FACT SHEET
(Pursuant to Nevada Administrative Code [NAC] 445A.401)

Permittee Name: **Barrick Gold U.S., Inc.**
Bald Mountain Mine
P.O. Box 2706
Elko, NV 89803

Project Name: **Bald Mountain Mine**

Permit Number: **NEV0050045 (Renewal 2014)**

A. Location and General Description

Location: The Bald Mountain Mine (BMM) is located on public and private land in White Pine County along the western slope of Big Bald Mountain in Sections 11-15 and 22-25, Township 24 North, Range 56 East, and Sections 5-9, 14-23, 26-30, and 32, Township 24 North, Range 57 East, Mount Diablo Baseline & Meridian, 35 miles northeast of the town of Eureka, Nevada.

General Description: The project consists primarily of No. 1, 2, 3, 4, and 5 Heap Leach Pads, associated process ponds, process buildings, open pit mines and waste rock dumps. Total mineral processing is limited by the Permit to **6,000,000 tons** of ore per year. Facilities are required to be designed, constructed, operated and closed without any discharge or release in excess of those standards established in regulation except for meteorological events that exceed the design storm event.

B. Synopsis

General

The region is typical of Nevada Basin and Range topography. Process facilities are located at the base of Big Bald Mountain, on the alluvial fan at the south edge of Huntington Valley. The stratigraphy is typically characterized by 0.5 to 3 feet of topsoil covering silty-clay to clayey-silt subsoil often interspersed with medium to large cobbles. Below the subsoil lies a deep layer of sediments resting on bedrock. The primary aquifer lies in the sediments with a potentiometric surface elevation about 500 feet below ground surface at the No. 2 well.

The operating heap leach facilities are located within Sections 25 and 26, T24N, RS6E. Land elevations across this area range from approximately 6,500 to 6,730 feet above mean sea level (ft amsl). Geotechnical borings drilled to a depth of up to 100 feet, show that alluvial materials underlying the current site of the BMM heap leach and Process facilities generally consist of silty gravel, silty sand, clayey sand and clayey gravel with minor silty clay to clayey silt units. Remolded permeability tests performed on shallow near surface soils suggest that the permeability of these soils is relatively low. Shallow groundwater was not penetrated in any of the geotechnical borings drilled through the site area confirming that groundwater occurs at depths greater than 100 feet.

Mining

The mine includes the RBM, LJ-Ridge, Top, Sage Flat, Rat, One, 2/3, and 1/5 pits. As of the fourth quarter of 2013, only the Sage Flat pit was fully operational with occasional activity in the Top and RBM pits as well.

In 1995, seasonal formation of a shallow lake in the 1/5 Pit was first noted. Initial water quality samples showed elevated levels of arsenic (0.154 mg/L), lead (0.031 mg/L), nitrate (27.8 mg/L), and thallium (0.005 mg/L). Subsequent samples taken from 1998 to 2004 showed continued elevated levels of arsenic only (0.11 mg/L in last sample taken in 2004). The surface elevation of the lake varies seasonally and, as of the fourth quarter of 2013, has yet to produce persistent surface water for two consecutive years.

Due to the formation of this pit lake, the Permittee was required by a Schedule of Compliance (SOC) item to demonstrate that the pit lake meets the applicable requirements under NAC 445A.429 (refer to correspondence dated April 15, 2002, “Modified 1/5 Pit Ponded Water Action Plan”). In response, Permittee submitted the *Bald Mountain Mine 1/5 Pit Lake Hydrologic Investigation* (SRK, November 2004) and the *Preliminary Screening-Level Risk Assessment for the 1/5 Pit Lake Water, Bald Mountain Mine* (SRK, May 2005). The 2004 study included conceptual water balance calculations and screening level sensitivity analyses to establish key inflow and outflow parameters for the pit, data from two boreholes (one upgradient, one downgradient) to determine if perched aquifers were present adjacent to the pit, and a fate and transport assessment to determine the potential for pit lake waters to reach groundwater. The study concluded that the pit lake was created by a combination of meteoric and perched groundwater but that the lake created no significant potential to degrade waters of the state. The 2005 study evaluated the potential impact of the pit lake waters on terrestrial, avian or human life. The study concluded that none of the chemical constituents in the 1/5 pit water pose a threat to humans or to the types of wildlife likely to visit that region of the state.

