



Show Me the Money:

Environmental Regulation Demands More, Not Less, Financial Assurance

James Boyd

Financial assurance rules require potential polluters to demonstrate they have the resources to correct any environmental damage that may be caused by their operations. A new set of such rules, finalized by the Clinton administration and soon to be implemented by the Bush administration, will toughen the bonding requirements for hardrock mines. The environmental record of firms operating without such requirements underscores the need for this highly valuable environmental compliance tool.

The Bush administration is moving forward with new rules that will strengthen financial assurance requirements for hardrock mines on U.S. lands. The rules—which were championed by and finalized under the Clinton administration—are a long-overdue response to environmental compliance problems in the mining industry. The recent announcement by the Bureau of Land Management (BLM) that it will institute the strengthened bonding rules presents an opportunity to reflect on the substantial benefits of financial assurance, the problems created when assurance is not provided by polluters, and the political forces that can act as a barrier to this form of environmental regulation.

Financial assurance rules, also known as financial responsibility or bonding requirements, require potential polluters to demonstrate they have the financial resources to correct environmental damage caused by their operations. Financial assurance is demanded of a wide variety of commercial operations, including municipal landfills, ships carrying oil or hazardous cargo,

hazardous waste treatment facilities, offshore oil and gas installations, underground gasoline tanks, nuclear disposal and nuclear power facilities, and mines. Firms needing assurance can purchase it in the form of insurance, surety obligations, or letters of credit from a bank, or they can set up trust funds or escrow accounts. Some regulatory programs allow compliance via demonstration of an adequate asset base and high-quality bond rating, or a financial guarantee from a wealthy corporate parent.

A bedrock principle of environmental law and regulation is that pollution costs should be borne by their creators. While often at odds over the details of environmental policy, most economists, environmentalists, and legal experts agree that polluters should pay to correct the environmental damage they cause. Cost internalization—the full payment of compensation for damages and environmental repair by polluters—yields the most equitable means of victim compensation, the alternatives being no compensation or compensation provided by public funds. It also leads to prices that fully

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reflect a product's social costs. Most important of all, cost internalization promotes deterrence by creating incentives to reduce environmental risks before they materialize.

Unfortunately, cost internalization's intended impact is not always achieved in practice. Bankruptcy and corporate dissolution defeat the law's ability to force polluter cost internalization by allowing many firms to abandon environmental responsibilities after reaping short-term financial gains. Nonrecoverable environmental obligations are more than a theoretical possibility. The U.S. landscape is littered with environmentally damaging operations that were either abandoned entirely or left unreclaimed due to bankruptcy.

Consider some illustrative figures: the U.S. Environmental Protection Agency (EPA) estimates there are nearly 190,000 abandoned underground petroleum storage tanks in the United States, each capable of soil and water contamination. A Society of Petroleum Engineers study calculates there are 57,000 abandoned oil and gas wells nationwide, themselves capable of serious ground and surface water contamination. Or consider landfills. A recent inventory by Texas regulators located 4,200 abandoned landfills in that state alone. An EPA Superfund study estimates that the cost of so-called orphan shares—liability costs for site cleanup that cannot be recouped due to a polluter's bankruptcy or absence—will range from \$150 million to \$420 million every year at federal Superfund sites alone. These numbers are just the tip of the iceberg, since they relate only to abandoned obligations. Huge costs also are associated with polluters that do not abandon sites, but rather avoid cost internalization via the bankruptcy process.

Assurance rules address the cost-internalization problem by requiring an up-front guarantee of potential polluters' ability to pay off liabilities or meet future ecological restoration obligations. For that same reason, the financial penalties associated with assurance rules promote compliance with immediate regulatory requirements such as monitoring, control, and reporting standards. Assurance rules also promote environmental monitoring. The insurers, sureties, and banks that provide the financial products used to demonstrate compliance have an incentive to train an extra set of eyes on the financial and environmental risks posed by potential polluters. When compliance and unfulfilled obligations are an issue, stronger assurances could be the answer.

