

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL

**Director's Review and Preliminary Determination of Permit Issuance
for**

**Nevada Mercury Control Program
Mercury Operating Permit to Construct**

August 27, 2010

Barrick Goldstrike Mines, Inc. – Goldstrike Mine has submitted an existing unit application for a Phase-2 Mercury Operating Permit to Construct (MOPTC) pursuant to NAC 445B.3633.1 to the Nevada Division of Environmental Protection-Bureau of Air Pollution Control (NDEP-BAPC) for three autoclaves on March 6, 2008.

The applicable facility, located in air shed basin #61, in Eureka County is:

*Barrick Goldstrike Mines, Inc.
P.O. Box 29
Elko, NV 89803*

The NDEP-BAPC has reviewed the application and has made a preliminary determination to issue the MOPTC. The draft MOPTC consists of one autoclave system comprised of three autoclave units, with an emissions performance standard and control technologies determined to be NvMACT pursuant to NAC 445B.3683.2(b).

The draft MOPTC includes requirements for monitoring, recordkeeping, annual stack testing for mercury emissions, annual emissions reporting, annual mercury co-product reporting, limits of operation, and work practice standards, which minimize emissions of mercury to the atmosphere. Other permit contents include a mercury emission limit for the autoclave system.

Final NvMACT mercury emissions performance limit for the autoclave system is: 7.8×10^{-5} gr/dscf mercury. Determination of proposed NvMACT mercury emissions control technology for the system is determined to be: primary venturi scrubbers, secondary venturi scrubber, gas cooling tower, ammonia chilled condenser, humidity control heater, and a deep bed carbon scrubber.

The proposed project will not cause or contribute to a violation of any applicable Federal or State air quality standard. After review of the application and independent NDEP-BAPC analyses, the agency has determined that the Barrick Goldstrike Mines, Inc. MOPTC may be issued and operated. The proposed sources must comply with all State and Federal air quality requirements and all conditions established within the draft MOPTC.

Copies of this permit action's public notice and the draft Mercury Operating Permit to Construct are available for review on the Nevada Division of Environmental Protection - Bureau of Air Quality Planning website at:

<http://ndep.nv.gov/baqp/hg/pub.html>