FACT SHEET

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

Permittee Name: **Nevada Gold Mines LLC**

Project Name: **Toiyabe Mine Project**

Permit Number: **NEV0060050**

Review Type/Year/Revision: **Renewal 2022, Fact Sheet Revision 00**

A. Location and General Description

Location: The facility is located in Section 18, Township 25 North (T25N), Range 47 East (R47E), and Section 13, T25N, R46E, Mount Diablo Baseline and Meridian. The Toiyabe Mine facility is located in the Toiyabe Range in East Central Lander County, along the west flank of Bald Mountain, Nevada, approximately 30 miles south of the town of Crescent Valley, Nevada.

General Description: The Permittee is no longer actively mining or processing ore at the mine site. Building and appurtenant facilities not required for post-closure site management were removed from the site between 1999 through 2022. Remaining mine components consist of three (3) open pits, two (2) waste rock dumps which were contoured, covered and seeded in 1999, two (2) heap leach pads covered and seeded in 2000, an evapotranspiration cell (converted from the former pregnant pond), and an infiltration field. The barren and emergency overflow ponds were closed and reclaimed in 2003.

The Project is located entirely on both public lands, administered by the Bureau of Land Management (BLM) Mount Lewis Field Office, Battle Mountain, and private lands owned by Nevada Gold Mines. There is no public land within the project area administered by the State of Nevada or by the U.S. Forest Service. The Project is in post-closure monitoring.

B. Synopsis

Mineralization on the Toiyabe property was discovered in 1966 by Homestake Mining Company (Homestake). Over the next few years, Homestake staked claims and conducted exploration drilling, and in 1969 abandoned the property. Homestake relocated the claims in 1976 and continued exploration until 1986, when Homestake sold the property to N.A. Degerstrom, Inc., who subsequently sold the property to Inland Gold and Silver Corporation (Inland). Inland began ore production in 1987; leaching operations began in 1988 with the issuance of Water Pollution Control Permit NEV0060050. Inland continued mining until 1991 and active leaching until 1992. Cortez Gold Mines (CGM) acquired the property in 1996 and the Permit was transferred from Inland to CGM. Barrick acquired CGM in a merger acquisition of Placer Dome in 2005. The site was placed into post-closure monitoring on 16 May 2008. The 2017 Renewal continues with post-closure monitoring and does not allow any mining or processing.

In July 2019, Nevada Gold Mines LLC (NGM), a joint venture between Barrick Gold Corporation and Newmont Goldcorp Corporation was created. NGM represents the combination of various Nevada operations, of which the Toiyabe Mine Project is included. Revision 01 of the 2018 Permit reflects the transfer of the Permit from Cortez Joint Venture dba Barrick Cortez Inc. to NGM.

The 2022 renewed Permit shall remain in effect until 23 December 2027.

Figure 1 below provides a site map including all components and monitoring locations specific to Toiyabe Mine**.**