The Mining Industry's Record

Historically, the mining industry has had particular difficulty with

unperformed environmental obligations. The Surface Coal Mining and Reclamation Act (SMCRA) of 1977 was a partial response, though it applies only to coal-mining operations, not to hardrock mining. The act has had a beneficial impact on the reclamation of both previous and current coal-mining operations. This should be viewed in its proper context, however: namely, decades of site abandonment and failed reclamation. In large part, the improvements brought about by SMCRA are due to stronger reclamation bond requirements, which guarantee that a site will be returned to its natural condition upon completion of a mining operation.

During the last two decades, SMCRA's bonding requirements have improved, though not completely solved, the problem of unreclaimed coal-mining sites and their associated environmental problems. A looming issue is the treatment of acid mine drainage (AMD), which contributes to water-quality problems in many states. A recent study placed a minimum estimate of \$1 billion on long-term mine drainage costs, associated primarily with abandoned mines, in the state of Pennsylvania alone. Due to the passage of time and the lack of bonds for this kind of damage, a large percentage of AMD liability will not be recoverable from responsible mine owners and operators.

Perhaps more problematic are unfunded costs created by the hardrock mining industry. EPA estimates that it will cost approximately \$20 billion to clean up mine sites currently on the Superfund National Priorities List. Recent studies identified dozens of large-scale, but bankrupt, western hardrock mines that pose ongoing environmental and financial problems. The poster child is Colorado's Summitville mine, abandoned in 1993, which by itself has an estimated cleanup cost of \$150–180 million. Another candidate for infamy is Montana's Zortman-Landusky mine. One of the first mines to use cyanide for gold extraction, the mine's owners declared bankruptcy in 1998, leaving behind as much as \$100 million in unrecovered environmental costs.

Against this backdrop, former Interior Secretary Bruce Babbitt championed a set of new rules to minimize hardrock mining damage on lands administered by the BLM. The rules have had a tortured history. A set of updated hardrock mining requirements was originally proposed by BLM in 1991. A full six years later, BLM issued the "first" final rules. The rules expanded the universe of operators required to post bonds, raised overall bond levels, required operations to pass a water-quality compliance test, and mandated third-party reclamation cost audits. Based on a challenge from the mining industry, these rules were over-

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turned in U.S. district court in 1998 for failure to comply with the Regulatory Flexibility Act (RFA). Under the RFA, agencies must consider the effect of new rules on small businesses. BLM was found to have conducted an inadequate analysis of small-firm effects and to have understated the rules' likely impact on such firms.

In response, another set of rules was proposed in 1999. These rules were finalized, but not implemented, at the end of Clinton's term. They featured higher bonding requirements and stronger performance standards for mine activities, reclamation, and treatment. The mining industry again challenged the rules on procedural grounds, claiming violations of the RFA, Administrative Procedures Act, and the National Environmental Policy Act because BLM did not appropriately consider the impact on small business. The mining industry sought an injunction to block the rules, which failed, and the rules were finalized in January this year. With the change in administration, and after some delay, BLM has announced its intention to retain the financial responsibility provisions of the Clinton rule. Other parts of the rule remain open for comment at this time.

The new financial responsibility rules will raise bond levels; apply bonds to previously exempted, small operations; and promote the use of more financially sound assurance mechanisms. Large, existing mines will feel much of the rules' impact due to increased mine reclamation and assurance costs. But opposition from small mining firms has been the loudest.

Holding 'Small' Business Responsible

The most common tactic on the part of financial responsibility's opponents is to claim that the rules will significantly harm small business. It may seem churlish to admonish opponents of stronger bonding rules, given that stronger rules are about to be implemented. But opposition to financial responsibility is common whenever financial assurance rules are proposed, implemented, or strengthened. It is also misplaced. Will the new mining regulations affect small business? Yes. Should they? Absolutely. The government can and should reduce the barriers to family-owned enterprises and other small businesses, as long as those businesses do not pose the threat of generating multimillion-dollar damages to the environment. While it sounds almost un-American to proclaim the need for stronger small-business regulation, our environmental history speaks for itself: many small firms create environmental risks out of proportion to their size and leave the public holding the messy bag.

