for Congress in 2005, the General Accounting Office called for new rules to require mining companies to post adequate surety bonds (a kind of insurance) to cover the costs of remediation if they went out of business.

Pegasus Gold, a Canadian company, declared bankruptcy in 1998 and abruptly shut down its Zortman-Landusky mine in Montana, once the largest gold mine in the United States, sticking the state's taxpayers with a $33 million bill for ongoing water treatment and cleanup. The citizens of Montana subsequently voted to ban cyanide heap-leach mining completely anywhere in the state. After an effort to overturn this initiative failed, Canyon Resources, a company that held the rights to a valuable Montana deposit, said it was looking into other ways to extract gold, including an innovative new technology that used bacteria instead of cyanide.

In 2004, Earthworks, an environmental NGO based in the United States, launched a campaign called "No Dirty Gold," and called on jewelry retailers to support the Golden Rules, agreeing to source only from responsibly operated mines. Many retailers—from Tiffany & Co. and Cartier to Walmart and JCPenney—signed on. Two years later, Earthworks joined with mining companies, retailers, and jewelers in the Madison Dialogue, an ongoing conversation about how best to encourage best environmental practices in their industry. A manager from Cartier, the jewelry retailer, said, "It is our duty to provide our clients with creations that are beautiful, desirable . . . and responsibly made. As times change, so do society's expectations."

Sources: Earthworks and Mining Watch Canada, *Troubled Waters: How Mine Waste Dumping Is Poisoning Our Oceans, Rivers, and Lakes,* February 2012; "The New Gold Standard," *Time,* February 6, 2009; "Dirty Metals: Mining, Communities, and the Environment," a Report by Earthworks and Oxfam America, *www.nodirtygold.org;* "Beyond Gold's Glitter: Torn Lands and Pointed Questions," *The New York Times,* October 24, 2005, pp. A1, A10; "Tangled Strands in Fight over Peru Gold Mine," *The New York Times,* October 25, 2005, pp. A1, A14; "Hardrock Mining: BLM Needs to Better Manage Financial Assurances to Guarantee Reclamation Costs," GAO Report to the Ranking Minority Member, Committee on Homeland Security and Governmental Affairs, U.S. Senate, June 2005; Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking, 2005), ch. 15, "Big Business and the Environment: Different Conditions, Different Outcomes"; Websites of Westerners for Responsible Mining, *www.bettermines.org,* and Alburnus Maior, *www.rosiamontana.org;* and additional articles in the Northwest Mining Association Bulletin, *High Country News,* and *Billings Gazette.* The website of the Madison Dialogue is at *www.madisondialogue.org.*

Discussion Questions

1. Using the classification system presented in the chapter section "Major Areas of Environmental Regulation," explain what type(s) of pollution is (are) generated by gold mining. Which of these do you think is (are) most damaging to the environment, and why?
2. Using the classification system presented in the chapter section "Alternative Policy Approaches," explain what type(s) of government regulation would most effectively address the concerns you identified in question 1.
3. In your view, what role should nongovernmental organizations (NGOs) and citizen movements play in reducing the adverse environmental impacts of gold mining?
4. Which of the gold mining companies mentioned in this case are more—or less—environmentally responsible? What factors, in your view, might cause these differences?