

Financial Assurance & Bonding: What Happens When Bankruptcy Hits

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Legal mechanisms and safeguards for financial assurance should not be considered valid until actually tested and proven. As New Mexico decision makers consider the topic, it may be instructive to review the recent experience of another western mining state. Montana's plan for financial assurance before 1998, based on the conventional scientific and economic wisdom of the time and designed to shield Montana taxpayers from liabilities, received its first major test following a corporate bankruptcy, and the plan was found inadequate.

The Montana Department of Environmental Quality's (DEQ) Environmental Management Bureau (EMB) administers the state's Metal Mine Reclamation Act. Under this act, operating permits have been required for metal and stone mining operations in Montana since the state constitution was enacted in 1971. Operators are required to post performance bonds to guarantee reclamation of mine sites; reclamation standards and the language of the law have evolved over time, with the late 2004 version being:

82-4-338 *Performance bond. (1) An applicant for an exploration license or operating permit shall file with the department a bond payable to the state of Montana with surety satisfactory to the department in the sum to be determined by the department . . . In lieu of a bond, the applicant may file with the department a cash deposit, an assignment of a certificate of deposit, an irrevocable letter of credit, or other surety acceptable to the department. The bond may not be less than the estimated cost to the state to ensure compliance with Title 75, chapters 2 [Air Quality] and 5 [Water Quality], this part, the rules, and the permit, including the potential cost of department management, operation, and maintenance of the site upon temporary or permanent operator insolvency or abandonment, until full bond liquidation can be effected.*

Performance bonds are typically submitted as surety policies, letters of credit, certificates of deposit, or cash. Please note that the act does not specifically mention corporate guarantees, and as a matter of policy, the state to date has not accepted any. From time

to time until 1998, it was necessary for the state to forfeit bonds to use for reclamation of mine or exploration sites abandoned by operators, but these projects generally involved financial assurance ranging from a few hundred to a few hundred thousand dollars.

In the mid-1990s Pegasus Gold was a medium-sized gold producer, with mines in Idaho, Nevada, and Montana, and a wide-ranging global exploration program. Pegasus had six mines in Montana, including four heap-leach gold operations at Beal Mountain, Basin Creek, Landusky, and Zortman, where the company had pioneered heap-leach technology in Montana starting in 1979. In 1997 the company suffered a series of financial setbacks from a steadily weakening gold price, diminished cash flow from the Montana operations due to exhaustion of permitted reserves, and, above all, disastrous losses from a new operation in Australia that failed to perform as expected. Pegasus went into Chapter 11 bankruptcy in mid-1997, booked a loss of more than \$500 million for the year, and went into Chapter 7 bankruptcy in January 1998. Over the next few months, the mines that still had positive cash flow were spun off into a new subsidiary, Apollo Gold, and the state of Montana and its federal partners were handed the responsibility for reclaiming the four heap-leach properties. The insurance companies that had provided the bulk of the financial assurance for the properties in the form of surety policies had the option to carry out the work themselves, but declined. Each of the mines had unique problems.

BEAL MOUNTAIN

Beal Mountain was a 1,470-acre property with two open pits and a single 75-acre leach pad containing 15 million tons of rock at an elevation of 7,500 feet. At the time of the bankruptcy, mining operations were complete, but gold recovery was continuing. In 1997 the bond had been reduced from \$11.9 million to \$6.3 million in recognition of partial pit backfill and other reclamation work completed. The approved plan included treatment of the pad solution with hydrogen peroxide to break down residual cyanide, followed by land application of the treated water. After

negotiations with the surety company Safeco in May 1999, DEQ received a lump sum of \$6.3 million as part of a settlement agreement, which stipulated that any unused funds would eventually be returned to Safeco. The money was immediately invested in a state-controlled interest-bearing account. Then, working with a court-appointed bankruptcy trustee and the U.S. Forest Service, DEQ began to implement the approved reclamation plan. It didn't work.