Access to the 1/5 pit is limited due to instability of the highwall and the associated dangers to personnel when attempting to obtain pit lake water samples. With this safety issue in mind, and recognizing the low level of constituents in the last rounds of analysis (2004) and the conclusions of the 2004 SRK study that the lake does not create the potential to degrade waters of the state, only annual inspection (3rd quarter) of the pit is required at this time. If water is present, the Permittee is required to obtain a sample for Profile I analysis and record the surface elevation in ft amsl.

The waste rock generated from these pits is routinely sampled and characterized according to Permit requirements. Based on analytical results, there is a low potential for acid generation except for the RBM waste. However, results of Meteoric Water Mobility Procedure (MWMP) testing have produced slightly alkaline solutions. Analytical results from the MWMP of waste from the Top Pit indicate significant concentrations of arsenic (0.54 milligrams per liter [mg/L] maximum result), mercury (0.036 mg/L max result), manganese (0.234 mg/L max result), and thallium (0.011 mg/L max result). Analytical results from the MWMP of waste from the Sage Flats Pit indicate significant concentrations of arsenic (0.094 mg/L max result), mercury (0.102 mg/L max result), and thallium (0.018 mg/L max result). Therefore, proper management techniques per the Waste Rock Management Plan, such as isolation, containment, blending, or other mitigative measures, are required to preclude potential concerns.

Historically, sodium cyanide was added at the crushing plant to the crushed ore via the conveyor belt prior to stockpiling. As a result of this activity, cyanide was detected to a depth of 70 feet beneath the stockpile area, prompting the termination of cyanide application at this location. Mitigation of the affected area was required via the 1998 Permit SOC to preclude potential degradation of the waters of the State. Mitigative efforts occurred over time and included drilling, sampling and analysis, determination of soil attenuation properties, and contouring. Removal of affected soil to Leach Pad 2 beneath and adjacent to the old cyanide mix tank and agglomerator building was also completed. Analyses to confirm complete removal of affected soil were required by the Division and the final report substantiating this finding was submitted on February 11, 2000.

Fresh water for mine use is obtained from production wells BMM-1 and BMM-2. Water produced by these wells is temporarily stored in Fresh Water Pond #1 until needed. The pond consists of a prepared subbase with an 80-mil high density polyethylene (HDPE) bladder placed thereon. The fluid capacity of the bladder is approximately 1.3 million gallons (gal).

Process Area 1

The pre-regulation (NAC 445A.350-447) No. 1 Process Area was originally permitted to include approximately 2.8 million square feet (sq ft) of leach pad, three pregnant solution ponds, one barren solution pond, one settling pond, and a process building. The No. 1 Process Area is closed and is currently in the reclamation process.

Each pond of the No. 1 Process Area consisted of a 60-mil HDPE primary liner, a leak detection system, and a six-inch thick compacted soil secondary layer. Pond secondary soil layers consisted of 6-12 inches of native silts/clays compacted to achieve a permeability of 1 x 10^{-5} cm/sec. The Process No. 1 facilities were constructed prior to adoption of NAC 445A.350-447. According to the Permittee, standard QA/QC practices for liner installation were employed, but the QA/QC program was not documented in a manner consistent with the current regulations. Each pond was built with a dedicated leak detection sump filled with clean gravel and a capacity of approximately 374 gal considering the void ratio of the gravel. Any leakage from the primary liner gravity-flowed between the liner and the secondary soil layer to the sump where it is evacuated via the leak detection port. As part of the Process 1 facility closure, Pregnant Pond 1 and Barren Pond 1 were backfilled and redesigned to be evapotranspiration (ET) cells.

