

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**

October 6, 2011

Round Mountain Gold Corporation (RMGC) has submitted an existing and new 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). The existing units consist of one (1) carbon reactivation kiln, one (1) pregnant tank, two (2) barren tanks, and one (1) electric induction furnace. The new units consist of one (1) carbon reactivation kiln, one (1) pregnant tank, one (1) barren tank, electrowinning cells, one (1) retort, and (1) smelting furnace. The applicable facility, located in hydrographic area, HA 137B, Big Smokey Valley, Northern Part, in Nye County Nevada:

*Round Mountain Gold Corporation
P.O. Box 480
Round Mountain, Nevada 89045*

The NDEP-BAPC has reviewed the application and has made a preliminary determination to issue the MOPTC. The draft MOPTC consists of six systems. The first system, carbon stripping and regeneration, includes (1) carbon reactivation kiln, one (1) pregnant tank, and two (2) barren tanks. The second system, refinery, includes (1) electric induction furnace. The third system, Gold Hill carbon kiln, includes one (1) carbon kiln. The fourth system, Gold Hill carbon stripping, includes one (1) pregnant tank, one (1) barren tank, and electrowinning cells. The fifth system, Gold Hill retort, includes one (1) retort. The sixth system, Gold Hill furnace, includes (1) furnace. All units have 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 each system.

Initial determination of proposed NvMACT mercury emissions performance for the first system consisting of (1) carbon reactivation kiln, one (1) pregnant tank, and two (2) barren tanks, is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the carbon kiln, and pregnant and barren tanks is a wet scrubber and a 5,000 pound sulfur impregnated carbon deep bed scrubber.

Initial determination of proposed NvMACT mercury emissions performance for the second system consisting of (1) electric induction furnace, is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the electric induction furnace is a wet scrubber and a 5,000 pound sulfur impregnated carbon deep bed scrubber.

Initial determination of proposed NvMACT mercury emissions performance for the third system consisting of (1) carbon reactivation kiln, is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the carbon reactivation kiln is a condenser and a 250 pound sulfur impregnated carbon deep bed scrubber.

Initial determination of proposed NvMACT mercury emissions performance for the fourth system consisting of one (1) pregnant tank, one (1) barren tank, and electrowinning cells, is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the pregnant and barren tanks, and the electrowinning cells is a 4,800 pound sulfur impregnated carbon deep bed scrubber.

Initial determination of proposed NvMACT mercury emissions performance for the fifth system consisting of one (1) retort is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the retort is a mercury condenser and a 200 pound sulfur impregnated carbon deep bed scrubber.

Initial determination of proposed NvMACT mercury emissions performance for the sixth system consisting of one (1) smelting furnace is 5×10^{-3} gr/dscf mercury. Final NvMACT mercury emission limits shall be determined based on the emissions control demonstration period. Determination of proposed NvMACT mercury emissions control technology for the retort is a baghouse and a 14,000 pound sulfur impregnated carbon deep bed 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 RMGC 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 Pollution Control website at:

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