When the first batch of water from the pad was treated with hydrogen peroxide and land applied, all the plants in the test area died. After extensive analysis and greenhouse testing, DEQ learned that the pad water had evolved from a simple cyanide solution into 160 million gallons of water with 1,300 ppm thiocyanate, a potent herbicide resistant to conventional cyanide treatment. Over the next several years, a whole series of unanticipated events and developments followed:

- A \$1 million biotreatment system based on an analogue in British Columbia was ultimately constructed to process the pad water to reduce thiocyanate and nitrate. The system worked reasonably well, but was very temperamental and prone to “crashing.”
- The sensors designed to measure water level in the pad were not calibrated properly. Days after Beal was shut down for one winter to conserve costs, the heap overflowed, creating negative headlines for DEQ and forcing expensive year-round operation.
- The high-altitude, thin-soiled land application area at Beal was not suitable for the high water application rates necessary to empty the heap before it could evolve to a more acidic condition, leading to violations of surface water standards.
- The leach pad solution did continue to evolve geochemically; the thiocyanate level decreased to a trace, while ammonia and nitrate levels increased. The biotreatment plant crashed, and DEQ actually had to buy thiocyanate to jump start the treatment process.
- Mineralized rock in place and in surface dumps was found to contribute unacceptably high levels of selenium to a local stream with a recovering westslope cutthroat trout population.
- An environmental group filed suit against the

U.S. Forest Service and DEQ over the violations and the department's issuance of a discharge permit to itself.

- The suit was rendered moot when the U.S. Forest Service took the site under CERCLA (Superfund) and assumed management responsibility.
- In spite of a synthetic cap and soil cover placed over the heap, the water level in the pad is rebounding, and the treatment plant must be started once again. Miscalculation of draindown has been a common problem.

To date, long-term water treatment issues linger at Beal after the expenditure of more than double the face amount of the bond. Additional funding for the site came from interest on the bond money, gold sales shared by the trustee, millions in supplemental funding from the U.S. Forest Service (USFS), and \$2.5 million in reclamation bonds sold by DEQ under authority granted by the state legislature in 2001.

ZORTMAN/ LANDUSKY

Permits for mining and heap leaching of oxide gold ores on private and Bureau of Land Management (BLM) land at Zortman and Landusky in the Little Rocky Mountains were issued in 1979. As mining continued until 1990 at Zortman and 1996 at Landusky, the pits were deepened into sulfide ores, and acid rock drainage was noted around 1992. A lawsuit over water quality violations led to a consent decree among DEQ, the Environmental Protection Agency, Pegasus Gold, and its sureties before the bankruptcy, requiring the company to buy zero-coupon bonds to create a trust fund to provide for long-term water treatment after 2017.

DEQ had calculated performance bonds for earth-moving work totaling about \$30 million based on the projected condition of the mines at the end of a planned and approved expansion. The price of gold fell, however, and the expansion was canceled as uneconomic. A recalculation shortly after the bankruptcy projected a shortfall of about \$8 million, but the agencies received only an additional \$1.05 million from the bankruptcy court while the corporate officers responsible for the company's problems received \$2 million in “golden parachutes.” Zero-coupon bonds that had been purchased were insufficient to create the full trust fund, but there was no company left, and the sureties took advantage of an error in the consent

decree language to stop any further payments. Full funding of the trust would require an up-front investment now of more than \$11 million, a sum that is simply not available to the state.

The consent decree also provided a yearly payment of \$731,000 from the sureties for water treatment at the site until 2017. A court-appointed site management contractor and bankruptcy trustee burned through the first year's budget in 3–4 months, leading to DEQ's dismissal of the contractor, who in turn filed a lawsuit against the agencies and a successor contractor. Six years of water treatment experience since then have shown the pitfalls of including calculations with line item amounts in agreements. Until the agreement was renegotiated in 2004, the sureties refused to pay more than the line item amount for any category in the calculation, even when other categories were underspent, and the actual yearly costs have ranged from \$750,000–\$950,000. The total projected water treatment shortfall from the end of 2004 until 2017 is about \$7.5 million.