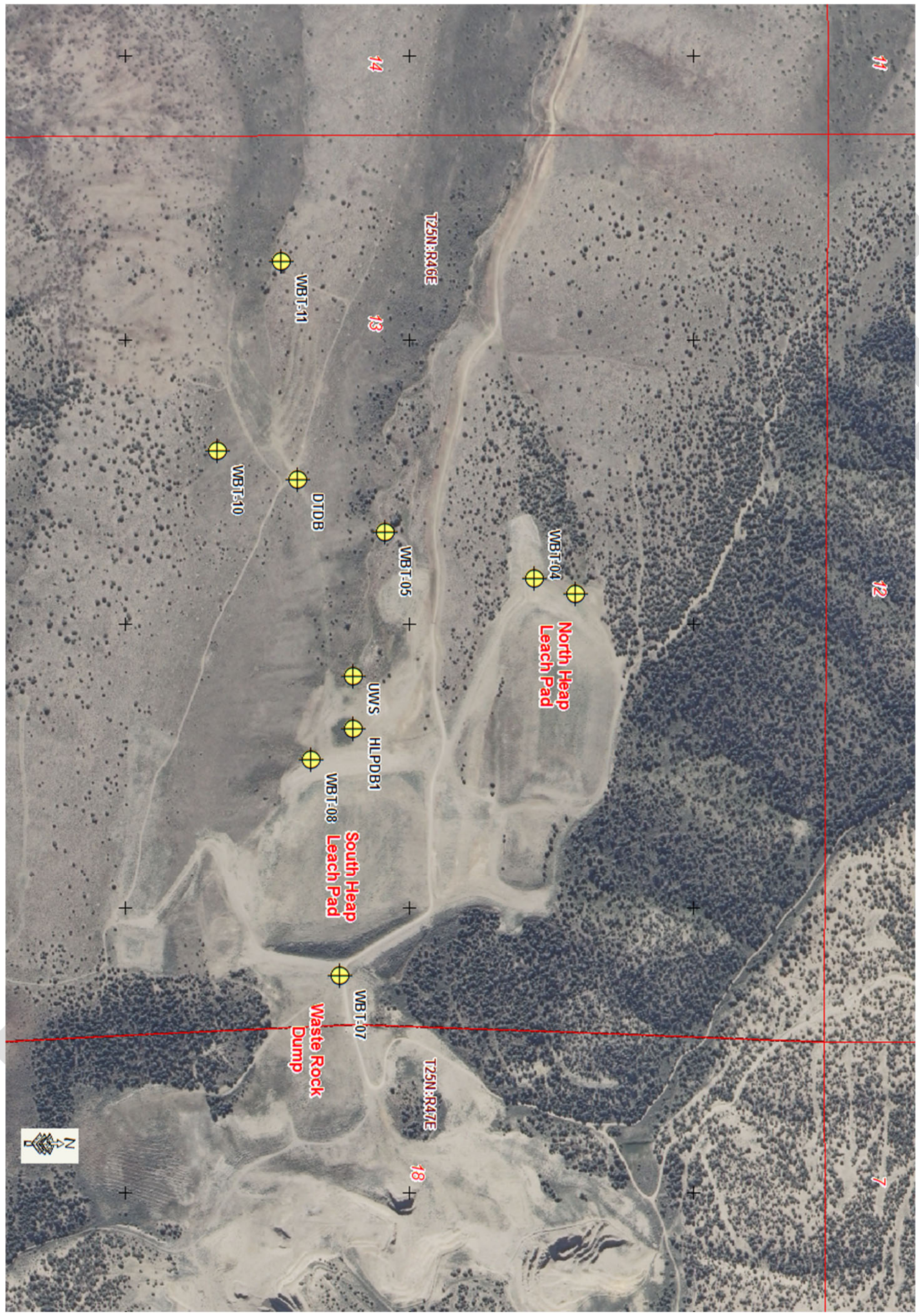

Figure 1 – Site map of the Toiyabe Mine Project

Geology

Toiyabe Mine ore was hosted in limestone, limey siltstone, and shale of the Roberts Mountain and Wenban Formations. Waste rock includes both calcareous rocks and siliceous argillite of the Vinini Formation located above the Roberts Mountain Thrust. Minor Tertiary intrusive rocks are present near ore zones.

The ore is strongly oxidized, locally silicified, and contains micro-veinlets of quartz, iron oxides, and calcite. It varies in color from gray to pale red to orange. Locally, some black, carbonaceous material is present. All ore and waste rock produced from the pits were oxidized. No sulfide ore was mined, and the materials have no acid generation potential.

The geology underlying the heap leach pads differs from that at the pits and dumps. The heap leach pads were constructed on an uplifted block of alluvium, which begins at the divide on which the pads were constructed, and which thickens to the west. Under most of the heap leach facilities, the alluvium is between 150 ft and 550 ft thick. On the eastern side of the South Heap leach pad near the divide, the alluvium thins to less than 20 ft. Surficial alluvial materials are comprised of medium to well-graded sand and gravel, with cobbles and boulders (SRK, 1986). Geologic drill logs indicate moderate clay content. Underlying bedrock consists predominantly of dolomite, siltstone, mudstone, and shale.

