required dollar amount of the bond.

(d) In place of the individual bond on each separate operation, a blanket bond covering statewide or nationwide operations may be furnished at the option of the operator, if the terms and conditions, as determined by the authorized officer, are sufficient to comply with these regulations.

Bond Review

(e) In the event that an approved plan is modified in accordance with § 3809.1 - 7 of this title, the authorized officer shall review the initial bond for adequacy and, if necessary, adjust the amount of the bond to conform to the plan as modified.

Bond Release

(f) When all or any portion of the reclamation has been completed in accordance with the approved plan, the operator may notify the authorized officer that such reclamation has occurred and that she/he seeks a reduction in bond or Bureau approval of the adequacy of the reclamation, or both. Upon any such notification, the authorized officer shall promptly inspect the reclaimed area with the operator. The authorized officer shall then notify the operator, in writing, whether the reclamation is acceptable. When the authorized officer has accepted as completed any portion of the reclamation, the authorized officer shall authorize that the bond be reduced proportionally to cover the remaining reclamation to be accomplished.

(g) When a mining claim is patented, the authorized officer shall release the operator from that portion of the performance bond that applies to operations within the boundaries of the patented land. The authorized officer shall release the operator from the remainder of the performance bond, including the portion covering approved means of access outside the boundaries of the mining claim, when the operator has completed acceptable reclamation. However, existing access to patented mining claims, if across Federal lands shall continue to be regulated under the approved plan. The provisions of this subsection do not apply to patents issued on mining claims within the boundaries of the California Desert Conservation Area (see § 3809.6 of this title).

Reclamation Requirements

§ 3809.2 Prevention of unnecessary or undue degradation.

§ 3809.2 - 1 Environmental assessment.

(a) When an operator files a plan of operations or a significant modification which encompasses land not previously covered by an approved plan, the authorized officer shall make an environmental assessment or a supplement thereto to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required.

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(b) In conjunction with the operator, the authorized officer shall use the environmental assessment to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of the land. If an operator advises the authorized officer that he/she is unable to prepare mitigating measures, the authorized officer, in conjunction with the operator, shall use the environmental assessment as a basis for assisting the operator in developing such measures.

(c) If, as a result of the environmental assessment, the authorized officer determines that there is substantial public interest in the plan, the authorized officer shall notify the operator, in writing, that an additional period of time, not to exceed the additional 60 days provided for approval of a plan in § 3809.1 - 6 of this title, is required to consider public comments on the environmental assessment.

§ 3809.2 - 2 Other requirements for environmental protection.

All operations, including casual use and operations under either a notice (§ 3809.1 - 3) or a plan of operations (§ 3809.1 - 4 of this title), shall be conducted to prevent unnecessary or undue degradation of the Federal lands and shall comply with all pertinent Federal and State laws, including but not limited to the following:

(a) Air quality. All operators shall comply with applicable Federal and State air quality standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).

(b) Water quality. All operators shall comply with applicable Federal and State water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

(c) Solid wastes. All operators shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

(d) Fisheries, wildlife and plant habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations.

(e) Cultural and paleontological resources.

(1) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.

(2) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

(3) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

(f) Protection of survey monuments. To the extent practicable, all operators shall protect all survey monuments, witness corners, reference monuments, bearing trees and line trees against unnecessary or undue destruction, obliteration or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, obliterated or damaged by such operations, the operator shall immediately report the matter to the authorized officer. The authorized officer shall prescribe, in writing, the requirements for the restoration or reestablishment of monuments, corners, bearing and line trees.

**BUREAU OF LAND MANAGEMENT:
CURRENT Reclamation and Closure Bonding Provisions (which the Bush Administration wishes to revoke)**

**Financial Guarantee Requirements —
General**

§ 3809.500 In general, what are BLM's financial guarantee requirements?

If— Then—

(a) If your operations constitute casual use, then you do not have to provide any financial guarantee.

(b) If you conduct operations under a notice or a plan of operations, then you must provide BLM or the State a financial guarantee that meets the requirements of this subpart before starting operations.
For more information, see §§ 3809.551 through under a 3809.573.

§ 3809.503 When must I provide a financial guarantee for my notice-level operations?

If— Then—

(a) If your notice was on file with BLM on January 20, 2001, then you do not need to provide a financial guarantee unless you modify the notice or extend the notice under § 3809.333.

(b) If your notice was on file with BLM before January 20, 2001 and you choose to modify your notice as required by this subpart on or after that date, then you must provide a financial guarantee before you can begin operations under the modified notice. If you modify your notice, you must post a financial guarantee for the entire notice.

