Glittering, Ghastly Gold

By: Christina C. Herman

The Chinese and Indian economies are booming, and there has been a concomitant increase in mining around the world, mostly in developing countries. Mining results in severe environmental and health problems, with the overuse and pollution of local water sources being among the most serious consequences of this under-regulated industry.

Large open-pit mining is the method most commonly employed to mine commercially useful minerals or rocks found near the earth's surface. Many mine sites contain several large pits – some a mile across. The rock mined from them is crushed and often mixed with cyanide or other toxic chemicals to extract the desired minerals.

Once the minerals are removed from the ore, the mine waste is mixed with water. This slurry – or tailings - is stored in large containment ponds which should be well lined to prevent leakage. The water eventually evaporates, leaving behind the contaminated soil and rock.

In island countries, mining companies say there is no room for tailings ponds, and they prefer to dump the waste directly into nearby rivers or bays. In countries like Indonesia, Papua New Guinea and the Philippines, for example, where environmental regulation and enforcement are lax, this practice has resulted in massive pollution. River life and aquatic breeding grounds near the coast have been destroyed, and local communities have suffered debilitating health problems. The dumping of tailings in rivers and bays is illegal in the U.S., but many developing country governments opt for the investment and overlook the negative impacts, which occur far from capitol cities and affect primarily the poor.

Buyat Bay in Indonesia is a good example of the problems associated with ocean dumping of tailings. The Minahasa Gold Mine operated for only seven years, yet poured more than 4 million tons of contaminated waste into the local bay, resulting in heavy metal contamination, destruction of fisheries, and serious health problems for the residents. The community brought legal action against Newmont Mining Corporation, the mine operator. While refusing to admit there was a problem, the company agreed to a $30 million settlement.

Even when mine tailings are contained in ponds, disastrous leakage can occur. Toxic tailings have leaked out of and overflowed their containment ponds, wreaking devastation on local rivers and ground water. At two mining sites in Bolivia, where

Oblates are active, Kori Chaka (in Oruro, south of La Paz) and Kori Kollo, (125 miles southeast of La Paz in the Andes Plain), unlined tailings ponds have leaked and those that are lined are feared to be inadequate. The Oblates have been working with local community leaders to press the mining companies concerned to address the consequences of their operations on local populations and the environment. Newmont Mining Corporation holds a majority share in both mines.

Acid mine drainage (AMD) is the other potentially serious threat to water supplies from mining. Once sulfide ores are mined and exposed to air and water, they give off sulfuric acid. When this happens, the acid must be neutralized with chemicals, in perpetuity. **Sulfuric acid production can last as long as ten thousand years.** The Peruvian gold mine, Yanacocha, in operation for only 13 years, has five big pits, all of which are generating acid. The AMD drainage from the Yanacocha will contaminate the entire water supply in this primarily agricultural area.

Unconstrained acid mine drainage damages ecosystems when it finds its way into waterways and groundwater alike. It can further pollute waterways with potentially toxic metals leached from the rock through which the acidic water flows. These can include arsenic, lead, cadmium, mercury, zinc, iron, copper, aluminum, manganese, and chromium. AMD is a time bomb waiting for countries anxiously courting foreign investment through mining. The only solution to this problem is to force companies not to build mines in areas where sulfides are present in the rock.

People in developing countries - especially the poor - lack both information on the negative impacts of mining and the ability to force decent environmental regulation of large mining corporations. Often, local communities are opposed to the mining, but corruption paves the way for their operation.

In Ghana, the recently developed Ahafo mine, also operated by Newmont Mining, has displaced 10,000 poor farmers from a region of Ghana that produces 30% of the country's food. An outstanding question is whether affected farmers will be granted replacement farmlands. The company has dammed the local river for its use, taking water previously used by people to irrigate their cocoa crops, and for which the company pays nothing.

Prior to the vote on this World Bank-funded project, NGOs pushed for an independent analysis of the operation. In response, the US EPA sent a mining expert to Ghana to look at Newmont's testing, and found it seriously lacking. Concerns center on the location of the tailings pond, which threatens the integrity of the surface and ground

water, and whether the mining will generate Acid Mine Drainage. The company claims it wants to do the right thing, but refuses to allow access to its data and does not use peer-reviewed testing. The loan was approved, although the US abstained, and the mine has started operation.

A number of groups are involved in responsible mining campaigns. Oxfam America and Earthworks have launched a "No Dirty Gold" campaign, calling on retailers and manufacturers of gold jewelry, electronics, and other goods to work to ensure that the gold they use was not produced at the expense of local communities, workers, and the environment. Campaigners are calling for the global mining industry to provide retailers and consumers an alternative to dirty gold. As of February, 23 jewelry retailers, including Tiffany's and Walmart, had endorsed the No Dirty Gold campaign's Golden Rules criteria for more responsible mining.

Increasingly, campaigners are putting pressure on companies directly to stop their harmful practices. The Missionary Oblates, through the US JPIC Office, are coordinating with other members of the Interfaith Center for Corporate Responsibility (ICCR) in a campaign involving Newmont Mining and other companies. They are asking the mining companies to change both their template for engaging local communities and to employ better and safer ways of extracting the metals and minerals from the ore and rocks that are mined.

During 2007, ICCR shareholders are meeting with Newmont Mining Corporation to review and critique the company's efforts to respond to a shareholder resolution calling for "free, prior and informed consent", a resolution that received 91.6% of the vote at the April Annual General Meeting. In a four-hour discussion with the company in June, shareholders provided suggestions and feedback on the company's plan of response to the resolution. They are waiting to review the next draft of the plan and hope to meet with the company throughout the process. This report will have to be completed and presented to the shareholders by the next AGM in 2008. It is hoped that insights from this report will lead to significant changes in existing as well as future Newmont sites.

In the long run, given the harmful impacts on people and the earth, there needs to be less mining overall. This will be hard for the industry to swallow, but in the meantime, it is urgent to develop a broad acceptance that certain practices are simply unacceptable.

Interested in more information?
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www.iccr.org;
www.oxfamamerica.org