Hardrock mining is profoundly destructive

The metals mining industry is the single largest source of toxic waste and one of the most environmentally destructive industries in the country.

Today’s massive mining operations involve blasting, excavating, and crushing many thousands of acres of land and treating the ore with huge quantities of toxic chemicals such as cyanide and sulfuric acid.

The mines that produce our gold, silver, copper, uranium, and other metals pollute adjacent streams, lakes, and groundwater with toxic by-products. In fact, the Environmental Protection Agency estimates 40 percent of the watersheds in the western United States are contaminated from hardrock mines. Toxic spills and acid mine drainage kill aquatic life, poison community drinking water, and pose serious health risks.

Record metal prices coupled with new technologies allow the mining industry to exploit places—at a scale—that would not have been feasible in the past.

For example, the Pebble Partnership is proposing to build North America’s largest copper and gold mine in the remote headwaters of Alaska’s Bristol Bay, the source of the greatest runs of sockeye salmon left on earth.

Adding insult to injury, the American public receives very little in exchange for the use and destruction of the public lands where many hard-rock mines are located. Most mines are owned by foreign corporations and, unlike other extractive industries, hardrock mining does not pay royalties for minerals taken from federal public lands.

What’s more, taxpayers are generally on the hook for the clean-up of abandoned mines. EPA estimates that the half million abandoned mines across the country could cost as much as $50 billion to clean up.

Loopholes in the Clean Water Act allow hardrock mines to poison our waters

While there is not a single solution to the problems posed by hard-rock mining, one obvious step is to prevent mines from dumping their toxic wastes into our lakes, rivers, and wetlands.

Hardrock mines produce millions, sometimes billions, of tons of waste. The production of one gold ring produces 20 tons of mine waste. Mine waste and tailings frequently contain toxic chemicals such as arsenic, cadmium, and lead.

Unfortunately, it has become a common industry practice for mines to use our lakes, streams, and other waters as cheap toxic waste dumps.

In theory, the Clean Water Act (CWA) would prevent...
this. One of the primary goals of the act was to stop the use of the nation’s waters as disposal sites for industrial wastes.

The problem: there are two loopholes in regulations adopted by EPA and the Army Corps of Engineers (Corps) that allow many hardrock and surface coal mines to treat the nearest river valley or lake as a waste dump for massive quantities of tailings and overburden. Mines that have exploited these loopholes have had devastating impacts on local communities, fish, and wildlife populations—effects often felt for decades.

The first loophole: regulations defining “waters,” allow mine developers to designate natural lakes, rivers, streams, and wetlands as “waste treatment systems,” exempt from the CWA.

For example, mine developers may dam a stream and dump their untreated wastes above the dam, rendering miles of the stream toxic and lifeless, based on the legal fiction that the water is no longer water, but a “waste treatment system.” This exemption defeats the very purpose and spirit of the CWA.

The second loophole: a 2002 revision of regulations redefined the term “fill material” under Section 404 of the Clean Water Act.

Section 404 was intended to regulate the placement of rock, soil, clay, sand, and other normally inert materials in water for construction-related activities.

For 25 years, the Corps prohibited using fill material permits to dispose of waste. In 2002, however, EPA and the Corps expanded the definition of “fill material” to include tailings from hard-rock mines and overburden from coal mines.

The effect of this change is that hazardous contaminants from mine waste are now exempt from EPA pollution rules and permitted—with no pollution control treatment at all—under a Corps regulatory scheme intended for relatively innocuous construction fill materials.

We can close the mining loopholes

While discharging wastes directly into wetlands, streams, and lakes may be cheaper for mining companies, it is not the only way of doing business. Mines can treat their waste, dispose of it responsibly, and still operate profitably. Starting in 1975, EPA adopted and maintained a set of regulations called “effluent limitations” that required mines to apply advanced treatment technologies to their waste and meet strict water quality standards, in some cases allowing no discharge of pollutants to water at all. In doing so, EPA studied the industry and determined not only that these limits were feasible, but that most mines were meeting them already. These regulations are still on the books, but the two loopholes have made them largely ineffectual.

The good news for people who care about clean water, community health, and abundant wildlife is that EPA and the Corps can close the loopholes with two simple rule changes. First, the agencies should explicitly limit the waste treatment system exclusion to only manmade waters. This was, in fact, how EPA originally interpreted the regulation back in 1980. And second, EPA and the Corps can revise the 2002 definition of “fill” to once again exclude waste disposal.

The White House, EPA, and the Corps need to hear from you. The current waste disposal practices of hard-rock mines and surface coal mines are an indefensible throwback to a time when polluters could legally poison our waters. It is time to close the mining loopholes.

For More Information

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