



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

November 21, 2008

Notice of Decision

Water Pollution Control Permit
Number NEV0087072

Metallic Ventures (U.S.), Inc.

Esmeralda Project

The Nevada Division of Environmental Protection (Division) has decided to renew Water Pollution Control Permit NEV0087072 to Metallic Ventures (U.S.), Inc. (Permittee). This permit authorizes the construction, operation, and closure of approved mining facilities in Mineral County. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through NAC 445A.447, to assure the Division that the groundwater quality will not be degraded by this operation, and that public safety and health will be protected.

The permit will become effective December 6, 2008. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute (NRS) 445A.605 and NAC 445A.407. All requests for appeals must be filed by 5:00 PM, December 1, 2008, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. For more information, contact Rob Kuczynski, P.E. at (775) 687-9441 or visit the Division's Bureau of Mining Regulation website at www.ndep.nv.gov/bmrr/bmrr01.htm.

One comment letter was received during the public comment period. The letter, dated November 7, 2008 was received electronically from Mr. John Hadder, Staff Scientist, Great Basin Resource Watch (GBRW). Division responses to Mr. Hadder's comments are attached to this Notice of Decision.

NDEP acknowledges the assistance provided by the Permittee in addressing GBRW's concerns.

GBRW Comment #1: "Great Basin Resource Watch is concerned...future groundwater contamination at the Esmerald[a] Mine." ... "Based solely on the available [F]act [S]heet it appears as though this mine has had a problematic past."

NDEP Response: *Comment noted. The Fact Sheet is not intended to be an all-inclusive regulatory history of the Esmeralda Project. As part of their WPCP Renewal submittal, the Permittee, incorporated recent information and monitoring data related to the Esmeralda Mine.*

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All of this information including documentation from previous renewal, modification and engineering design change submittals, correspondence and monitoring reports were made available for public review during the public comment period.

GBRW Comment #2: "According to the [F]act [S]heet (pg. 7) the tailing[s] impoundment continues to seep" ... "[W]hen last sampled, MW-3A [Monitoring Well-3A] water quality met Profile I standards." ... "MW-3A has had past results with Profile I exceedences." ... "MW-2A may also have shown Profile I exceedences" ... "current results are not reflective of the general conditions of the water sampled." ... "[T]hese wells [MW-2A and MW-3A] are critical to evaluating groundwater contamination." ... "[T]he scope of evaluation needs to be over a longer period..." ... "[T]he fact sheet does not indicate that MVI is taking action to determine how the [tailings impoundment] leak is occurring." ... "GBRW sees the toe drains as emergency measures." ... "MVI should be actively perusing activities to evaluate the source of the leak." ... "[T]he continued leak maybe symptomatic of a larger problem." ... "MVI is planning to expand the tailing impoundment (pg. 6)." ... "[T]he permit should include requirement to address the tailings leak ...before any further expansion occurs."

NDEP Response: *The last observed seepage from the tailings impoundment occurred in 2005 and the entire impoundment has been dry since the second quarter of 2007. In October 2003, seeps (approximately 5.0 gallons per minute) were observed from the northwest and south wall of the tailings embankment. A geotechnical assessment was performed on the tailings embankment and it was concluded that the seepage was coming through the embankment in a more permeable layer, approximately 13 to 15 feet below the 1993 crest elevation. At that time it was recommended the embankment design be modified to include an internal drain within the approved tailings raise to intercept the seepage and further prevent the saturation of the downstream portion of the embankment.*

The internal drain is comprised of a toe-drain consisting of rounded cobble surrounded by geotextile and a chimney drain protected by geotextile on the impoundment side. One toe drain was constructed to flow from the north side of the impoundment to the access ramp and the second toe-drain was constructed flow southwesterly to the opposing side of the impoundment to the access ramp. The ditches were graded to drain at slopes of 0.25 to 0.5 percent toward the access ramp, lined with Bentomat and backfilled with round, screened river gravel. The sloping chimney drain consists of crushed gravel on non-woven geotextile was placed on the downstream side of the existing (i.e. 1993) embankment fill, which has been compacted. Seepage from the internal drain (when present) is piped to a new containment facility south of the tailings impoundment. The containment facility consists of an HDPE-lined pond that provides secondary containment for a 35,000 gal the steel storage tank.

