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

Permittee Name: **AngloGold Ashanti North America, Inc.**

Project Name: **Sterling Mine**

Permit Number: **NEV0089016**
Review Type/Year/Revision: **Renewal 2024, Fact Sheet Revision 00**

A. Location and General Description

Location: The Sterling Mine is located in southern Nye County, approximately 8 miles southeast of the town of Beatty, Nevada. The project is located in the historic Bullfrog-Rhyolite Mining District, on the eastern flank of the Bare Mountain Range with Crater Basin and the Yucca Mountains to the east. The mine site is located on public land (administered by Bureau of Land Management [BLM] – Las Vegas Field Office) within Township 13 South (T13S), Range 47 ½ East (R47½E), Sections 10, 11, 12, 13, 14, 15, 22, and 23; and T13S, R48E, Section 20, Mount Diablo Baseline and Meridian.

AngloGold Ashanti North America, Inc. is the Permittee for the Sterling Mine.

***Site Access*:** To access the Sterling Mine, proceed approximately 9 miles southeast of Beatty on U.S. Route-95 to the mine access road (unnamed). Proceed east and then northeast approximately 8 miles to the mine site.

General Description: The Sterling Mine has been in operation since December 1980. In 1991, Water Pollution Control (WPC) Permit NEV0089016 was first issued to SAGA Exploration Company for the Sterling Mine, a surface and underground mining operation utilizing chemicals to process up to 490,000 tons of ore annually.

Gold is extracted from crushed or run-of-mine ore using conventional cyanide heap leaching technology and recovered using carbon adsorption and stripping. The Sterling Mine is 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 which exceed the design storm event.

B. Synopsis

Permitting History: WPC Permit NEV0089016 was issued to SAGA Exploration Company (predecessor to the Permittee), in January 1991. The Permit was renewed in February 2003 and again in February 2008. Since the Permit was first issued, two Minor Modifications have been approved by the Division. The first Minor Modification was approved in December 2005 for the development of a 4000-foot underground exploration decline and waste rock dump. A second Minor Modification was approved in October 2007 for the construction of a new 300,000 ton heap leach pad.

Existing Facility: The Sterling Mine consists of three open pits (Ambrose, Sterling and Burro), underground mine workings, five waste rock dumps (Ambrose, Burro, Low Grade, Boulder, and No. 1), a heap leach pad (HLP), five ponds (Pregnant, Barren, Make-up, Fresh Water, and Overflow Ponds), and a carbon plant/strip circuit. Ancillary facilities include a lay down yard, office/shop complex, and a gravel pit.

Mining: The combined footprint for the three pits is approximately 14.0 acres and depth is about 250 feet below ground surface (bgs) for all three pits. Because of the depth to groundwater (over 1,000 feet bgs), lakes will not form in any of the pits at the completion of mining and analytical results indicate that the ore and waste rock from these pits and the underground development does not have a potential to generate acid. Acid neutralization potential/acid generation potential (ANP/AGP) results for the ore and waste rock samples range between 8:1 and 35:1. A portion of the waste rock generated has been used for pit backfilling. None of the pits are currently active.

Exploration activity south of the existing facility within the Bare Mountain Range has identified a gold ore deposit amenable to underground mining methods. Development of a 4,000-foot underground exploration decline is currently underway to provide a drill platform better suited to drilling deeper targets and eventually ore production.

Reclaimed Heap Leach Pad: The original HLP was permanently closed in 2003. The HLP was constructed prior to the 1989 promulgation of NAC 445A.350 through 445A.447 (Regulations Governing Design, Construction, Operation and Closure of Mining Operations).

The 15-acre HLP was constructed with a layer of 30-mil PVC (polyvinyl chloride) liner in between 6 inches of sand above and below the liner. During the life of the pad, over 1,000,000 tons of ore were placed on the pad with a maximum height of the pad of 45 feet above the PVC liner surface. Prior to initiating closure, the HLP was regraded and re-leached to maximize the recovery of remaining gold values. After regrading to a 3 horizontal to 1 vertical (3H:1V) slope, a 12-inch (nominal) soil layer was placed on the pad. Heap draindown currently averages less than 1 gpm and any draindown solution collected is conveyed to the process ponds for evaporation.

A test HLP, similar in design to the original pad was constructed during the 1980's for testing and evaluating low-grade ores. Two process ponds were also constructed using Hypalon^{TM} (chlorosulfonated polyethylene--CSPE) as the liner. In 1996, the Sterling mine completed the movement of approximately 16,500 tons of spent ore from the test heap to the mine's closed leach pad and initiated closure of the two test heap process ponds.