(c) If you file a new notice on or after January 20, 2001, then you must provide a financial guarantee before you can begin operations under the notice.

§ 3809.505 How do the financial guarantee requirements of this subpart apply to my existing plan of operations?

For each plan of operations approved before January 20, 2001, you must post a financial guarantee according to the requirements of this subpart no later than July 19, 2001 at the local BLM office with jurisdiction over the lands involved. You do not need to post a new financial guarantee if your existing financial guarantee satisfies this subpart.

§ 3809.551 What are my choices for providing BLM with a financial guarantee?

You must provide BLM with a financial guarantee using any of the 3 options following :

If— Then—

(a) If you have only one notice or plan of operations, or wish to provide a financial guarantee for a single notice or plan of operations, then you may provide an individual financial guarantee that covers only the cost of reclaiming areas disturbed under the single notice or plan of operations. See §§ 3809.552 through 3809.556 for more information.

(b) If you are currently operating under more than one notice or plan of operations, then you may provide a blanket financial guarantee covering statewide or nationwide operations. See § 3809.560 for more information.

(c) If you do not choose one of the options in paragraphs (a) and (b) of this section, then you may provide evidence of an existing financial guarantee under State law or regulations. See §§ 3809.570 through 3809.573 for more information.

Individual Financial Guarantee

§ 3809.552 What must my individual financial guarantee cover?

(a) If you conduct operations under a notice or a plan of operations and you provide an individual financial guarantee, it must cover the estimated cost as if BLM were to contract with a third party to reclaim your operations according to the reclamation plan, including construction and maintenance costs for any treatment facilities necessary to meet Federal and State environmental standards. The financial guarantee must also cover any interim stabilization and infrastructure maintenance costs needed to maintain the area of operations in compliance with applicable environmental requirements while third-party contracts are developed and executed.

(b) BLM will periodically review the estimated cost of reclamation and the adequacy of any funding mechanism established under paragraph (c) of this section and require increased coverage, if necessary.

(c) When BLM identifies a need for it, you must establish a trust fund or other funding mechanism available to BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long term, post-mining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure, for as long as the treatment and facilities are needed after mine closure. BLM may identify the need for a trust fund or other funding mechanism during plan review or later.

§ 3809.553 May I post a financial guarantee for a part of my operations?

- (a) Yes, BLM may authorize you to provide a financial guarantee covering a part of your operations if—
- (1) Your operations do not go beyond what is specifically covered by the partial financial guarantee; and
 - (2) The partial financial guarantee covers all reclamation costs within the incremental area of operations.
- (b) BLM will review the amount and terms of the financial guarantee for each increment of your operations at least annually.

§ 3809.554 How do I estimate the cost to reclaim my operations?

- (a) You must estimate the cost to reclaim your operations as if BLM were hiring a third-party contractor to perform reclamation of your operations after you have vacated the project area. Your estimate must include BLM's cost to administer the reclamation contract. Contact BLM to obtain this administrative cost information.
- (b) Your estimate of the cost to reclaim your operations must be acceptable to BLM.

§ 3809.555 What forms of individual financial guarantee are acceptable to BLM?

You may use any of the following instruments for an individual financial guarantee, provided that the BLM State Director has determined that it is an acceptable financial instrument within the State where the operations are proposed:

- (a) Surety bonds that meet the requirements of Treasury Department Circular 570, including surety bonds arranged or paid for by third parties;
- (b) Cash in an amount equal to the required dollar amount of the financial guarantee, to be deposited and maintained in a Federal depository account of the U.S. Treasury by BLM;
- (c) Irrevocable letters of credit from a bank or financial institution organized or authorized to transact business in the United States;
- (d) Certificates of deposit or savings accounts not in excess of the maximum insurable amount as set by the Federal Deposit Insurance Corporation; and
- (e) Either of the following instruments having a market value of not less than the required dollar amount of the financial guarantee and maintained in a Securities Investors Protection Corporation insured trust account by a licensed securities brokerage firm for the benefit of the Secretary of the Interior, acting by and through BLM:
- (1) Negotiable United States Government, State and Municipal securities or bonds; or
 - (2) Investment-grade rated securities having a Standard and Poor's rating of AAA or AA or an equivalent rating from a nationally recognized securities rating service.
- (f) Insurance, if its form and function is such that the funding or enforceable pledges of funding are used to guarantee performance of regulatory obligations in the event of default on such obligations by the operator. Insurance must have an A.M. Best rating of "superior" or an equivalent rating from a nationally recognized insurance rating service.

§ 3809.556 What special requirements apply to financial guarantees described in § 3809.555(e)?

