



Defense news
from a federal
perspective

REPORTING THE LATEST
NEWS FROM CAPITOL
HILL TO THE PENTAGON.

FEDERALTIMES.com

DefenseNews

[Log In](#) | [Register](#) | [Subscribe](#) | [Renew](#)

[Electronic Edition](#) | [RSS Feeds](#)

HOME AIR LAND NAVAL EUROPE AMERICAS ASIA & PACIFIC RIM MIDDLE EAST & AFRICA FEATURES VIDEO HELP

ADVERTISEMENT

GOING SOMEWHERE?

LEARN WHAT RECENT POLICY CHANGES COULD AFFECT YOUR TRIP

FEDERALTIMES.com

GAO: Reviving U.S. Rare Earths Supply a 15-Year Chore

By JOHN T. BENNETT
Published: 14 Apr 2010 15:22

PRINT | EMAIL

Rebuilding a viable U.S.-only supply chain of rare earth minerals could take 15 years, according to a U.S. Government Accountability Office (GAO) report that underscores China's global dominance over production and price of the family of elements used in many high-tech military and commercial systems.

Eventually rebuilding America's rare earths supply chain depends on several issues, GAO found, including securing the large amounts of capital to restore production facilities, developing new technologies and obtaining patents now held by foreign firms.

RELATED TOPICS

[Americas](#)

"The United States has the expertise, but lacks the manufacturing assets and facilities to refine oxides to metals," states the study. "Refined metal is almost exclusively available from China."

The study notes several Defense Department entities are in the early stages of assessing the U.S. military's reliance on rare earths and Chinese sources for them. It adds that some U.S. services and military components are taking steps to pare their dependence and to broaden their supplier base of the rare earths.

Colorado-based Molycorp Minerals is working to raise enough capital to bring its Mountain Pass, Calif., rare earths mining and production facility back online. By the middle of this decade, the company hopes to reach that goal. Industry officials and analysts say this will substantially, but not completely, reduce America's reliance on Chinese rare earths supplies, especially for defense systems.

The auditors found, however, that the Mountain Pass site does not contain certain rare earths that can withstand extremely high temperatures. These rare earths are the ones used in the permanent magnets used in many U.S. defense systems.

That California site is not the lone rare earths deposit in the United States. Other deposits are in Idaho, Montana, Colorado, Missouri, Utah and Wyoming. But even if a firm moved to begin mining those sites, the auditors estimate it would take seven to 15 years to reach full-rate production, the time needed to comply with state and federal regulations.

Nearly all the world's rare earths production is done in China. And 97 percent of the world's supply of rare earths oxides are produced in China.

GAO found China has a "dominant position" that gives it "market power" to set and control prices of rare earths.

Many U.S. minerals industry officials and academics told the auditors that most investors are not interested in even considering doling out the kind of capital needed to set up production facilities for a bona fide alternative to Chinese oxides.

ADVERTISEMENT

BOEING KC-X
NewGen
Tanker

PLAY

Armed Forces Journal Magazine Group

AFJ
ARMED FORCES JOURNAL

Armed Forces Journal is the leading joint service monthly magazine for officers and leaders in the United States military community.

CISR

C4ISR Journal published 10 times per year, is a professional journal dedicated to the rapidly advancing, high-tech realm of military intelligence, surveillance and reconnaissance.

T SJ
Training & Simulation Journal

Training & Simulation Journal, often referred to as TSJ, is a bimonthly journal that provides information on the latest trends in products and opportunities in the global military training and simulation market.

What about building key military and commercial systems with alternative

components? The auditors determined that could be viable in 10 to 15 years, but the researchers warn such alternatives might not perform as well as the family of rare earths.

The Pentagon's industrial affairs shop is conducting a soup-to-nuts study of DoD's reliance on rare earths and possible supply chain weaknesses, a study that is slated for completion in September.

In a statement on Wednesday, the U.S. Magnetic Materials Association said it "believes that urgent and collective action is needed by the federal government in order to head off the impending rare earth crisis.

"It is estimated that Chinese domestic consumption of rare earth materials will outpace Chinese domestic supply between 2012-2015," according to the organization. "With a 3-5 year timeline to re-establish a domestic rare-earth supply-chain, the United States is already in a 'silent crisis.' It is unclear whether rare earth material will be available outside China in the coming years."

All content © 2010, Army Times Publishing Company



[click here
for today's federal news](#)
FEDERALTIMES.com

No one covers the Capitol
like Federal Times.

Services: [Help](#) | [About](#) | [Contact Us](#) | [Site Map](#) | [E-Newsletters](#) | [Current Issue](#) | [Register](#) | [Subscribe](#) | [Renew](#) | [Advertising](#) [User Agreement](#) | [Privacy Policy](#) | [Terms of Service](#)