

NOTICE OF DECISION - Bureau of Mining Regulation and Reclamation

Web Posting: 09/28/2016

Deadline for Appeal: 10/08/2016

WPC Permit No. NEV0087011

Rain Project

Newmont USA Limited dba Newmont Mining Corporation

The Administrator of the Nevada Division of Environmental Protection (the Division) has decided to renew Water Pollution Control Permit NEV0087011 to Newmont USA Limited dba Newmont Mining Corporation. This Permit authorizes the closure of approved mining facilities in Elko County, Nevada. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through 445A.447, to assure that the waters of the State will not be degraded by this operation, and that public safety and health will be protected.

The Permit will become effective 13 October 2016. 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, 8 October 2016, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. For more information, contact Karl W. McCrea at (775) 687-9407 or visit the Bureau of Mining Regulation and Reclamation website at <http://ndep.nv.gov/bmrr/index.htm>.

Written comments were received during the public comment period from Mr. John Hadder, Great Basin Resource Watch (GBRW) of Reno, Nevada. The text of all comments, in some cases excerpted, and the Division responses (in *italics*) are included below as part of this Notice of Decision.

GBRW, Written Comment 1: The Acid Rock Drainage (ARD) from the North Waste Rock Dump (NWRD) has been occurring for over 20 years, and has not shown any signs of abatement as by the graph below.... The graph does indicate a rough correlation to annual precipitation despite some increases in the amount of cover material. In addition, data on the chemical composition of the ARD shows that the average toxicity (pH, TDS, sulfate, metals) has also remained consistent....

Division Response 1: *Comment noted.*

GBRW, Written Comment 2: According to the 2012 final closure plan Newmont is pursuing the following option, called Project D: "Construct Stage 1 of an active water treatment plant (high-density sludge system) with no cover improvements and utilize the effluent as process makeup water in Emigrant's heap leach circuit. Construct Stage 2 (final) WTP prior to terminating effluent usage at Emigrant." This option appears to make no serious attempt to decrease the flow of ARD, and in fact it is stated, "For Project D and the recommended partial improvements to the cover, flow rates will generally not change from current rates.... It appears as though Newmont plans to close the site with an ARD treatment plant to remain indefinitely as there does not seem to be any mention of how long this plant is to operate. GBRW concludes that the preferred closure plan calls for treatment in perpetuity of the ARD, and this is not acceptable.

Division Response 2: *Although Newmont currently proposes to pursue Project D, there are several other options being considered by the Division and Newmont. For more details regarding these options, please refer to the 28 August 2014 Newmont document entitled "Closure Alternatives Summary." In addition, the renewed Permit has been revised to require the submittal by 31 December 2018 of a Final Plan for Permanent Closure (FPPC) with implementation timeframes for the NWRD including an initial test phase of an effort to eliminate the generation of ARD. Each of these FPPCs will be reviewed based on their technical merits.*

GBRW, Written Comment 3: GBRW would like to see NDEP move Newmont away from a treatment in perpetuity plan. The 2012 closure report also states that there is no feasible way to significantly reduce flows from the NWRD. GBRW assumes this to mean that it is too expensive and not cost effective. Has NDEP discussed a reconfiguration of the waste rock dump to isolate the PAG material. [sic] Indeed this would be a costly undertaking, but GBRW sees this as an important bracketing analysis. The public needs to know what would this cost and be able to evaluate whether it is worthwhile or not, or if a hybrid plan is possible to reconfigure a portion of the NWRD.

Division Response 3: *During a 12 September 2016 meeting between Newmont, GBRW, and the Division, Newmont stated that studies of the flow rate and water quality of the ARD from the various seepage collection pipes at the NWRD indicate that the potentially acid generating (PAG) material is evenly distributed with the NWRD. Therefore, reconfiguring the waste rock dump to isolate the PAG material does not appear technically feasible. However, please refer to Division Response 2 above regarding the Permit requirement for an effort to eliminate the generation of ARD by the NWRD.*

GBRW, Written Comment 4: In addition, the bond for Rain should be reviewed to cover the very long-term treatment, the possibility of perpetuity treatment, or the need for reconfiguration of the NWRD.

Division Response 4: *Comment noted.*

GBRW, Written Comment 5: Heap Leach Pad (HLP).... GBRW notes that there still remains significant uncertainty in the behavior of the HLP drainage and chemical process in the HLP. We recommend that the Rain bond be reviewed considering the possibility of very long-term treatment of HLP drainage given existing uncertainties.

Division Response 5: *Comment noted. However, the Division-approved conceptual closure plan for the HLP consists of placement of a geomembrane cover to reduce infiltration to approximately 1 gallon per minute (gpm) annually, allowing for passive treatment in an evaporation cell. Therefore, all solution, regardless of the chemical nature, will remain on containment and not require treatment.*

GBRW, Written Comment 6: Tailings Storage Facility (TSF) GBRW agrees that once fluids from the NWRD and HLP are no longer directed to the TSF passive management is possible.... In our 2009 comment letter...we stated: “In summary, the drains intercept much of the seepage, but it appears possible that some of the seepage reaches deeper levels, as illustrated by the chemistry in MW-2B. It is unfortunate that MW-16 is mostly dry, because observations in that well could verify or help to counter the observations just made based on those in MW-2B.”