- (a) If you choose to use the instruments permitted under § 3809.555(e) in satisfaction of financial guarantee requirements, you must provide BLM, before you begin operations and by the end of each calendar year thereafter, a certified statement describing the nature and market value of the instruments maintained in that account, and including any current statements or reports furnished by the brokerage firm to the operator or mining claimant concerning the asset value of the account.
- (b) You must review the market value of the account instruments by December 31 of each year to ensure that their market value continues to be not less than the required dollar amount of the financial guarantee. When the market value of the account instruments has declined by more than 10 percent of the required dollar amount of the financial guarantee, you must, within 10 calendar days after its annual review or at any time upon the written request of BLM, provide additional instruments, as defined in § 3809.555(e), to the trust account so that the total market value of all account instruments is not less than the required dollar amount of the financial guarantee. You must send a certified statement to BLM within 45 calendar days thereafter describing your actions to raise the market value of its account instruments to the required dollar amount of the financial guarantee. You must include copies of any statements or reports furnished by the brokerage firm to you documenting such an increase.
- (c) If your review under paragraph (b) of this section demonstrates that the total market value of trust account instruments exceeds 110 percent of the required dollar amount of the financial guarantee, you may ask BLM to authorize a written release of that portion of the account that exceeds 110 percent of the required financial guarantee. BLM will approve your request only if you are in compliance with the terms and conditions of your notice or approved plan of operations.

Blanket Financial Guarantee

§ 3809.560 Under what circumstances may I provide a blanket financial guarantee?

(a) If you have more than one notice-or plan-level operation underway, you may provide a blanket financial guarantee covering statewide or nationwide operations instead of individual financial guarantees for each operation.

(b) BLM will accept a blanket financial guarantee if we determine that its terms and conditions are sufficient to comply with the regulations of this subpart.

State-Approved Financial Guarantee

§ 3809.570 Under what circumstances may I provide a State-approved financial guarantee?

When you provide evidence of an existing financial guarantee under State law or regulations that covers your operations, you are not required to provide a separate financial guarantee under this subpart if—

(a) The existing financial guarantee is redeemable by the Secretary, acting by and through BLM;

(b) It is held or approved by a State agency for the same operations covered by your notice(s) or plan(s) of operations;

(c) It provides at least the same amount of financial guarantee as required by this subpart.

§ 3809.571 What forms of State-approved financial guarantee are acceptable to BLM?

You may provide a State-approved financial guarantee in any of the following forms, subject to the conditions in §§ 3809.570 and 3809.574:

(a) The kinds of individual financial guarantees specified under § 3809.555;

(b) Participation in a State bond pool, if—

(1) The State agrees that, upon BLM's request, the State will use part of the pool to meet reclamation obligations on public lands; and

(2) The BLM State Director determines that the State bond pool provides the equivalent level of protection as that required by this subpart; or

(c) A corporate guarantee that existed on January 20, 2001, subject to the restrictions on corporate guarantees in § 3809.574.

§ 3809.572 What happens if BLM rejects a financial instrument in my State-approved financial guarantee?

If BLM rejects a submitted financial instrument in an existing State-approved financial guarantee, BLM will notify you and the State in writing, with a complete explanation of the reasons for the rejection within 30 calendar days of BLM's receipt of the evidence of State-approved financial guarantee. You must provide BLM with a financial guarantee acceptable under this subpart at least equal to the amount of the rejected financial instrument.

§ 3809.573 What happens if the State makes a demand against my financial guarantee?

When the State makes a demand against your financial guarantee, thereby reducing the available balance, you must do both of the following:

(a) Notify BLM within 15 calendar days; and

(b) Replace or augment the financial guarantee within 30 calendar days if the available balance is insufficient to cover the remaining reclamation cost.

§ 3809.574 What happens if I have an existing corporate guarantee?

(a) If you have an existing corporate guarantee on January 20, 2001 that applies to public lands under an approved BLM and State agreement, your corporate guarantee will continue in effect. BLM will not accept any new corporate guarantees or increases to existing corporate guarantees. You may not transfer your existing corporate guarantee to another operator.

(b) If the State revises existing corporate guarantee criteria or requirements that apply to a corporate guarantee existing on January 20, 2001, the BLM State Director will review the revisions to ensure that adequate financial coverage continues. If the BLM State Director determines it is in the public interest to do so, the State Director may terminate a revised corporate guarantee and require an acceptable replacement financial guarantee after due notice and a reasonable time to obtain a replacement.

Modification or Replacement of a Financial Guarantee

§ 3809.580 What happens if I modify my notice or approved plan of operations?

