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From Open Pit to Wedding Band

Where did the gold in your ring come from? Most likely, it came directly from the Earth. Of all the gold in use or storage today, two-thirds is newly mined. About two-thirds of this was extracted from immense, open-pit mines in places as far apart as Canada and Papua New Guinea. Once it's extracted, the mine ore is crushed, piled into heaps, and sprayed with cyanide to separate out the gold. Years later, the abandoned waste piles can still release acid and toxic heavy metals into streams, rivers, and groundwater. This is no small matter: the gold produced for a single .33 ounce, 18 karat gold ring leaves in its wake at least 18 tons (20 short tons) of mine waste.



Most gold isn't used for essential services. While a small amount is bought by investors or used in electronics, more than 80 percent is made into jewelry—a lucrative pursuit. In the United States, a piece of gold typically sells for at least four times the value of gold. Yet few jewelers can tell you where the gold in their products originated. As a result, it's currently impossible to know if the gold we buy comes from a mine that dumps toxic waste in rivers, violates workers' rights, digs up wilderness areas, or evicts communities under the threat of violence.

DID YOU KNOW ...?

- Between 1995 and 2015, approximately half of the gold produced worldwide has or will come from the traditional territories of indigenous peoples, whose land rights are often not clearly recognized. Even when indigenous groups hold legal title to surface lands, some governments sell off the subsurface rights to mining corporations.
- In 2001, the world's top 5 gold producers were South Africa, the United States, Australia, Indonesia, and China.
- Smelting—a process that removes gold's impurities once it's separated from the ore—uses large amounts of energy and releases significant air pollution. The world's smelters add 142 million tons of sulfur dioxide to the atmosphere every year—13 percent of global emissions.
- Metals mining is the number one toxic polluter in the United States, responsible for 96 percent of arsenic emissions and 76 percent of lead emissions.
- * The U.S. Geological Survey reports that water tables have dropped by as much as 300 meters around some large open-pit

- gold mines in Nevada. The Betze-Post mine alone pumps out 380,000 cubic meters (100 million gallons) of groundwater per day.
- * Bingham Canyon, the world's largest open pit mine, is visible from outer space. This Utah mine, which produces copper, gold, silver, and molybdenum, measures 1.5 kilometers (1 mile) deep and 4 kilometers (2.5 miles) across.
- A single gold mine in Papua New Guinea— Ok Tedi—daily generates 200,000 tons of waste per day, more than all of the cities in Japan, Canada, and Australia combined.
- Between 1990 and 1998, more than 30,000 people were displaced by gold mining operations in the district of Tarkwa in Ghana.
- * 120,000 tons of toxic waste spilled from the Baia Mare gold mine in Romania in 2000, contaminating the drinking water of 2.5 million people and killing 1,200 tons of fish.
- In 1996, Pik Botha, then South Africa's Minister for Mineral and Energy Affairs, estimated that in his country, each ton of gold mined costs 1 life and 12 serious injuries.

SUCCESS STORIES

- ❖ In December 2003, Peru's mining ministry blocked a Canadian mining company's proposed open-pit gold mine in Tambogrande. This decision was a major victory for the local farming community, which had voted against the mine in June 2002.
- The International Finance Corporation, the private arm of the World Bank Group, decided in October 2002 not to back the controversial Rosia Montana gold mine project in Romania, which would displace local people and pose a high environmental risk.
- Similarly, Cotacachi county in Ecuador has banned all forms of mining in order to protect its cloudforest and people.
- ❖ The Baia Mare toxic spill in Romania in 2000 prompted both the Czech Senate and the German Parliament to ban gold mining using cyanide leaching methods.
- In 1998, a citizens' initiative in the U.S. state of Montana led to a ban on the use of cyanide leaching for new mines or expansions of existing mines in the state.



SIMPLE THINGS YOU CAN DO:

- ✓ Take the No Dirty Gold consumer pledge (www.nodirtygold.org) to demand an alternative to gold that wasn't produced at the expense of communities, workers, and the environment.
- ✓ Buy recycled or vintage gold. (About one third of the gold in use or storage today comes from scrap or recycled sources.)
- Ask your jeweler to tell you the source of the gold they sell, as a way to encourage them to offer more environmentally sound and socially just alternatives.

CHALLENGE YOUR-SELF AND OTHERS:

If you have investments such as mutual funds or a retirement account, find opportunities for shareholder activism, such as filing a shareholder resolution calling on mining companies to clean up their act. Learn more from the Northwest Corporate Accountability Project (www.scn.org/earth/wum) and the Social Investment Forum's Shareholder Action Network (www.shareholderaction.org).

FOR MORE INFORMATION

- **No Dirty Gold (www.nodirtygold.org)** is a consumer campaign seeking to change the way gold is mined, bought, and sold.
- **Earthworks (www.earthworksaction.org)** is a nonprofit organization dedicated to protecting communities and the environment from the destructive impacts of mining.
- Mines and Communities (www.minesandcommunities.org) provides links to mining activist sites and information about mining companies and affected communities.