Protection of small-scale enterprises is one thing. Letting small business externalize pollution costs is another.

The history of financial assurance regulation also speaks for itself: assurance does not bankrupt whole industries and it does not mean the end of small business. Opponents of stronger bonding rules claim the rules "threaten a crippling blow" to the mining industry and the communities dependent on it. This mantra has been heard many times before, whenever assurance rules are proposed and implemented. But in all of the industries so far subject to financial assurance regulations, the crippling blow has never materialized.

Private financial markets develop to provide the insurance, bonds, and other financial instruments necessary to demonstrate assurance, and they provide them at reasonable cost. Ten years ago, underground storage tank assurance rules were supposedly going to bankrupt the retail gas industry. Today, you can insure such a tank for \$400 a year—less than it costs to insure a car. Assurance for oil tankers and vessels carrying hazardous substances was supposedly going to result in mass bankruptcy and the withdrawal of maritime insurance coverage for vessels in U.S. waters. Today, dozens of firms compete to provide tanker financial assurance at rates that continue to fall.

Assurance Rules as a Compliance Tool

RFF researchers are exploring the ways in which assurance rules fulfill, or fail to fulfill, their promise. Assurance programs raise a set of design issues, including the level of assurance to be required, the financial mechanisms to be allowed, the conditions under which bonds are released, and the interaction of assurance rules with other areas of law—most importantly, bankruptcy law. As currently implemented under a variety of programs, assurance rules are not perfect. The typical problem with assurance is not that it goes too far, but rather, that it doesn't go far enough. For example, most programs allow wealthy firms to "self-demonstrate" assurance via a variety of book-keeping measures, such as asset demonstrations and good bond ratings. These measures make some sense, but in practice often undermine the goals of assurance. The problem is that accounting measures are difficult for regulators to verify and monitor closely over time. Also, good-looking accounting numbers can deteriorate quickly, leaving a once-healthy firm insolvent and unable to come up with other forms of assurance. There is an almost constant pressure on regulators to relax the criteria by which firms can pass these financial tests. After all, if they pass

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the test, assurance is free. That pressure should be resisted.

Perhaps the strongest motivation for assurance requirements arises from contemplation of the alternatives. Since environmental costs never simply vanish on their own, someone must pay. The question is, who? Having the public pay is highly undesirable since it implies that the polluter has escaped its own costs. Another alternative, one that should strike fear in the hearts of the business community, is that obligations not internalized by polluters can be imposed on their business partners. In some contexts, the law currently extends liability to the business partners of insolvent or absent defendants. This relieves the public burden and promotes compensation, but is inefficient and highly disruptive. First, the extension of liability does not guarantee cost internalization, since there may be no applicable business partners from whom to seek compensation, or if there are, they may themselves be insolvent. Second, extended liability implies significant transaction costs associated with the division of responsibility among jointly liable defendants. Third, the threat

of extended liability can distort business relationships by raising the fear of unwittingly catching an insolvent business partner's liability. Viewed against this alternative, assurance is by far the most transparent, low-cost way to guarantee cost internalization.

In concrete terms, financial responsibility ensures that the expected costs of environmental risks appear on a firm's balance sheets and in its business calculations. Third-party assurance providers are obviously concerned that their capital will be consumed by clients' future liabilities. As a result, firms and their underwriters have a strong incentive to monitor environmental safety and fulfill their restoration obligations. In practice, assurance rules improve cost recovery and are a relatively low-cost means to improve regulatory compliance. History shows that they are both needed and, when applied, not commercially disruptive. The new, improved federal hardrock mining requirements should be welcomed with open arms.

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