(a) If you modify a notice or an approved plan of operations under § 3809.331 or § 3809.431 respectively, and your estimated reclamation cost increases, you must increase the amount of the financial guarantee to cover any estimated additional cost of reclamation and long-term treatment in compliance with § 3809.552.

(b) If you modify a notice or an approved plan of operations under § 3809.331 or § 3809.431 respectively, and your estimated reclamation cost decreases, you may request BLM decrease the amount of the financial guarantee for your operations.

§ 3809.581 Will BLM accept a replacement financial instrument?

(a) Yes, if you or a new operator have an approved financial guarantee, you may request BLM to accept a replacement financial instrument at any time after the approval of an initial instrument. BLM will review the offered instrument for adequacy and may reject any offered instrument, but will do so by a decision in writing, with a complete explanation of the reasons for the rejection, within 30 calendar days of the offering.

(b) A surety is not released from an obligation that accrued while the surety bond was in effect unless the replacement financial guarantee covers such obligations to BLM's satisfaction.

§ 3809.582 How long must I maintain my financial guarantee?

You must maintain your financial guarantee until you or a new operator replace it with another adequate financial guarantee, subject to BLM's written concurrence, or until BLM releases the requirement to maintain your financial guarantee after you have completed reclamation of your operation according to the requirements of § 3809.320 (for notices), including any measures identified as the result of consultation with BLM under § 3809.313, or § 3809.420 (for plans of operations).

Release of Financial Guarantee

§ 3809.590 When will BLM release or reduce the financial guarantee for my notice or plan of operations?

(a) When you (the mining claimant or operator) have completed all or any portion of the reclamation of your operations in accordance with your notice or approved plan of operations, you may notify BLM that the reclamation has occurred and request a reduction in the financial guarantee or BLM approval of the adequacy of the reclamation, or both.

(b) BLM will then promptly inspect the reclaimed area. We encourage you to accompany the BLM inspector.

(c) For your plan of operations, BLM will either post in the local BLM office or publish notice of final financial guarantee release in a local newspaper of general circulation and accept comments for 30 calendar days. Subsequently, BLM will notify you, in writing, whether you may reduce the financial guarantee under § 3809.591, or the reclamation is acceptable, or both.

§ 3809.591 What are the limitations on the amount by which BLM may reduce my financial guarantee?

(a) This section applies to your financial guarantee, but not to any funding mechanism established under § 3809.552(c) to pay for long-term treatment of effluent or site maintenance. Calculation of bond percentages in paragraphs (b) and (c) of this section does not include any funds held in that kind of funding mechanism.

(b) BLM may release up to 60 percent of your financial guarantee for a portion of your project area when BLM determines that you have successfully completed backfilling; regrading; establishment of drainage control; and stabilization and detoxification of leaching solutions, heaps, tailings, and similar facilities on that portion of the project area.

(c) BLM may release the remainder of your financial guarantee for the same portion of the project area when—

- (1) BLM determines that you have successfully completed reclamation, including revegetating the area disturbed by operations; and
- (2) Any effluent discharged from the area has met applicable effluent limitations and water quality standards for one year without needing additional treatment, or you have established a funding mechanism under § 3809.552(c) to pay for long-term treatment, and any effluent discharged from the area has met applicable effluent limitations and water quality standards water for one year with or without treatment.

§ 3809.592 Does release of my financial guarantee relieve me of all responsibility for my project area?

(a) Release of your financial guarantee under this subpart does not release you (the mining claimant or operator) from responsibility for reclamation of your operations should reclamation fail to meet the standards of this subpart.

(b) Any release of your financial guarantee under this subpart does not release or waive any claim BLM or other persons may have against any person under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. 9601 *et seq.*, or under any other applicable statutes or regulations.

§ 3809.593 What happens to my financial guarantee if I transfer my operations?

You remain responsible for obligations or conditions created while you conducted operations unless a transferee accepts responsibility under § 3809.116, and BLM accepts an adequate replacement financial guarantee. Therefore, your financial guarantee must remain in effect until BLM determines that you are no longer responsible for all or part of the operation. BLM can release your financial guarantee on an incremental basis. The new operator must provide a financial guarantee before BLM will allow the new operator to conduct operations.

§ 3809.594 What happens to my financial guarantee when my mining claim or millsite is patented?

(a) When your mining claim or millsite is patented, BLM will release the portion of the financial guarantee that applies to operations within the boundaries of the patented land. This paragraph does not apply to patents issued on mining claims within the boundaries of the California Desert Conservation Area.