Diversion ditches were constructed upgradient of the closed heap leach facility to divert runoff resulting from the 100-year, 24-hour storm event, around the leach pad, the ponds, and the process plant and to tie-in with existing natural drainage courses. These remain in place.

Operating Heap Leach Pad and Design Revision: A Minor Modification for the design, construction, operation, and closure of a new HLP at the Sterling Mine was approved by the Division in October 2007; however, construction of the HLP was delayed for several years due to the facility being in "Temporary Closure". With the return to active mining and heap leaching operations during 2011-2012, the Permittee proposed several minor changes to their previously approved HLP Expansion design. In addition, a Schedule of Compliance (SOC) item required the Permittee to replace all existing solution pond liners with 60-mil HDPE. An Engineering Design Change (EDC) approved on 25 April 2011 revised the HLP liner system design and replaces all solution pond liners.

The new HLP is wedge-shaped and occupies a foot print of approximately 3.7 acres. The pad is divided into three cells, numbered 1 through 3, and is located adjacent to a perimeter access road along the southern boundary of the now closed HLP. The new pad is designed to drain to the east and connect to the existing leach solution ditch through a newly constructed collection ditch along the eastern boundary of the new HLP and southeast corner of the closed pad.

Run-of-mine ore is placed on the pad in three 15-foot high lifts to a maximum heap height of 45 feet above the liner surface and graded side slopes of 3H:1V. The pad is designed to drain to the east and connect to the existing leach solution ditch through a collection ditch along the eastern boundary of the new pad and southeast corner of the existing pad. All solution which falls within the new pad reports to the existing Pregnant Pond.

The new pad was initially designed with a 12-inch layer of free draining gravel overliner material; however, the April 2011 EDC increased the overliner layer thickness by an additional 6 inches to 18 inches. Beneath the overliner layer is a layer of 60-mil textured high density polyethylene (HDPE) liner (textured side down). The HDPE liner overlies a layer of Bentomat® DN; a geosynthetic clay layer (GCL) material. Bentomat® DN is comprised of a layer of sodium bentonite within two non-woven geotextile layers and with a tested (American Society for Testing and Materials [ASTM] Method D5887) hydraulic conductivity of 5×10^{-9} centimeters per second (cm/sec), high internal shear strength, and excellent interface friction on both sides of the GCL when wet.

The Bentomat® DN overlies a minimum 12-inch thick compacted subbase, constructed in two 6-inch lifts. The subbase material has a maximum coefficient of permeability of less than $1x10^{-5}$ cm/sec when compacted to 95 percent of the maximum dry density (ASTM Method D1557).

Since the depth to groundwater at the Sterling Mine site is in excess of 1,000 feet bgs and the tested hydraulic conductivity of Bentomat® DN is below the 1×10^{-7} cm/sec regulatory performance standard for engineered liners (pursuant to NAC 445A.438), the Permittee installed four vadose zone monitoring wells (two wells downgradient of the New HLP and two wells downgradient from the ponds), within 200 feet of the New HLP and solution ponds.

The new HLP has been operational since spring of 2012.

Slot Heap Leach Pad Expansion

A Minor Modification approved 23 January 2014, authorized the design, construction, operation, and closure of Slot HLP Expansion. The Slot HLP Expansion is located within the 600-foot long gap between the reclaimed HLP and the operating HLP. Additional ore stacking is proposed on the eastern slope and on top of the operating HLP. The expansion is expected to provide approximately 129,000 tons of additional ore storage. The Slot HLP Expansion will utilize the same general design and materials as the operating HLP.

The liner system for the Slot HLP Expansion extends from the operating HLP and up the reclaimed HLP south slope. The liner materials proposed for the Slot HLPF Expansion includes Bentomat® DN GCL manufactured by CETCO and 60-mil Microspike© single-side textured linear-low density polyethylene (LLDPE) liner manufactured by Agru America. A liner bedding layer with maximum particle size of 1-inch will be placed a minimum of 6 inches thick prior to GCL placement to protect the liner system. Protrusions greater than ¼-inch, will be removed pursuant to the GCL manufacturer's specifications. Where possible, the existing subgrade will be used as liner protection if the prepared surface meets specifications.

