

Three Nevada Gold Mines Grossly Under-Report Mercury Air Emissions

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Prepared by Great Basin Mine Watch, Idaho Conservation League and Earthworks

The Coeur Rochester, Newmont Lone Tree and Glamis Gold mines in northern Nevada have grossly under-reported their mercury air emissions. Mining companies are required to report their emissions annually to the EPA's Toxic Release Inventory (TRI) so that the public has access to information about the amount of toxic mercury released in and around their communities. According to TRI data, these three gold mines have reported zero, or relatively low, mercury air emissions every year since 1998. Yet, Great Basin Mine Watch, Idaho Conservation League, and Earthworks recently obtained new information from the Nevada Department of Environmental Protection (NDEP), which indicates that these mines have vastly understated their emissions.

Consequently, citizens and regulators do not have accurate information to determine health risks and to effectively regulate these mines. Mercury air emissions are a tremendous public health concern, particularly for children. Exposure to mercury can cause significant neurological and developmental problems such as attention and language deficits, impaired memory and impaired vision and motor function. Mercury in the air falls back to the land and into rivers and lakes, where it can be taken up into the food chain and ultimately the fish people eat.

Scientists have reported high mercury levels in fish and in waterfowl down-wind of northern Nevada's gold mines in southeast Idaho and in Utah. Yet very little monitoring has been done to determine the extent of mercury contamination in fish and waterfowl in Nevada.

GLAMIS GOLD:

According to the EPA's Toxic Release Inventory, Glamis Gold reported zero pounds of mercury air emissions in 2004. Yet, the company submitted information to NDEP in March 2006 disclosing mercury emissions of 171 pounds in 2004.¹ Mining companies are required to report their mercury emissions to the TRI so that the public has access to information about the amount of toxic emissions in and around their community.

We believe that prior years' operations at Glamis Marigold were substantially similar to 2004, and thus each prior year's TRI report substantially understates the actual amount of mercury released to the air as well.

¹Glamis Gold Ltd. response to NDEP "Precious Metals Mining Mercury Air Emissions Questionnaire," March 2006. p. 4.

Glamis Marigold’s reported releases of mercury to the air (in pounds) from Form R

<u>Year</u>	<u>Stack Emissions</u>
2004	0
2003	0
2002	0
2001	0
2000	3.6
1999	Mercury releases not reported
1998	Mercury releases not reported

NEWMONT LONE TREE:

Newmont Lone Tree’s reports of zero or one pound of emissions from stack sources are also suspect and under-report the amount of mercury air emissions. The company stated in its recent response to NDEP’s questionnaire that mercury is released into the air from many of the mine’s major facilities, yet the company claimed that the amount of emissions from those sources were “unknown.”² For example, on page 6, Newmont Lone Tree stated that “mercury is released through process vent-off gas,” but that it had “no data” for 2004 emissions from the autoclave stack. On page 12 they reported, “mercury contained within the carbon is vaporized and emitted with other drum emissions . . . through an exhaust vent,” yet emissions from this stack source were “unknown for 2004.” On page 14, the company stated, “mercury escapes the solution with the steam and is vented to the outside of the refinery.” Yet, once again, the company reports that mercury from this stack source were “unknown” for 2004.

The Emergency Planning and Right to Know Act requires companies to provide a reasonable estimate of mercury emissions from all sources. Yet, Lone Tree has clearly made no effort to report mercury emissions for many of the mine’s facilities, and is very likely to be severely under-stating its mercury air emissions.

Lone Tree’s reported releases of mercury to the air (in pounds) from Form R

<u>Year</u>	<u>Stack Emissions</u>
2004	0
2003	1
2002	1
2001	1
2000	1
1999	0
1998	0

²Newmont Lone Tree response to NDEP Precious Metal Mining Mercury Air Emissions questionnaire, March 2006

COEUR ROCHESTER:

Coeur Rochester's ore is very rich in mercury. Indeed, Coeur Rochester recently reported to the State of Nevada that it produced over 31,000 pounds of byproduct mercury in 2004³, yet it reported only 5 pounds of air emissions to the TRI. In order to achieve this level of efficiency, Coeur Rochester's pollution control devices would have to be capturing mercury at over 99.99% effectiveness, which is effectively impossible with currently available technology. Coeur's operations were not substantially different prior to 2004.

Coeur Rochester's reported releases of mercury air emissions from stack sources according to Form R (in pounds)

<u>Year</u>	<u>Stack Emissions</u>
2004	5
2003	0
2002	0
2001	1
2000	0
1999	0
1998	0

According to data obtained from the Nevada Department of Labor, mercury concentrations in one area of the mine have exceeded occupational health standards, and health tests conducted on mine workers have shown harmful levels of mercury in urine. This evidence strongly suggests that Coeur emitted more mercury pollution than it reported publicly.

Airborne Mercury (provided by DBI-mine safety and training)

Mine	Date	µg Hg/M³	Comments
Coeur Rochester	February 2006	130,170, & 200	Retort area

Urine Mercury (provided by DBI – mine safety and training)

Mine	Date	µg Hg/gm Creatine	Comments
Coeur Rochester	March 2005	106-109	Spot for three employees/retort area
Coeur Rochester	March 2005	60-90	24-hour for three employees/retort area

Conclusion: New information obtained from NDEP indicates that three major mines in northern Nevada have under-reported their mercury air emissions. Considering the significant health risks associated with mercury, it is essential that communities and agencies have accurate emissions information. Yet, government records reveal a number

³Coeur Rochester response to NDEP Precious Metal Mining Mercury Air Emissions questionnaire, March 2006

of significant problems with industry-provided data, including inconsistent emissions data, reports of impossibly low emission rates, and repeated failure to test or report emissions from mine facilities that are likely emission sources. These findings underscore the need for independent testing and reporting, and comprehensive regulatory oversight.