(b) BLM will release the remainder of the financial guarantee, including the portion covering approved access outside the boundaries of the mining claim, when you have completed reclamation to the standards of this subpart.

Forfeiture of Financial Guarantee

§ 3809.595 When may BLM initiate forfeiture of my financial guarantee?

BLM may initiate forfeiture of all or part of your financial guarantee for any project area or portion of a project area if—

(a) You (the operator or mining claimant) refuse or are unable to conduct reclamation as provided in the reclamation measures incorporated into your notice or approved plan of operations or the regulations in this subpart;

(b) You fail to meet the terms of your notice or your approved plan of operations; or

(c) You default on any of the conditions under which you obtained the financial guarantee.

§ 3809.596 How does BLM initiate forfeiture of my financial guarantee?

When BLM decides to require the forfeiture of all or part of your financial guarantee, BLM will notify you (the operator or mining claimant) by certified mail, return receipt requested; the surety on the financial guarantee, if any; and the State agency holding the financial guarantee, if any, informing you and them of the following:

(a) BLM's decision to require the forfeiture of all or part of the financial guarantee;

(b) The reasons for the forfeiture;

(c) The amount that you will forfeit based on the estimated total cost of achieving the reclamation plan requirements for the project area or portion of the project area affected, including BLM's administrative costs; and

(d) How you may avoid forfeiture, including—

(1) Providing a written agreement under which you or another person will perform reclamation operations in accordance with a compliance schedule which meets the conditions of your notice or your approved plan of operations and the reclamation plan, and a demonstration that such other person has the ability to satisfy the conditions; and

(2) Obtaining written permission from BLM for a surety to complete the reclamation, or the portion of the reclamation applicable to the bonded phase or increment, if the surety can demonstrate an ability to complete the reclamation in accordance with the reclamation measures incorporated in your notice or approved plan of operations.

§ 3809.597 What if I do not comply with BLM's forfeiture decision?

If you fail to meet the requirements of BLM's forfeiture decision provided under § 3809.596, and you fail to appeal the forfeiture decision under §§ 3809.800 to 3809.807, or the Interior Board of Land Appeals does not grant a stay under 43 CFR 4.321, or the decision appealed is affirmed, BLM will—

(a) Immediately collect the forfeited amount as provided by applicable laws for the collection of defaulted financial guarantees, other debts, or State bond pools; and

(b) Use funds collected from financial guarantee forfeiture to implement the reclamation plan, or portion thereof, on the area or portion of the area to which financial guarantee coverage applies.

§ 3809.598 What if the amount forfeited will not cover the cost of reclamation?

If the amount forfeited is insufficient to pay for the full cost of reclamation, the operators and mining claimants are jointly and severally liable for the remaining costs. BLM may complete or authorize completion of reclamation of the area covered by the financial guarantee and may recover from responsible persons all costs of reclamation in excess of the amount forfeited.

§ 3809.599 What if the amount forfeited exceeds the cost of reclamation?

If the amount of financial guarantee forfeited is more than the amount necessary to complete reclamation, BLM will return the unused funds within a reasonable amount of time to the party from whom they were collected.

**UNITED STATE FOREST SERVICE:
Current Reclamation and Closure Bonding Provisions**

TITLE 36--PARKS, FORESTS, AND PUBLIC PROPERTY DEPARTMENT OF AGRICULTURE PART 228--MINERALS--
Table of Contents Subpart A --Locatable Minerals

Sec. 228.13 Bonds.

(a) Any operator required to file a plan of operations shall, when required by the authorized officer, furnish a bond conditioned upon compliance with Sec. 228.8(g), prior to approval of such plan of operations. In lieu of a bond, the operator may deposit into a Federal depository, as directed by the Forest Service, and maintain therein, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having market value at the time of deposit of not less than the required dollar amount of the bond. A blanket bond covering nationwide or statewide operations may be furnished if the terms and conditions thereof are sufficient to comply with the regulations in this part.

(b) In determining the amount of the bond, consideration will be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.

(c) In the event that an approved plan of operations is modified in accordance with Sec. 228.4 (d) and (e), the authorized officer will review the initial bond for adequacy and, if necessary, will adjust the bond to conform to the operations plan as modified.

(d) When reclamation has been completed in accordance with Sec. 228.8(g), the authorized officer will notify the operator that performance under the bond has been completed: Provided, however, That when the Forest Service has accepted as completed any portion of the reclamation, the authorized officer shall notify the operator of such acceptance and reduce proportionally the amount of bond thereafter to be required with respect to the remaining reclamation. [39 FR 31317, Aug. 28, 1974; 39 FR 32029, Sept. 4, 1974]