Division Response 6: *Comment noted.*

GBRW, Written Comment 7: (continued quote from GBRW 2009 letter) “It is also possible that well MW-23 shows that much seepage misses the trenches.”

Division Response 7: *Groundwater at monitoring well MW-23 is not degraded by seepage from the TSF, as indicated by comparison of average concentrations of conservative constituents such as nitrite + nitrate and sulfate in the tailings solution with average concentrations of the same constituents in MW-23. Over the timeframe of March 2012 to December 2015, average concentrations of nitrite + nitrite and sulfate were 45 mg/l and 1,615 mg/L, respectively, in the tailings solution, and only 1.78 mg/L and 430 mg/L, respectively, in MW-23. For additional information regarding MW-23, see page 22 of the Fact Sheet.*

GBRW, Written Comment 8: (continued quote from GBRW 2009 letter) “Data from the Ferdelford Springs, FSPR-2 and -3, may also reflect the influence of tails water; monitoring reports from 2001 and 2008/9 indicate that aluminum and iron concentrations are high, with values occasionally exceeding standards. Considering that the tracer moved 800 feet in 36 hours, it is not unreasonable that some tails water has reached these springs.”

Division Response 8:

GBRW is correct in stating that aluminum and iron occasionally exceed the Division Profile I reference values; however, over the distance of 2.1 and 2.3 miles, respectively, of FSPR-2 and -3, from the TSF, both these metals would be expected to attenuate to near non-detect levels.

Therefore, the Division believes that the varying concentrations represent natural background conditions, as described on page 29 of the Fact Sheet.

A more reliable method for determining if TSF seepage has impacted the Ferdelford Springs is to compare concentrations of the conservative constituents nitrite + nitrate and sulfate in the tailings solutions with their concentrations in the springs. For the timeframe of March 2012 to December 2015, the average concentrations of nitrite + nitrate and sulfate were 45 mg/L and 1,615 mg/L, respectively, in tailings solution, and <0.1 mg/L and 47 mg/L, respectively, in FSPR-2. These data indicate that TSF seepage is not reaching FSPR-2. FSPR-3 has been dry since June 2010.

In addition to this, to confirm that downgradient surface water is not being impacted, three new surface water monitoring points were added to the 2016 Permit renewal: FF-HW1-A and FF-D1-A, located upstream and downstream, respectively, of the confluence of the unnamed drainage and Ferdelford Creek above FSPR-2, and PC-D1-A, located downstream of the confluence of Ferdelford Creek and Pine Creek. A new schedule of compliance item was also added to the Permit requiring submittal of an updated monitoring plan.

GBRW, Written Comment 9 (continued quote from GBRW 2009 letter) “Because of the uncertainties in the data provided here and collected by Newmont below the tailings impoundment, it is not possible to determine the efficacy of the trench collection system.

“Therefore, NDEP should require Newmont to perform a detailed flow path analysis as a schedule of compliance item. It is essential to know from where the flow reaching the monitoring wells and trenches emanates. There should also be a determination of the source of iron and aluminum at the Ferdelford Springs. The analysis could include tracer studies wherein different dyes are applied in different portions of the tailings; because the impoundment is full, it is recognized this could be difficult to accomplish. Newmont could also consider isotope analysis and more detailed geochemical analysis. It could be necessary for flowpath analysis to collect samples more frequently. An improved understanding of the sources and pathways of the water reaching each trench and monitoring well is essential for both understanding whether the plume is passing the trenches and for planning permanent closure (especially of the trenches).”

Did Newmont conduct the flow path analysis and was the source of iron and aluminum at the Ferdelford Springs [sic] determined? It is vital that the plume is fully characterized and being captured.

Division Response 9: *As explained in Division Responses 7 and 8, conservative constituents present in the tailings solution are not being detected at concentrations exceeding the Division Profile I reference values at monitoring locations MW-2B, MW-23, FSPR-2, or FSPR-3. Based on these data, and as stated on page 23 of the Fact Sheet, the parallel trench drain (PTD), upper trench drain (UTD), and downstream trench drain (DTD), appear to be capturing and removing tailings seepage as designed.*

Newmont has consistently maintained the tailings solution volume below 2,000,000 gallons since approximately May 2013. Once the flow from the NWRD is removed from the TSF, flows to the trench drains are expected to subside as there will be less driving head on the TSF liner system.

At this time, the Division is not including a schedule of compliance item in the Permit to perform a flow path analysis. However, in the future, the Division may require additional studies if warranted.

GBRW, Written Comment 10:GRBW will continue to review background materials and would very much like to meet with NDEP and Newmont staff to explore other options than perpetuity [sic] treatment.

Division Response 10: *A meeting was held on 12 September 2016 in Carson City. In attendance were representatives from Newmont, GRBW, and the Division.*

GBRW, Written Comment 11: We do not support the closure plan and have tentatively planned to contest this permit.

Division Response 11: *Comment noted.*