Excess draindown which exits the evapotranspiration cells is allowed to infiltrate into an adjacent leach field. As of October 2011, flow rates to the leach field range from 0 to 3 gal per minute (gpm), varying seasonally. Analysis of samples of the fluid show exceedances of the Division Profile I reference values for arsenic (up to 0.431 mg/L), antimony (up to 0.091 mg/L), manganese (up to 0.085 mg/L), mercury (up to 0.015 mg/L), selenium (up to 0.096 mg/L), nitrate + nitrite (up to 194 mg/L), sulfate (up to 848 mg/L), and TDS (up to 2300 mg/L). The leach pad piping system is designed such that all fluid is released under fill without surface accumulations. In addition, the location of the leach field is within an area where groundwater is more than 300 ft below ground surface. Modeling of the system has shown that the leach field does not have the potential to degrade waters of the State.

The No. 1 Process Area leach pad consists of an 80-mil HDPE liner, segregation berms, pad leak detection system, and at least six inches of material with an in-situ permeability that does not exceed 1 x 10^{-5} cm/s underlying the liner. The Process 1 heap leach pad has been closed and is now in the reclamation process. In 2008 two piezometers were installed to monitor hydraulic head within the heap leach pad. Monitoring of the water level in each piezometer has now been added to the monitoring requirements of the Permit.

Process Area 2

The No. 2 Process Area was originally permitted to include the leach pad, a barren pond, a settling pond, pregnant ponds 4, 5, 6, and 7, and a process building. All ponds still exist but their function has changed in some cases (presently the Pregnant Pond 4 is used as a secondary overflow pond, Barren Pond 2 as the Primary Overflow Pond, Settling Pond 2 as Pregnant Sump 1).

The Phase I Pad of the No. 2 Process Area was constructed similar to the No. 1 Process Area Pad. In general, the liner system consists of an 80-mil HDPE liner, leak detection system, and compacted subbase (maximum permeability 1x10^{-5} cm/s). The primary differences in design/construction between the No. 2 Process Pad relative to the No. 1 Process Pad include more pad segregation berms, leak detection directly beneath solution channels, and more detection ports and collection lines per unit area. Phases subsequent to Phase I of the No. 2 Process, which includes the 1998 and 1999 phased expansions totaling 2,140,000 sq ft, consist of 80-mil HDPE liners segregation berms, pad leak collection lines, leak detection ports, and one foot of compacted material which meets maximum permeability requirements of 1 x 10^{-6} cm/sec. Leak detection ports CC1 and PD1 detect leakage in the downgradient portion of the leach pad and solution channel where hydraulic heads could be significant.

As initially designed, the Barren Pond 2 (POF1), Pregnant Sump 2 (PS1), and Pregnant Pond 2 (PP4) originally consisted of a 60-mil HDPE primary liner and a leak collection/detection system above a six-inch compacted soil secondary layer (pre-regulation). A formal quality control program was not in place during construction of the ponds. Therefore, the Division does not have adequate documentation indicating the permeabilities of the secondary soil liners and whether they meet current regulatory criteria. Each pond leak detection system reports to a common external sump (inside the process building) which originates from the 7-ounce geotextile fabric installed between the synthetic liner and soil layer. Per the previous Permit SOC, leak detection system/port PP4 was evaluated to determine if the collection, transport and removal of fluids was at a rate that prevented head transference to the secondary liner. The evaluation and recommendations were completed by October 1, 1998. The leak detection ports, possibly due to this type of pond design/construction (i.e. geotextile conveyance), had never shown fluid. The evaluation led to the installation of additional leak detection systems and new primary liners. Barren Pond 2 is now used as the Primary Overflow Pond, the Pregnant Sump remains, and the Pregnant Pond 4 is now used as Secondary Overflow Pond. Each of these ponds is considered to be single lined and may not impound process solution beyond the 20 day Permit limit.