As stated in the Fact Sheet, monitoring wells MW-2A and MW-3A are downgradient of the Esmeralda tailings impoundment. Water quality for MW-2A meets Profile I standards, with the exception of iron, which shows a slight exceedence of the 0.6 mg/L standard. MW-3A has been dry since December 2003 and when last sampled, MW-3A water quality met the Profile I standards.

Schedule of Compliance (SOC) item I.B.2 in WPCP NEV0087072 states that before any commencement of operations and the re-introduction of process solution into the Esmeralda Project process facility and tailings impoundment, the Permittee "shall secure the services of a third-party consulting engineer with expertise in the design, construction, operation and closure

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of mining related process components, and the associated solution conveyance, storage, containment and monitoring devices, for the purpose of performing an evaluation of the integrity and adequacy of the existing fluid management and monitoring system at the Esmeralda Project site."

In addition, upon completion of the evaluation, the Permittee "shall provide to the Division the consulting engineer's P.E. stamped detailed report and assessment of the fluid management system and monitoring network conditions and recommendations for repair, replacement or closure/abandonment. If the evaluation concludes that the specific components are in need of repair, the Permittee shall complete the repairs prior to submitting the notification to initiate start-up, pursuant to SOC item I.B.4, to the Division. If the evaluation determines that specific components have deteriorated to a level where they can not be repaired or their integrity remains in question, the Permittee shall submit, within thirty (30) days, to the Division for approval, an Engineering Design Change (EDC) and schedule for complete replacement and/or permanent closure/abandonment of the respective components, containment and monitoring devices."

In summary, the consulting engineer's report will dictate what future improvements and changes to the fluid management system and monitoring network will be necessary prior to the commencement of operations.

GBRW Comment #3: " [GBRW] is concerned about...quality of the pit lake water." ... "[A]s late as July 2008 there have been occasional exceedences [of the Profile I standards]." ... "One question we have...is the evaluation of the extent of pit lake water infiltrating into the surrounding groundwater" .

NDEP Response: *Schedule of Compliance (SOC) item I.B.6 in WPCP NEV0087072 states that with each subsequent application for renewal of WPCP NEV0087072 or any operational change that could affect the pit lake predictive model and water quality, the Permittee shall re-evaluate the model and provide modeling results demonstrating no change or change in the predicted model results. Any update or modification shall include, but not be limited to 1) all new data developed during the period elapsed since the date of the previous submittal; 2) an update of the most likely scenario or alternative; and 3) as applicable, revised conclusions and recommendations based on current NAC(s) and best engineering and scientific principles and practices.*

GBRW Comment #4: "GBRW recommends that MVI do more extensive than static testing of the waste rock [used as backfill] to assure that the [Humboldt Pit Lake] water [quality] does not degrade further."

NDEP Response: *Only non-PAG waste rock is permitted for placement as backfill in any pit or to be used as a construction/road building material. Quarterly sampling of waste rock for MWMP, Profile I and ANP/AGP is consistent with other facilities permitted under the Division's regulatory program. Pursuant to WPCP NEV0087072, Part I.D.4, Footnote (4), when static testing characterization of waste rock shows the potential for acid generation as set forth in the Division's guidance document "Waste Rock and Overburden Evaluation" (dated September 14, 1990), the Permittee shall notify the Division in writing and initiate kinetic testing within ten (10) days.*

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If the kinetic test results indicate acid generation conditions exist, the Permittee shall submit in writing, within thirty (30) days, the methods proposed for providing containment of these materials and the anticipated impact this acid generation potential may have on final stabilization of all components affected as defined in NAC 445A.359.

GBRW Comment #5: “[P]resence of WAD cyanide in...MW-4 well is also disturbing....source of the cyanide is...the closed heap leach facility (pg. 10).” ... “It is not clear...how cyanide...found its way into the groundwater below the pit.”

NDEP Response: *The presence of WAD cyanide is attributed to the now closed heap leach facility last operated by the Aurora Partnership during the early 1990’s, predating the Permittee’s operation of the Esmeralda Facility. WAD cyanide concentrations for MW-4 range between 0.03 and 0.09 mg/L and continue to meet the 0.20 mg/L Profile I standard.*

GBRW Comment #6: “[B]ased solely on the available factsheet and draft permit, GBRW questions whether this permit should go forward given the existing conditions at the site.”

NDEP Response: Comment noted. Refer to the Division’s response to GBRW Comment #1.