



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

*Kenny C. Guinn, Governor*

*Allen Biaggi, Director*

*Leo M. Drozdoff, P.E., Administrator*

For Immediate Release:  
March 6, 2006

## PRESS RELEASE

Contact: Dante Pistone  
775.687.9395

### NDEP RECEIVES RESEARCH GRANT TO DEVELOP MERCURY SAMPLING SYSTEM

CARSON CITY— The Nevada Division of Environmental Protection (NDEP) has received approval of a \$364,000 research grant from the U.S. Environmental Protection Agency (EPA) to develop an easily deployable sampling system to detect mercury in the air.

Nevada is home to large areas of naturally occurring mercury, as well as man-made sources, including gold and silver mines and electricity generating plants. The main environmental concern is that mercury emissions could be depositing in lakes and streams, where it can accumulate in the tissues of fish. While bioaccumulation in fish is the primary concern, the health affects in humans who ingest too much fish containing mercury can include neurological damage and danger to pregnant women and their fetuses, as well as young children.

“Currently, there is no easy or inexpensive means of measuring atmospheric mercury,” said Mike Elges, chief of NDEP’s Bureau of Air Pollution Control. “This grant will assist in the development of easily deployable passive samplers that can be distributed over a large area.”

NDEP will partner on the project with the University of Nevada, Reno (UNR) and Frontier Geosciences, Inc. of Seattle, Wash., to implement the necessary laboratory testing, field testing, and testing of the passive samplers through field deployment at two existing national Mercury Deposition Network (MDN) sites in eastern Nevada and one in Reno. The testing will determine whether the research protocols are easily followed, and whether the passive sampling system is effective in measuring atmospheric mercury concentrations downwind of emissions sources. The research will build upon ongoing studies being conducted at the MDN sites.

“Because current sampling technology is so expensive and difficult to deploy, there is little information on the potential for mercury dispersal and deposition locally, regionally and globally once released from geologic and industrial sources,” said Dr. Mae Gustin, associate professor in UNR’s Department of Natural Resources and Environmental Sciences, who helped write the grant proposal. “This has led to a great deal of speculation and concern regarding potential impacts on fish and local communities. This grant will enable us to conduct some sound scientific research so we can calm the speculation and begin to address those concerns that are truly legitimate.”

(more)

Mercury Research  
Add 1-1-1-1

Gustin stressed that much more research needs to be done to identify natural and man-made sources of mercury, how mercury travels through the environment, and what potential impacts it might have on health and the environment.

“Mercury is a growing environmental concern across the country,” NDEP’s Elges added. “If this sampling system proves effective, it could be used in many other locations around the U.S. and could significantly advance our understanding of mercury’s environmental impacts.”

Work on the project is expected to begin this spring and continue until the grant funding expires in October 2007.

For more information on mercury, visit NDEP’s website at <http://ndep.nv.gov/bwm/mercury.htm>, or EPA’s website at <http://www.epa.gov/mercury/>