The Slot HLP expansion liner system will tie into the operating HLP liner by cutting the existing HDPE liner to expose existing GCL. The new GCL will be placed with a minimum 3-foot overlap with two rows of granular bentonite to maintain GCL continuity. The new LLDPE will be welded to existing HDPE providing continuous containment. An anchor trench, cut into a constructed anchor berm, will anchor the HLP expansion liner. The anchor berm was designed to prevent cutting into the 1-foot thick reclaimed HLP closure cover.

Design for Future Expansion: Future mine expansion planning includes a new HLP west of the reclaimed HLP. The Permittee proposes running the PLS conveyance pipes and stormwater from the new HLP through the slot between the operating and reclaimed HLFs. These pipes, four PLS conveyance pipes and one stormwater culvert, will be built on top of the Slot HLF Expansion liner within the drainage gravel. The four sleeves for future conveyance pipes are 24-inch diameter

Advanced Drainage Systems, Inc. (ADS) N12® HDPE pipes and the stormwater culvert is a 24-inch diameter HDPE pipe. When the new pad is built, the conveyance pipes will be pulled through the sleeves and the stormwater culvert will be connected to a bulkhead or similar structure to direct stormwater flow through the slot.

Geotechnical Analysis: A slope stability analysis of the operating HLP and Slot HLP Expansion was performed to demonstrate that additional ore placement on both HLPs did not impact stability. Material properties and geometries from the design of the stability berm and reclaimed HLP closure design were used in the stability analysis. Three cross-sections were cut where the steepest natural ground and highest heap slopes were observed after analysis of current and previous topographic data. The three sections were interpreted to be the critical or worst-case sections for slope stability. Response to earthquake loading was evaluated using pseudostatic methods for an earthquake with a return period of 475 years for operating conditions, and 2,475 years for closure conditions.

The stability of the operating HLP and Slot HLP Expansion was evaluated for infinite slope, circular, and block type failure modes. The minimum acceptable factor of safety (FOS) for static and pseudostatic conditions are 1.3 and 1.05, respectively as dictated by the Division's guidance document for HLP stability. Stability analyses results indicated that the slot fill can be raised to a maximum elevation of 3,845 feet above mean sea level for active leaching operations. However, a larger safety berm will be required for closure conditions to satisfy minimum pseudostatic FOS values for the 2,475-year earthquake event. Construction of the larger stability berm will therefore be deferred until site closure.

Solution Collection System: The Leach Solution Collection System is relatively unchanged with respect to the original design. The April 2011 EDC modified the management of solution entering the solution transport pipes from the pad and stormwater management through the solution collection ditch.

In the original design, solution was collected by internal collection pipes and directed to discharge along the downstream eastern side of the pad to flow to the northeast corner of each cell into a sump. The solution was then conveyed from the sump via a 4-inch diameter PVC pipe, through the perimeter berm to one of two solid 6-inch diameter HDPE pipes in the solution corridor. No internal solution collection header pipes were installed and solution exiting the pad was allowed to form an open channel along the downstream berm and pond in the HLP cell sumps. Each pipe from the cells was placed in a lined solution corridor and directed to the Pregnant Pond which also served to collect any stormwater runoff from the pad and solution corridor.

The April 2011 EDC optimized the solution collection circuit by providing additional control for process solution and stormwater collection. Process solution is collected along each cell divider and perimeter berm with an 8-inch diameter perforated header pipes. Internal cell divider berms running east to west within the pad separate the solutions. At each cell divider berm, the perforated pipes tie into solid 8-inch diameter pipe that penetrate the berm and continue down the east side of the pad.

At the northeast corner of Cell 1, all three solid pipes (1 for each of the 3 cells) penetrate the perimeter berm and enter an energy dissipation structure. Inside each structure, the solution passes over a series of baffles and over a v-notch weir so that flow can be accurately measured. After the solution passes over the weir it will enter one of two solid 8-inch diameter pipes depending on whether the solution is "Pregnant" or "Barren/Intermediate". Flow into these pipes is manually controlled. The pregnant and lean pipes will continue down the solution corridor along the eastern edge of the closed HLP area and discharge into the pregnant pond and the intermediate pond for the pregnant and lean solution pipes, respectively. When the corridor reaches the Overflow Pond any stormwater which may be present will be discharged into the Overflow Pond. This will be accomplished by opening up the corridor on the pond side to create a spillway to the Overflow Pond. Stormwater from the northern portion of the existing leach pad will also be diverted away from the Fresh Water, Barren/Intermediate, and Pregnant Ponds to the Overflow Pond by a stormwater diversion berm.

