



## **No Dirty Gold fact sheet Feb 05, 2009**

### **Quick facts about the U.S. jewelry market:**

- About 80 percent of gold demand in the U.S. is for jewelry.<sup>1</sup> Globally, jewelry accounts for about 68 percent of gold demand.<sup>2</sup>
- Nearly half of all people surveyed by the Jewelry Consumer Opinion Council call jewelry their favorite Valentine's Day gift. 28 percent of shoppers gave a gift of jewelry the previous Valentine's Day.<sup>3</sup>
- US jewelry sales in 2007 totaled \$62 billion.<sup>4</sup>
- Thus far, 50 jewelry retailers have signed on to the No Dirty Gold campaign's "Golden Rules" criteria for more responsible mining and sourcing of metals.
- These retailers represent \$14.2 billion in US jewelry sales (2007), or 23 percent of the US jewelry market, and include 7 of the top 10 retail jewelers in the US.<sup>5</sup>
- The list of retailers includes: Ben Bridge, Cartier, Fred Meyer Jewelers, Fortunoff, Helzberg Diamonds, JCPenney, Piaget, Tiffany & Co., the Signet Group (the parent firm of Kay Jewelers), Wal-Mart and Zale Corp. The full list is available at: [http://www.nodirtygold.org/supporting\\_retailers.cfm](http://www.nodirtygold.org/supporting_retailers.cfm)

### **Quick facts about gold mining:**

- A single gold ring leaves in its wake, on average, [20 tons of mine waste](#).<sup>6</sup>
- Open-pit gold mines obliterate the landscape, opening up vast craters, flattening or even inverting mountaintops, and producing 8 to 10 times more waste than underground mining.<sup>7</sup>
- Gold mining threatens biodiversity. Three-quarters of operating mines and exploration sites in 2003 overlapped with areas of high conservation value. Nearly one-third of all active mines and exploration sites are located within areas of intact ecosystems of high conservation value. Over a quarter of active mines and exploration sites are in or near a strictly protected area.<sup>8</sup>
- Gold mining is toxic. Cyanide is used by mining operations to separate gold from ore at some mines. The average gold mine uses 1,760 tonnes of cyanide per year.<sup>9</sup> A rice grain-sized dose of cyanide can be fatal to humans (1 teaspoon of 2% cyanide); concentrations of less than 1 milligram per liter of water can be fatal to fish.<sup>10</sup> 120,000 tons of toxic waste, including 50-100 tons of cyanide, spilled from the Baia Mare gold mine in Romania in 2000, contaminating the drinking water of 2.5 million people and killing over 1,200 tons of fish.<sup>11</sup>

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- Metals mining is the number one toxic polluter in the United States, responsible for more than a quarter of all reported toxic releases in 2006, including 89% of arsenic releases, 89% of mercury releases, and 88% of lead releases.<sup>12</sup>
- Gold mining can be dangerous for workers. Metals mining represents only 0.4% of the global workforce, but is responsible for approximately 3% of work deaths globally, or about 30 deaths a day.<sup>13</sup>
- Gold mines are enormous. The world's largest open pit, the Bingham Canyon mine in Utah, is visible to astronauts from outer space. It measures 1.5 kilometers (1 mile) deep and 4 kilometers (2.5 miles) across.<sup>14</sup>
- Gold mining uses a lot of water. The average reporting gold mine uses 6,596,833m<sup>3</sup> of water per year, or enough to supply the basic water needs of the population of a large US city for a year. The Lihir gold mine in Papua New Guinea used 175,889,000m<sup>3</sup> of water in one year, or more than twice the volume of water in an average large European dam.<sup>15</sup> Three-quarters of all active mine and exploration sites in 2003 overlapped with areas with limited water supplies.<sup>16</sup>
- Gold mining uses a lot of energy. The average gold mine uses 1,740,827 GJ of energy per year, or about the same amount of electricity generated in the entire country of Mali; the Porgera mine in Papua New Guinea used 8,318,000 GJ of energy in one year, or more energy than the energy from power plants in the entire country of Tanzania.<sup>17</sup> The expanded Olympic Dam copper-uranium-gold mine in Australia will need half of South Australia's current electricity supply to operate.<sup>18</sup>
- Gold mining produces a lot of greenhouse gases. The average gold mine produces 150,000 tonnes of carbon dioxide per year, or more than the power plant emissions of the entire country of Tanzania; Barrick Gold's Goldstrike mine produced 1,275,000 tonnes of carbon dioxide in 2005, or more than the power plant emissions of the entire country of Norway.<sup>19</sup>

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- <sup>4</sup> "Lean and Mean" *National Jeweler* 16 May, 2008.
- <sup>5</sup> State of the Majors 2008. *National Jeweler* 16 May, 2008.
- <sup>6</sup> No Dirty Gold calculation using publicly available data that is reported by mining companies to their shareholders, data published by <[www.infomine.com](http://www.infomine.com)>, US Geological Survey, and US Environmental Protection Agency. 2003. Methodology at: [http://www.nodirtygold.org/pubs/20TonsMemo\\_FINAL.pdf](http://www.nodirtygold.org/pubs/20TonsMemo_FINAL.pdf)
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