PROPOSED RULE TO REDUCE MERCURY EMISSIONS FROM GOLD ORE PROCESSING AND PRODUCTION SOURCES

FACT SHEET

ACTION

- On April 15, 2010 the U.S. Environmental Protection Agency (EPA) proposed National Emissions Standards for Hazardous Air Pollutants for gold ore processing and production facilities, the sixth largest source of mercury air emission in the United States.

- The proposed standards would cut mercury emissions from this industry by more than 70 percent from 2007 levels.

- Gold ore processing and production facilities extract gold from mined ore. About 20 gold ore processing facilities in the United States will be subject to the proposed rule.

- Some facilities in Nevada already, including some of the nation's largest gold ore processing facilities, are making significant progress toward the proposed reductions under the Nevada Mercury Air Emissions Control Program, which requires controls at precious metal mining facilities.

- At full implementation, the proposed rule is estimated to reduce mercury emissions to 0.7 tons per year (1,390 pounds), a 73 percent reduction from 2007 levels.

- EPA estimates capital costs of this proposed rule at $6.2 million, with annual costs of $3.8 million a year.

- Mercury is the only air toxic that would be regulated under this proposed rule. Gold processing and production facilities have not been identified as major sources of hazardous air pollutants, also known as air toxics. A "major source" emits 10 or more tons a year of a single air toxic, or 25 or more tons a year of a combination of toxics.

- However, because gold ore processing and production is a significant source of mercury emissions, it falls under a section of the Clean Air Act that requires EPA to establish standards known as maximum achievable control technology (MACT) for sources of seven air toxics known as persistent, bioaccumulative pollutants, including mercury.

- Mercury in the air eventually deposits into water, where it transforms into methylmercury, a highly toxic form that builds up in fish. Americans are primarily exposed to mercury by eating contaminated fish.

- Because methylmercury can damage children's developing brains and nervous systems, even before they are born, women of childbearing age and children are the population of greatest concern.

- EPA will accept comments on this proposed rule for 30 days following publication of the proposed rule in the Federal Register. The Agency will hold a public hearing if requested; requests for a hearing must be made within 10 days after the rule is published. (If a hearing is requested, the comment period will be extended by 15 days.)

WHAT THE PROPOSED RULE WOULD REQUIRE

- The proposed rule would establish mercury emissions limits for three types of processes found at gold production facilities: ore-pretreatment processes (primarily heating processes used to prepare ore for gold extraction); and two other processes known as carbon and non-carbon concentrate processes (both separate gold from ore). The proposed emissions limits are based on the existing emissions level of the best-performing U.S. facilities, which are well controlled for mercury.

- The proposed mercury limits are as follows:

Proposed Emissions Limit	Pre-treatment processes (in pounds per million tons of ore)	Carbon processes (in pounds per ton of concentrate)	Non-carbon concentrate processes (in pounds per ton of concentrate)
Existing sources	149 lb	2.6 lb	0.25 lb
New sources	149 lb	0.14 lb	0.20 lb

- For new carbon processes, we are proposing a compliance alternative of 97 percent control efficiency.

- At full implementation, these limits are estimated to reduce mercury emissions to 0.7 tons per year, a 73 percent reduction from 2007 levels.

- Today's action also proposes several requirements for monitoring. These include requiring each facility to conduct annual mercury emissions tests at all emissions stacks. In addition, EPA is seeking comment on two options for continuous or frequent (weekly) testing at facilities using roasters to pretreat ore.

BACKGROUND

- The Clean Air Act requires EPA to identify and, develop regulations for, the sources of 90 percent of the air emissions of seven pollutants known as persistent, bioaccumulative pollutants. The seven pollutants are: mercury, alkylated lead compounds, polycyclic organic matter (POM), hexachlorobenzene, polychlorinatedbiphenyls (PCBs), 2,3,7,8-tetrachlorodibenzofurans (TCDF) and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).

- EPA identified gold processing and production as one of these sources in 2008.

- The State of Nevada and the gold processing and production industry have made significant progress in reducing mercury emissions in that state, under a combination of voluntary and regulatory programs. Fifteen of the gold ore production and processing facilities in the U.S. are located in Nevada. Emissions have been reduced from about 11.5 tons in 1999 down to about 2.5 tons in 2007. Today's proposed rule would further reduce emissions from those facilities, in addition to limiting emissions from gold ore processing and production facilities in other states.

HOW TO COMMENT

- EPA will accept comment on the proposal for 30 days after publication in the Federal Register. Comments, identified by Docket ID No. EPA-HQ-OAR-2010-0239, may be submitted by one of the following methods:

    - www.regulations.gov: Follow the on-line instructions for submitting comments.
    - E-mail: Comments may be sent by electronic mail (e-mail) to a-and-r-Docket@epa.gov.
    - Fax: Fax your comments to: 202-566-1741.
    - Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 2822T, 1200 Pennsylvania Ave., NW, Washington, DC, 20460.
    - Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, Room 3334, 1301 Constitution Ave., NW, Washington, DC, 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

FOR MORE INFORMATION

- To download a copy the proposed rule, go to EPA's Web site at http://www.epa.gov/ttn/oarpg/new.html

- For more information about the proposed rule for gold ore processing, contact Chuck French of EPA's Office of Air Quality Planning and Standards at (919) 541-7912 or french.chuck@epa.gov.