A solution collection ditch is constructed along the east side of the HLP and consists of a lined open channel (60-mil HDPE) that is graded to flow to the northeast corner of each cell. The channel is covered with a net to prevent wildlife access. The synthetic liner in the collection ditch is underlain by compacted subgrade material. The collection ditch has a section of 60-mil HDPE liner material folded back over the liner system to protect it from ultraviolet (UV) degradation.

Solution Ponds: Historical records indicate that the four solution ponds were originally constructed of 30-mil Hypalon™ (CSPE--chlorosulfonated polyethylene) and/or 40-mil HDPE during the early 1980's. Because of the long-term exposure, limited use, and minimal maintenance, the primary liners fell into a state of disrepair and with questionable containment integrity. Three process ponds (Pregnant Pond, Intermediate/Barren Pond, and Overflow Pond) were constructed with double liners and leak collection and recovery sumps (LCRS). The Freshwater Pond was constructed with a single liner of 60-mil HDPE.

An integrity evaluation was performed on the liner and LCRS for all ponds and conveyance channels and because of their condition, replacement of all liners was warranted. Although the condition of the secondary 30-mil Hypalon™ liners appeared to be satisfactory, the Division recommended at the time that the Permittee replace the liners with thicker (at least 60-mil) LLDPE or HDPE.

The April 2011 EDC replaced all geosynthetic liners in all ponds and conveyance channels with new 60-mil HDPE. All process ponds (Pregnant, Barren/Intermediate, Overflow, and the permitted but not constructed New

Overflow Pond) are double-lined and leak detected for operational flexibility and are capable of managing the 24-hour HLP draindown and direct precipitation as the result of a 100-year, 24-hour storm event, with 2 feet of freeboard. The subbase for all of the ponds has been reconditioned and recompacted to a permeability of less than $1x10^{-5}$ cm/sec at 95 percent maximum dry density (ASTM Method D1557).

The liner system for each process pond consists of 60-mil HDPE (single-side textured) as the primary liner overlying a layer of geonet. The geonet overlies a 60-mil HDPE (single-side textured down) as the secondary liner. This configuration provides 1) a preferential flow path for any fluids escaping the primary liner to the leak collection sump located at the lowest corner of the pond and 2) reduction of potential hydraulic head against the secondary liner in the event of a defect in the primary liner.

Each collection sump volume has a nominal effective capacity of about 3,000 gallons. The collection sump is located between the primary and secondary liners and is fitted with a perforated 12-inch diameter HDPE pipe (SDR-32) and surrounded by drain gravel within the sump. Outside the sump the perforated pipe transitions to solid 12-inch diameter HDPE pipe (SDR-32), located between the primary and secondary liners. In the event leaks occur, in the primary liner, the solutions will report to the sump where they can be removed via pumping and reduce the possibility of seepage through the secondary liner by reducing the amount of head on the secondary liner.

Process Facility: The Sterling Mine ores were initially processed by heap leaching at a rate of 200 gpm. The leach solutions were pumped through carbon columns which were situated in a 40-foot trailer located on a cement slab adjacent to the process ponds. The carbon was alcohol stripped to remove the precious metals, the metals electroplated onto steel wool in electrowinning cells and the steel wool smelted to doré bullion on-site. In 2001, as a result of dwindling reserves and low metal prices, the original carbon columns, which had reached the end of their useful life, were decommissioned, rinsed, and removed from the trailer. The decommissioned columns are currently stored inside the fenced process area awaiting disposal.

Unauthorized Construction of the Sterling Process Facility: With the discovery of additional reserves combined with increased metal prices, the Permittee was granted authorization in 2012 by the Division to re-initiate the application of cyanide leach solution onto the HLP. To process the solutions, new 500-gpm carbon columns were installed without Division knowledge to replace the original columns. The new columns were placed directly on the process facility slab where the original carbon columns were housed in the trailer.

Since the Division had never been afforded the opportunity to review any of the engineering designs, the Division was concerned over the adequacy of the containment and containment integrity. Furthermore, Division authorization in

2012 for Sterling to initiate the application of cyanide leach solution did not include the process facility.

To rectify the unauthorized construction of the process facility, the Division required in a letter to the Permittee dated 26 February 2013, that the Permittee submit by 15 March 2013, a Minor Modification and a complete "As-Built" Report and Quality Assurance/Quality Control Documentation for the Process Facility. In addition, the report and documentation were to be stamped by a Nevada-licensed Professional Engineer who could attest to the design, containment adequacy, and integrity of the Process Facility. The submittal date was later extended to allow for the completion of the structural evaluation for the Process Facility. All documents and fees were received on 5 April 2013.