The validity of the approved reclamation plans at the time of the bankruptcy was questioned almost immediately by tribes on the adjacent Fort Belknap Reservation and environmental groups, which ultimately led to a supplemental environmental impact statement paid for by the Environmental Protection Agency. The agencies' record of decision selected alternatives that could be largely paid for with the known funding, rather than the optimal alternatives identified. This led to another lawsuit, which lingers on, even though good engineering, additional funds from the BLM, and favorable bids from contractors have actually allowed the agencies to implement most of the optimal alternatives. In spite of reclamation to date, water quality in a drainage that flows onto the reservation continues to deteriorate. The BLM has taken Zortman/Landusky under their CERCLA authority, but there is yet another lawsuit over water quality issues to be contested.

The dirt work reclamation was largely completed by the end of 2004, but only about \$2 million of the original bonds remained unspent. More than \$6 million in supplemental funding has come from the BLM and state Resource Indemnity Trust grants, but significant projected long-term shortfalls remain, with no solution in sight.

LESSONS LEARNED

Lessons learned by state and federal regulators from six years of hands-on experience directing mine recla-

mation projects include the following:

- Site maintenance and water treatment costs continue in bankruptcy. Laws and financial assurance must be designed and written to allow regulatory agencies immediate access to funds.
- Insurance companies may prefer protracted negotiations or litigation to settlement of multi-million dollar claims.
- If reexamination of an approved reclamation plan after bankruptcy or site abandonment reveals previously unaddressed issues, the public may demand additional environmental analysis, even if there is no responsible party to pay for it.
- Financial assurance should be written to reflect involvement of federal partners.
- Financial assurance should be written to exclude line-item limitations on costs, and agencies should attempt to collect bond amounts as lump sums to be placed in interest-bearing accounts.
- It is extremely difficult in the current economic climate for even financially stable companies to obtain surety bonds. Agencies should be flexible, creative, and reasonably patient as companies try to establish acceptable guarantees for reclamation.
- Indirect costs (administrative overhead, engineering design, inflation, contingencies, etc.) are a much larger part of total reclamation costs than DEQ previously assumed.
- Real-world emergencies will continue to occur under agency management.
- The geochemistry of solutions in leach pads, tailings impoundments, and waste dumps may continue to evolve during reclamation, complicating treatment and increasing costs.
- When bond calculations include a component for long-term water treatment, DEQ runs the calculation out to one hundred years. Projected expenditures beyond one hundred years have little effect on a present-value figure.
- Bankruptcy trustees serve different masters and may sell equipment or facilities needed at the site for reclamation.
- Agencies must be creative when faced with financial assurance shortfalls. Grants or supplemental

funding may be available from federal partners (EPA, BLM, USFS). In 2002 Montana sold \$2.5 million in state general obligation bonds to fund reclamation at Beal Mountain.

CORPORATE GUARANTEES

Two recent corporate histories involving prominent companies in Montana will help illustrate why the state does not wish to hold corporate guarantees for mine reclamation. For years, Montana Power Company (MPC) was a solid, secure, dividend-paying utility company. A few years ago the company divested itself of its traditional assets, including coal-fired and hydroelectric power units, transmission systems for electricity and natural gas, and oil and gas production. The proceeds of the divestitures were all plowed into telecommunications, particularly fiber optic transmission lines. That overbuilt market collapsed. The company went into bankruptcy, and the remaining assets were liquidated for pennies on the dollar. The company that purchased the transmission systems also went into Chapter 11 bankruptcy, although it has recently reorganized and emerged. A corporate guarantee from MPC for anything would have been worthless.

Stillwater Mining operates two platinum group metal mines on the JM reef, a world-class mineral deposit in Montana's Stillwater complex. Although the stock traded in the upper \$40 range only a few years ago, a free-fall drop in palladium prices and huge capital costs drove the stock down below \$2.50 in early 2003. The company was widely believed to be on the verge of bankruptcy, which was averted only by a takeover and infusion of capital by Nor'ilsk Nickel, a major Russian mining company.

Such huge and sudden variations in overall value, especially in corporations perceived as solid, with substantial assets, have convinced Montana regulators of the need to avoid corporate guarantees. Had corporate guarantees been in place from Pegasus Gold, the state of Montana, with a limited industrial base and fewer than a million people, would have faced a total reclamation shortfall on the Pegasus properties alone of more than \$75 million.