The No. 5, 6, and 7 pregnant ponds of Process Area 2 consist of primary and secondary HDPE synthetic liners with geonet between the liners that allows any leakage through the primary liner to report to the leak detection sump for evacuation. Pregnant pond 5 had been installed with a floating HDPE cover, however this cover has now been removed. The result is that the upper 1.4 million gal of capacity (out of a total of 6.71 million gal) is effectively on single liner and may only be used for temporary storage. Any solution accumulation above 6,557 ft amsl is restricted by the Permit to 20 days for each such event.

Both process areas are designed to contain 25-year, 24-hour storm event flows and withstand the 100-year, 24-hour storm event. Emergency catchment dams are in place for both the No. 1 and 2 process areas in case the design storm event is exceeded. The No. 1 and No. 2 process buildings' secondary containment, consisting of concrete slabs with stem walls sealed at the joints with water stops, meets or exceeds the 110% regulatory requirement.

Heap Leach Pad 3 was constructed in three phases. Correspondence dated November 18, 1997 from the Permittee withdrew Phase III of Pad 3; thus, based on engineers calculations, there is no need for the storm pond. Pregnant Pond 6 serves Leach Pad 3. As stated in the Permit SOC item 1, a condition of construction of Phase III is that prior notification be given to the Division, including submittal of the Engineering Design Report for review and approval, and that a modification of the Permit with applicable fees, may be required. All pregnant solution is ultimately transferred to the No. 2 Process Area.

Heap Leach Pad 4 was constructed in 2006, thereby connecting Leach Pads 2 and 3 into one facility (Leach Pad 2-4). The liner system for Leach Pad 4 is identical to that of Leach Pads 2 and 3, consisting of a 12-inch compacted subbase (maximum permeability $1x10^{-6}$ cm/s), overlain by 80-mil HDPE geomembrane, and covered by a layer of drain material for liner protection. The total area of the Leach Pad 2-4 is approximately 7.7 million sq ft.

In July 2011, the Permittee submitted a minor modification proposing to construct Leach Pad 5 directly south and conjoined to Leach Pad 2-4. This expansion would join with Leach Pad 2-4 into one single facility (Leach Pad 2-5), adding 1.6 million sq ft to the total area. The liner system for the Leach Pad 5 expansion is identical to that of Leach Pads 2 and 3, consisting of a 12-inch compacted subbase (maximum permeability $1x10^{-6}$ cm/s), overlain by 80-mil HDPE geomembrane, and covered by a layer of drain material for liner protection. The total height of any leach pad section is limited by the Permit to 250 feet measured vertically from the surface of the synthetic liner.

As part of this proposal, Pregnant Pond 4 was upgraded to a double-lined and leak detected configuration according to the Engineering Design Change (EDC) submitted in April 2006 and approved by the Division in May of the same year. In addition, a new Pregnant Pond 8 was constructed as part of the Minor Modification. The liner system for Pregnant Pond 8 consists of a prepared subgrade, overlain by a 60-mil HDPE geomembrane secondary liner, which is in turn overlain by an 80-mil HDPE geomembrane primary liner. A geonet was inserted between the primary and secondary liners to convey fugitive solution to the leak detection sump, which has a fluid capacity of approximately 12,300 gal. Solution can be detected and evacuated through a 12-inch diameter HDPE riser pipe which is slotted at the bottom within the sump.

The Permittee submitted an EDC in October 2011 proposing to construct a bypass system at Pregnant Pond 6 to allow the pond to be emptied and repaired. The bypass consists of 1) a pipe diversion from the southern Leach Pad 3 solution pipe redirecting solution to the northern portion of Leach Pad 3; and 2) a temporary dam and solution sump at the eastern corner of the pond allowing solution collected there to be pumped onto Leach Pad 2. The pond, sump, and dam areas are lined with 60-mil HDPE secondary and 80-mil HDPE primary geomembrane liners, with geonet in between to convey fluid to the sump. Repair of the pond includes construction of a new leak detection sump with a fluid capacity of approximately 1,050 gal, and with a 12-inch diameter polyvinyl chloride (PVC) riser pipe for inspection and evacuation. The cutoff sump leak detection sump has a fluid capacity of approximately 85 gal and also includes a 12-inch diameter PVC riser pipe for inspection and evacuation. The EDC was approved by the Division in October 2011.