Acid Wash Tank Circuit Containment: The adequacy of existing containment around the acid wash tank area and its ability to effectively contain acid solution as a result of catastrophic tank rupture or valve failure had been a significant concern with the Division, since it was first discovered during the January 2012 Mine Compliance Inspection. Efforts undertaken by the Permittee appeared to be more cosmetic rather than functional as indicated in the engineering designs submitted with the 25 January 2013 EDC in an effort to address Division concerns.

To rectify containment concerns, the Permittee was required to submit by 15 March 2013, test results and photographic documentation demonstrating the existing containment design is adequate. Testing involved the severing of the tank's side discharge valve to determine whether or not any of the tank contents (in this case water) will leave containment. In the event the test demonstration indicated the potential for fluid to leave containment, the Division would require expansion and/or reconfiguration of the existing containment. Failure to do so would result in the delay in the review and approval of any future Permit actions (e.g. Renewals, Modifications, and EDCs and possible compliance actions, including, but not limited to, the suspension of operations.

In response to the Division's 26 February 2013 letter, the Permittee's consultant (Kappes Cassiday and Associates [KCA]) submitted a Minor Modification to address all unauthorized construction within the Process Facility. The Minor Modification included an evaluation of the Process Facility's secondary containment capacity and integrity, a description of the Process Facility (including reagents and components present, pump capacities, and tank volumes), and a building structure evaluation performed by the structural engineering firm of Forbes Engineering.

Process Facility Containment Evaluation: The Process Facility is on a 30-foot by 60-foot reinforced concrete slab, 6 to 8 inches thick with a chemical resistant coating and water stop material installed between any concrete joints. A 5-inch high stem wall surrounds the pad with the exception of the south entrance where a 12-inch wide rounded curb has been installed to facilitate vehicle access. The Process

Facility slab has two embedded 3-inch diameter drains which convey solution spills directly to the process ponds. Containment is approximately 157 percent of the capacity of the largest vessel (Barren Tank working capacity 2,596 gallons, total available containment capacity 4,098 gallons).

The Acid Mix Tank has a working capacity of 110 gallons and is located within containment at the southwest corner of the Process Facility. The tank sits on a metal grate which covers an 8-foot by 16-foot by 3-foot deep concrete sump with a containment capacity of 2,872 gallons. The sump does not drain to the process ponds. Containment provided is 2,610 percent of the capacity of the vessel.

The 3,289-gallon Strip Tank is located outside southeast corner of the Process Building, within a 10-foot by 20-foot reinforced concrete slab with a curb height of 4 inches which provides an interim containment capacity of 408 gallons of leakage solution prior to its discharge to an 8-foot by 16-foot by 3-foot deep concrete sump with a containment capacity of 2,872 gallons. In addition, a 4-inch diameter outlet is capable of conveying collected solution through a 4-inch pipe to the double-lined Intermediate Pond. Combined sump and interim containment area capacity is 3,280 gallons, which is significantly less than the minimum 3,617 gallons required.

To meet the minimum 110-percent required containment, the Permittee is proposing to decrease Strip Tank capacity by 1) installing a new tank overflow discharge standpipe approximately 65 inches from the floor of the interim containment area and 2) creating additional containment volume by perforating the Strip Tank supports.

A 14-foot by 15-foot by 5-inch high reinforced concrete slab located north of the Process Facility, is utilized for the storage and dispensing of anti-scalant solution. A 6.5-inch diameter outlet and pipeline directs overflow from the 6,500 gallon tank into the Pregnant Pond.

Process Facility Structure Evaluation: The Process Facility Building is a pre-fabricated structure, manufactured by Armstrong Steel Buildings, Inc. The particular design utilized at the process Facility is sold under the trade name as "Clear Span-High Boy." The building is a fabric structure with a steel truss frame system constituting a combined roof and wall system. The weaved fabric is comprised of high-density and low-density polyethylene fibers, sold under the trade name as Nova-Shield II with ArmorKote RB88X-6LD. The approximate fabric thickness is 4 mil. The fabric material meets the prevailing ASTM standards for tensile stress, tearing, and UV protection and is also chemically resistant to the reagents currently identified for use within the Process Facility. Forbes performed the comprehensive building structure assessment and evaluation.

The light-weight steel truss frame system is designed resists the lateral wind and seismic loads transvers to the structure in the transverse direction while a cable X-brace system resists the lateral wind and seismic loads in the longitudinal direction.