Prior to construction, surface soils were mapped, and fourteen test pits were completed in the area of the leach pads (Environmental Assessment, dated 12/86). Surficial soils were mapped as Handy clay loam and gravelly loam with good profile development and were up to 20 inches thick. These soils were removed and stockpiled at the site.

Two boreholes were drilled in 1999 near the location of the proposed subsurface infiltration system to the southwest of the heap leach pads. One of the boreholes was subsequently completed as a groundwater monitoring well. Logs from these holes confirm that the stratigraphy comprised mixed alluvial material to the drilled depth of approximately 310 ft. The alluvium encountered in these holes is similar to that encountered during drilling and test pit exploration in the vicinity of the heap leach pads.

No active faults are known to exist in the vicinity of the mine.

Pits

The mine has three separate pits, the North Pit (also referred to as 401), the Main Pit and the South Pit. Table 1 below provides the approximate dimensions of the various pits. The pit floors are several hundred feet above the water table, and dewatering was never required. However, fracture-controlled groundwater, the depth of which varies widely on a seasonal basis, may exist as little as 40 feet below the bottom of the South Pit. No accumulation of persistent meteoric water in the pits has been observed.

Table 1. Pit Dimensions

Identification	Length, feet	Width, feet	Depth, feet
North Pit (401)	1000	400	300
Main Pit	400	600	200
South Pit	900	500	220

Total surface area disturbance of all pits is approximately 41 acres.

During operation, approximately 7.8 million tons of material was removed from the pits, including 2.4 million tons of oxidized gold ore and 5.4 million tons of waste rock. Of this amount, approximately 2.2 million tons of waste rock from the South Pit was used to backfill the northwest extension of the Main Pit, thereby splitting the Main Pit into two separate pits: Main Pit and North Pit.

Post-closure monitoring of the North Pit, Main Pit and South Pit requires quarterly of the pits for ponded water and, if ponded water is present, to take a field pH, field specific conductance, photos, and a water quality sample (Profile III). The Permittee will also be required to inspect annually (Spring) all pits for stability, safety and access restriction.

Waste Rock Dumps

Two waste rock dumps, Dump No. 1 and Dump No. 2, are located west of the pits and east of the north-south trending surface water drainage divide. Dump No. 1 contains approximately 1.4 millions tons of material and Dump No. 2 contains approximately 1.2 million tons of material. Both dumps have been regraded and revegetated. No seepage has been observed from the toes of dumps.

Waste rock produced from the pits included calcareous and silicic argillite rocks of the Vinini Formation, located above the Roberts Mountain Thrust. No sulfide material was encountered and this material exhibited no acid generation potential. Acid-base accounting analysis of the waste rock indicated ratios of acid neutralizing potential (ANP) to acid generating potential (AGP) ranging from 796 to 1,283 for Dump No. 1 and 560 to 1,335 for Dump No. 2.

The Permittee is required to inspect the waste rock dumps annually (spring) for mass and physical stability, and designate surfaces as dry, damp, or wet (visible flow or ponding). Should a discharge be present from any portion of any waste rock dump, the Permittee shall measure field pH and field specific conductance; collect and submit a water quality sample for a Nevada Division of Environmental Protection (Division) Profile I analysis, take photos, and document the event.

Heap Leach Pads

There are two heap leach pads on the mine site. The South Heap Leach Pad (Heap #1) covers approximately 14.2 acres and contains approximately 1.4 million tons of processed ore, of which about 0.9 million tons were crushed and agglomerated. The South pad was constructed on a base consisting of approximately 500,000 tons of compacted mine waste hauled from the Main Pit area. It was placed as engineered fill at the head of a westward-sloping drainage and graded at a 3-percent slope toward the process ponds. A 14-inch thick clay subbase was compacted over the mine waste prior to installation of a 3/8-inch thick geotextile blanket and an overlying 60-mil High-Density Polyethylene (HDPE) liner.

The North Heap Leach Pad (Heap #2) covers approximately 17 acres and contains approximately 1.0 million tons of processed ore of which about 0.9 million tons were crushed and agglomerated. The North pad was constructed on a leveled ridge crest; the base was built by grading (5-percent slope to the west) and compacting the existing clay loam soil material. A 40-mil HDPE liner was installed over a 3/8-inch-thick geotextile blanket liner protector.