In March 2012, the Permittee submitted a non-fee proposal for the addition of a temporary solution transfer pipeline between Pregnant Pond 5 and Pregnant Pond 7. The purpose of the pipeline was to completely drain of Pregnant Pond 7 to allow removal of accumulated sediments. The system consisted of a six (6)-inch diameter HDPE pipeline spanning approximately 800 feet from Pregnant Pond 7 to Pregnant Pond 5. The pipeline was above ground and was subject to daily inspections which confirmed that no leakage occurred during operation. The proposal was approved by the Division later the same month with a limit of a total of 10 days of operation. In June 2012, the Permittee requested a two (2)-week extension of the time limit for operation due to the failure of the original pump installed in the system.

The Division approved the request later the same month. Operation of the system was completed by June 30, 2012 and the system subsequently disassembled. No spills or leaks occurred during the use of the system.

In April 2012, the Permittee submitted an EDC proposing the modification of the Pregnant Pond 6 overflow spillway to increase the flow capacity. The EDC was approved by the Division later the same month.

Appurtenances such as distribution piping and collection systems containing process solutions are either welded steel, HDPE, or PVC. However, only welded steel pipe and HDPE are used outside containment.

An EDC was approved in October 2007 to upgrade the solution conveyance system along the perimeter of the Heap Leach Facility 2-3. Locations of the new pipelines are the Leach Pad 2 North Channel, Leach Pad 2 Southwest Channel, Leach Pad 3 West Channel, and the Leach Pad Channel 3 Outlet Area.

The EDC design incorporated combinations of one (1) to six (6) individual 6- and 12-inch diameter perforated corrugated polyethylene pipes (CPEP) and runs of 24-inch diameter corrugated culvert placed within drain rock fill to enhance solution flow in the existing 80-mil HDPE-lined and leak detected solution collection channels, on a 12-inch subbase with maximum permeability of 1×10^{-6} cm/s. The carrying capacity of the pipelines was calculated assuming a maximum barren solution application rate to the heap leach pad of 7,000 gpm, although the maximum operational application rate is limited by the Permit to 4,000 gpm. The existing channel design accommodates an additional flow capacity in excess of 10,500 gpm. The approved design also requires the channel berm height be a minimum 1-foot higher in elevation than the elevation of the top of the highest adjacent pipeline. All berms were surveyed and raised as necessary, the subgrade and berm material prepared to meet the approved design specifications, including 95% maximum dry density verified by ASTM D1557 (Modified Proctor), and the 80-mil HDPE liner extended as necessary to meet the minimum elevation difference requirement.

In September 2012, the Permittee submitted a non-fee proposal to add temporary booster pumps to assist in solution delivery to the heap leach pad and to provide adequate pumping capacity during large storm events. Located in the west and northwest portions of the heap, the two pumps were skid-mounted units, temporarily plumbed into the existing solution delivery pipe network. The proposal was approved by the Division in the same month, with operation permitted until upgrades of the piping system were completed in 2013. However, the Permittee submitted an EDC in April of 2013, proposing to make the booster pump arrangement permanent. The EDC was approved by the Division later that same month.

Process Building

Gold-bearing pregnant solution in the process ponds is pumped to the Adsorption, Desorption, and Recovery (ADR) plant for initial gold recovery. Gold is recovered from the pregnant solution in a single train carbon column circuit consisting of five carbon columns operating at a flow rate between approximately 2,000 and 4,000 gpm. Activated carbon is advanced between the columns countercurrent to the pregnant solution flow. The loaded carbon from the last column is removed and stripped for gold recovery. Barren process solution from the columns is pumped to the plant barren solution tank where it is reconstituted with calcium or sodium cyanide and pH stabilized. Barren tank solution is pumped to the heap for reapplication.

