

# California mine to compete with China in rare-earth metals

**Kendall Taggart, California Watch, 5-12-11**

Amid intensifying concern about China's domination of rare-earth metal supplies, a Colorado-based company is preparing its rare-earth mine in California's Mojave Desert for full production by 2013.

The Mountain Pass mine, owned by Molycorp Minerals, will be the only producer of rare earths in the U.S.

Tiny amounts of rare-earth metals are used in many everyday devices, like cell phones and hard drives. The U.S. Department of Defense estimates [PDF] the United States uses about 5 percent of the world's production of rare earths just for defense purposes. They are considered "rare" because while they are relatively abundant, they are seldom concentrated in one, easily exploitable location.

Currently, over 97 percent of rare-earth oxides are supplied by China and some Congress members have expressed concern [PDF] about the lack of a domestic rare earths supply.

When China cut back on its rare-earth exports last fall, many large companies also began questioning the reliability of the Chinese supply. Molycorp Minerals CEO Mark Smith told the Financial Times, "We're being contacted by Fortune 100 companies who are worried about where they're going to get their next pound of lanthanum, where they're going to get their next pound of cerium. What they want to talk to us about is long-term, stable, secure supplies."

Although company officials won't disclose which potential customers have approached them, spokesman Jim Sims said, "The markets that are most intensely interested in securing a non-Chinese supply are the wind turbine industry ... and the hybrid and electric vehicle markets."

Some hybrid car companies are working to develop an electric motor that does not use rare earth metals, as California Watch previously reported.

The California mine used to be the largest producer of rare-earth metals, but eventually could no longer compete with the low-cost rare earths mined in China. There were also permit problems and environmental issues.

Part of the difficulty in finding rare-earth deposits that can be mined profitably is that most ores contain thorium, a radioactive element.

Molycorp Minerals now claims it will be the cleanest, most environmentally progressive facility in the world and, due to its increased efficiency, will be able to produce at half the cost of the Chinese.

The entire facility will cost roughly three-quarters of a billion dollars to complete. The company is currently \$100 million dollars short and is seeking additional funds through private sources and a \$280 million loan from the U.S. Department of Energy.

When the facility is finished, Molycorp Minerals anticipates it will create 300 to 350 jobs.