In the Fall of 2000, both heaps were reshaped and regraded to a nominal 3H:1V (horizontal:vertical) slope. Topsoil/growth media, at a minimum of 18-inches thick, was placed and seeded. Prior to these reclamation activities, in order to stabilize heap draindown chemistry, the heaps had undergone seasonal rinsing for seven years. Since March 2000, the weak acid dissociable (WAD) cyanide concentration in the heap draindown solution at the heap leach pad distribution box, (HLPDB1), where solution flows into the evapotranspiration basin (ETB), has been less than 0.2 mg/L (milligrams per liter) and pH has been within the range of 6.5 – 8.5 standard units (SU) since March 2001. Solution at the dosing tank distribution box (DTDB), which discharges solution to the infiltration field, has had WAD cyanide less than 0.2 mg/L since June 2004, and pH has been within the range of 6.5 – 8.5 SU since inception.

Leached ore consists of limestone, limey siltstone and shale of the Roberts Mountain and Wenban Formations. Minor amounts of Tertiary intrusive rocks were present near ore zones. All ore produced from the pits was oxidized material; no sulfide material was encountered, these mined materials exhibit no acid generation potential. Acid-base accounting of representative spent heap leach material (ore) composites indicated net neutralization potential (NNP) of +243 and +284 tons $CaCO_3$/kilotons of material for the South and North heaps, respectively, with resulting ratios of ANP to AGP of 784 and 916, respectively.

Review of the heap draindown flow rates from the Fall of 2000 through Spring of 2024 indicates seasonal variability ranging from zero recordable flow to 12 (gallons per minute) gpm, with an overall average flow rate of approximately 2.7 gpm. Long-term draindown modeling predicted an average of less than 0.3 gpm. Toiyabe experienced three wet winters which were encountered in 2006/2007, 2016/2017, and 2023/2024 and resulted in short-term seasonal spring draindown increases of approximately 12 gpm, 6 gpm, and 5.2 gpm respectively. The draindown flow rate, as of 2Q 2024, was 5.2 gpm. Table 2 below provides average concentrations and ranges and current water quality for the heap leach pad draindown (74 sampling events – March 1999 thru October 2023) and dosing tank distribution basin (14 sampling events May 2003 thru June 2019). Average solution concentrations are based on an average of all available analyses.

Table 2 - Average Concentration, Range, and Current Concentration of Heap Leach Pad Draindown Distribution Box (HLPDB1) and Dosing Tank Distribution Box (DTDB)

Parameter	Division Profile I Reference Values (mg/L, except as noted)	HLPDB1 Average Concentration and (Range) (mg/L, except as noted)	HLPDB1 Current Concentration as of 3Q2024 (mg/L, except as noted)	DTDB Average Concentration and (Range) (mg/L, except as noted)	DTDB (a) Current Concentration as of 2Q2024 (mg/L, except as noted)
Alkalinity, HCO_3	---	283 (130 – 371)	190	164 (122 – 259)	220
Arsenic	0.010	1.31 (0.293 – 2.8)	1.9	1.18 (0.733 – 1.79)	1.4
Iron	0.6	0.37 (0.025 – 1.0)	0.54	0.362 (0.024 – 0.58)	0.32
Mercury	0.002	0.0088 (0.001 – 0.027)	0.0078	0.0105 (0.002 – 0.016)	0.22
Nitrate + Nitrite (as N)	10	42 (3.35 – 90)	30	49.4 (9.5 – 74.2)	14
pH (SU) (b)	6.5 – 8.5	8.2 (6.25 – 10.1)	7.11	8.02 (7.45 – 8.50)	8.06
Sulfate	500	378 (83 – 710)	430	389 (152 – 551)	310
Total Dissolved Solids	1,000	1,335 (296 – 2,300)	1,100	1,364 (70 – 1,860)	880
WAD Cyanide	0.2	0.080 (0.010 – 0.48)	0.075	0.161 (0.020 – 0.230)	0.072

(a) DTDB last sampled in 2nd Quarter 2024 as it was dry in 3rd Quarter 2024
(b) SU = Standard Units

Continued monitoring of combined heap leach pad draindown solution chemistry and flow will be achieved through sampling of HLPDB1, located prior to entering the ETB. The water level in the ETB will also be monitored. An additional sample water quality and flowrate measurement will be collected at the DTDB, located prior to discharge to the infiltration field dosing tank. These data will help to determine the effectiveness of the ETB on flowrate and chemistry.