The plant floor is designed to provide more than 110 percent containment capacity for the process solution held within the carbon circuit. This is accomplished through a combination of constructed floor sumps, concrete containment berms, and the overflow drainage system and includes waterstops between abutting slabs/stemwalls and epoxy coating of the surface. Process solution or reagent spills within the plant will be collected in the overflow drainage system that provides a gravity flow pathway directly into the process solution ponds located adjacent to the plant.

Up to 26,000 gal of 30 percent calcium and/or sodium cyanide solution, 7,000 gal of caustic soda solution, and 7,000 gal of anti-scalant solution are stored at the ADR plant. A concrete off-loading platform for reagent delivery to the ADR plant is designed to drain into the plant containment network. The plant is powered by a 24.9 kV transmission line, with a standby generator for emergency conditions.

Petroleum-Contaminated Soil (PCS) Management Plan

A PCS Management Plan was approved as an EDC in August 2010, authorizing on-site disposal of PCS on the following Rock Disposal Areas (RDAs): North-1 RDA, RAT West RDA, and East Sage RDA. Prior to management under the plan, hazardous waste determinations must be performed to demonstrate that the PCS is not hazardous waste. Hazardous waste must be managed and disposed of in accordance with applicable regulations. On-site disposal of PCS is also contingent on the results of periodic screening analyses, which must show that the PCS does not exceed screening levels for various organic constituents established via risk assessment. Otherwise, the PCS must be properly disposed of off-site. PCS may be stored on a temporary holding pad (former bioremediation pad) while screening analyses are performed, or it may be provisionally placed at one of the approved disposal locations provided that it will be removed and properly disposed of elsewhere if it exceeds screening levels during subsequent screening analyses. The plan also provides for limited bioremediation of PCS to reduce constituent concentrations. However, this may not take place until the Division approves the design, construction, and commissioning of a treatment pad, for which an appropriate Permit modification proposal , along with corresponding fees, must be submitted by the Permittee. Various time limits and other stipulations in the plan apply to temporary storage, provisional placement, and treatment of the PCS.

In February 2012, the Permittee submitted an EDC proposing to add a fourth PCS disposal area on private land (TSF) and to modify the screening criteria for surface disposal based on site specific data. The EDC was approved by the Division in June 2012.

Vehicle Wash Bay

The truck wash facility was constructed in 2011 as part of Bald Mountain's expansion project. The truck wash consists of both light vehicle and mine equipment wash bays. Light vehicles and mine equipment are regularly washed as part of a maintenance program to ensure proper equipment functionality. Sediments and other material washed from light vehicles and mine equipment are collected in three sediment ponds which are equipped with an oil skimming system to remove oils from the surface of the ponds. The sediment ponds are constructed of concrete with sealed joints to prevent water loss. Water collected in the sediment ponds is recycled back into the wash bays as needed. Water loss from the ponds only occurs due to evaporation and fresh water is added to the system only when water levels in the ponds becomes significantly low. Sediment collected in the ponds is removed from the system and managed per Bald Mountain's Petroleum Contaminated Soils (PCS) Management Plan.

C. <u>Site Hydrology</u>

Paleozoic carbonate rocks identified in wells and borings below an elevation of 5,950 ft amsl are believed to form a portion of the Regional Groundwater System within the carbonate-rock province of the Great Basin. South of the BMM site, the direction of regional groundwater flow is believed to be northeast to southwest from Ruby Valley toward Newark Valley.

Groundwater chemistry information available for the BMM production wells (Bald Mountain 1 [BMM-1] and Bald Mountain 2 [BMM-2]) is sent to the Division on a quarterly basis as part of the current Water Pollution Control Permit (WPCP) reporting requirements. This information provides an indication of water quality for the local groundwater system. With the exception of arsenic, baseline water quality analyses demonstrate water quality is generally good and is predominantly calcium or calcium/sodium carbonate water. Water level elevation data from these wells suggests that groundwater in the local system occurs at elevations ranging from 5,900 to 6,000 ft amsl. Using the land surface elevations and the water-level elevation data from the BMM production wells, the projected depth of the upper portion of the local groundwater system is believed to occur at depths greater than 500 feet beneath the site of the current heap leach facilities. Groundwater flow through the local system is believed to be from recharge areas along the slopes of the Ruby Mountains towards the playas.