Since this is a very light weight structure, wind loads control the structural design of the system. According to Forbes, the seismic loading on this type of structure is minimal and the structure, as constructed, has more than enough structural stability as required by the Nye County Building Code (and International Building Code) for seismic resistance.

The fabric and steel frame structure is supported by a timber stem wall placed on top of the concrete stem wall. The steel frame baseplate is supported by a continuous ¼-inch steel plate on top of the 2-inch by 6-inch double top plate of the stem wall. The steel baseplate is bolted through the top plates and connected to a steel post cap to a double 2-inch by 6-inch post. This double post is attached to the concrete slab with two steel hold down anchors. These anchors provide direct transfer of the wind uplift forces into the concrete slab.

Based on their assessment of the Acid Wash Circuit containment, KCA concluded that the containment volume for the acid wash tank to be deficient. Although the containment available considering the sump and slab area do adequately hold the volume of a small leak, 3,000 gallon tank and a containment total of 3,412 gallons (2,872 gallon sump, assumed empty, and 540 gallons contained on the slab), KCA concluded that the placement of the tank near the edge of the slab had the possibility of escaping containment in the event of a catastrophic failure. After discussing various options with the Permittee on site and reviewing tank volumes and available containment, the decision was made to remove the Acid Wash Circuit completely (E-mail to the Division dated 26 March 2013).

Acid washing is now performed in the individual carbon columns prior to sending the carbon to the strip vessel. The carbon will be rinsed with fresh water prior to acid washing. After acid washing, the acid solution will be pH buffered to pH 11 or higher before being discharged to the intermediate pond. The carbon is then pumped to the strip vessel, and then returned to the carbon column for further gold loading. Carbon that no longer effectively collects gold (spent) will be rinsed, bagged and shipped off site for final processing.

C. Receiving Water Characteristics

Site Hydrology/Hydrogeology and Water Quality: Depth to groundwater is estimated to be at least 1,200 feet bgs. Groundwater quality at the Sterling Water Supply Well (US-VH-2) indicates that background groundwater quality meets applicable Division Profile I criteria except for slight exceedances of the iron, mercury, and total dissolved solids (TDS) reference values. Well US-VH-2 is located approximately 3 miles east of the facility and conveys fresh water to the Fresh Water pond.

Groundwater has not been encountered in any of the exploration drill holes on the Sterling property. Recent holes have been drilled to a depth of 1,500 feet from within the underground mine workings and in the vicinity of the HLP and ponds, holes have been drilled to a depth of 700 feet and 1,000 feet.

Surface Water: There are no surface waters (i.e. springs, seeps or streams) within the project vicinity with the exception of ephemeral drainage following storm events that dissipates on alluvial fans. The climate is semi-arid with an average of 4.13 inches of precipitation per year (NOAA). The 100-year, 24-hour storm event was determined to be 2.6 inches of precipitation. The two watersheds contributing surface flow to the area of the process components are diverted via diversion channels engineered to withstand a 100-year, 24-hour storm event.

Vadose Zone Monitoring: As stated previously, depth to groundwater at the site is in excess of 1,000 feet. In an effort to evaluate potential impacts to the vadose zone as a result of an accidental release of process fluid, the Permittee has installed vadose zone monitoring wells downgradient of the HLP and solution ponds for the purpose of performing early detection of fluids beneath the HLP and ponds.

D. Procedures for Public Comment

The Notice of the Division's intent to issue a Permit authorizing the facility to construct, operate, and close, subject to the conditions within the Permit, is being published on the Division website: https://ndep.nv.gov/posts/category/land. The Notice is being mailed to interested persons on the Bureau of Mining Regulation and Reclamation 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 public notice. 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, any affected 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.

E. Proposed Determination

The Division has made the tentative determination to issue the renewed Permit.

F. Proposed Limitations, Schedule of Compliance, Monitoring, Special Conditions

See Section I of the Permit.

G. Rationale for Permit Requirements

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

The primary method for identification of escaping process solution will be placed on required routine monitoring of leak detection systems as well as routinely sampling downgradient monitoring wells. Specific monitoring requirements can be found in the Water Pollution Control Permit.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 U.S. Code 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 (50 Code of Federal Regulations 10, 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 the 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 2800 Cottage Way, Room W-2606, Sacramento, California 95825, (916) 414-6464, for additional information.

Prepared by: Charles Schmitz
Date: 25 September 2024

Revision 00: 25 September 2024; Renewal