Surface water is limited due to low precipitation and high evaporation. Spring runoff contributes to the flow in ephemeral drainages and provides water that infiltrates through faults and fractures to the bedrock system or isolated perched water confined by clay lenses.

Some of this flow is then expressed at the surface as isolated springs, which is confirmed through mapping of the potentiometric surface (Mine Mappers 2007). Flow rates from springs in the area were measured by Simon Hydro-Search (1994a) and supplemented by Tetra Tech (2008). Most drainage channels are dry for the majority of the year, except during spring runoff and significant storm events. Flow rates in the drainages within and near the Mine site have not been measured because of the ephemeral nature of the drainages.

Springs in and near the BMM property are typically found near the uppermost reaches of canyons or in the bottoms of canyons that are above 6,200 feet in elevation. Local springs include upper and lower Mill Spring, South Water Canyon Spring, Cherry Spring, and Bourne Tunnel Spring. Most springs are dry by summer; however, the Cracker Johnson #1 and #2 springs, which lie north of the area, and the Water Canyon Spring typically flow until late summer or early fall. Flow in these springs averages between one and six gpm. Surface water is also occasionally present in the 1/5 pit lake which may ultimately be back-filled. Based on April 15, 2002 analytical results, the quality of this pit lake meets Division Profile I reference values, except for arsenic (0.11 mg/L).

D. Procedures for Public Comment

The Notice of the Division's intent to issue a renewed Permit authorizing the facility to construct, operate, and close subject to the conditions contained within the Permit, is being sent to **The Ely Times** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed Permit can do so in writing within a period of 30 days following the date of publication. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected State agency, intrastate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the
reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.403 through NAC 445A.406. The final determination of the Administrator may be appealed within 15 days of the decision to the State Environmental Commission pursuant to NRS 445A.605.

E. Proposed Determination

The Administrator has made the tentative determination to renew the proposed Permit.

F. Proposed Effluent Limitations, Schedule of Compliance and Special Conditions

See Part I of the Permit.

G. Rationale for Permit Requirements

The facility is located in an area where annual evaporation is greater than precipitation. Therefore, it must operate under a standard of performance which authorizes no discharge(s) except for excess accumulations which are a result of a storm event beyond that required by design for containment.

Groundwater is not near the surface and, in terms of quality, analytical results indicate that groundwater meets the drinking water standards. The primary emphasis for identification of escaping process solutions is placed on periodic inspection of the process components leak detection systems and visual inspections. Monitoring requirements can be found in the Permit. Characterization of the alluvium was documented as ranging from silty gravel lenses with high permeability to areas with strong cementation producing permeabilities as low as 10^{-6} cm/sec.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 U.S.C. 701-718, it is unlawful to kill migratory birds without license or permit, and no permits are issued to take migratory birds using toxic ponds. The Federal list of migratory birds (50CFR10, 15 April 1985) includes nearly every bird species found in the State of Nevada. The U.S. Fish and Wildlife Service is authorized to enforce the prevention of migratory bird mortalities at ponds and tailings impoundments. Compliance with state permits may not be adequate to ensure protection of migratory birds for compliance with provisions of Federal statutes to protect wildlife. Open waters attract migratory waterfowl and other avian species. High mortality rates of birds have resulted from contact with toxic ponds at operations utilizing toxic substances. The Service is aware of two approaches that are available to prevent migratory bird mortality: 1) physical isolation of toxic water bodies through barriers (e.g. by covering with netting), and 2) chemical detoxification. These approaches may be facilitated by minimizing the extent of toxic water. Methods which attempt to make uncovered ponds unattractive to wildlife are not always effective. Contact the U.S. Fish and Wildlife Service at 1340 Financial Blvd., Reno, Nevada 89502, (775) 861-6300, for additional information.

Prepared by: Paul Eckert

Date: January 2014

Revision: Renewal 2014