Process Ponds

There were three solution ponds on site: barren and pregnant process solution ponds, and an emergency overflow pond, which was located downgradient of the South Heap (Heap #1). Both the barren and pregnant solution ponds each had a maximum capacity of approximately 1.5 million gallons. The barren and pregnant pond liner system consisted of compacted clay overlain by two 40-mil HDPE liners. The leak detection system for these two ponds consisted of a polyethylene drainage net and two-inch diameter HDPE pipe installed between the two liners.

The emergency overflow pond, which had a maximum capacity of 1.0 million gallons, was permanently closed during the first phase of closure activities. The liner was removed and the fill material used during construction of the pond was excavated and utilized during heap leach pad cover placement.

The barren pond was permanently closed and reclaimed in 2003. Pond closure consisted of in-place stabilization of sediment by covering with a 24- to 30-inch thick layer of select backfill and cutting and folding the exposed HDPE liners over the backfilled floor of the pond. Process building foundation demolition material was then graded into the backfilled part of the barren pond and completely covered by backfilling the pond with local material to approximate natural grade with a finished free-draining surface to promote runoff.

In December 2001, to reduce the reliance on the infiltration field during the growing season, the pregnant pond was converted into an evapotranspiration basin (ETB). The evapotranspiration basin was not modeled for either evapotranspiration or chemical attenuation ability. Excess draindown solution from the ETB is directed to the sub-surface infiltration field for long-term disposal.

The system collects fluid via two 10-inch solid HDPE return lines, from the North and South heap leach pads, which are joined and routed to the distribution box (HLPDB1). The fluid then flows into the ETB via a buried 4-inch diameter, schedule 40, polyvinyl chloride (PVC) pipe. Once the ETB fills to design capacity near the soil-gravel interface, fluids are backed up to the HLPDB1 and overflow 1,400 feet via buried 6-inch diameter, schedule 40, PVC pipe to the dosing tank distribution box (DTDB). The DTDB then overflows to two dosing tanks, each equipped with twin “dosing siphons”. The fluids released from the siphons are routed to the infiltration field, which consists of a series of lateral trenches and enclosed perforated and solid pipe to distribute and percolate solution into shallow subsurface soils.

Distribution box HLPDB1, a precast concrete vault, was installed immediately north of the evapo-transpiration basin to direct heap draindown to the ETB. The vault also allows for measuring of the draindown flowrate and sample collection. A similar vault was installed for distribution box DTDB to direct flow to the dosing tanks.

The infiltration field is constructed approximately 1,400 feet west-southwest of the evapotranspiration basin (converted pregnant pond). It consists of two dual-dosing siphon systems which convey solution through two 6-inch diameter pipes to four distribution reservoirs, two reservoirs for each 6-inch pipe, each of which then discharges the solution through an infiltration chamber consisting of three staggered lengths of ¾-inch diameter perforated PVC piping. The dosing system is designed such that, in the event of failure of both siphons, all solutions would be split using a system of T-connections in series to convey solution to the infiltration chambers. The entire infiltration field encompasses approximately 5 acres.

All solution conveyance piping was single-walled. At the time of submittal (2000), and since discharge to the infiltration field is considered a controlled solution treatment and disposal method, the use of single-wall piping was approved. However, current Division policy would likely require the use of double-walled pipe for any buried solution conveyance, regardless of the long-term treatment method.

Structures:

Non-process buildings and facilities included an office trailer, security trailer, a shed housing two diesel generators, a laboratory building, a supply trailer, a 10,000-gallon diesel fuel tank, and a 5,000-gallon gasoline tank. Process–related facilities included the mine shop, ore crusher, agglomeration facility and cement silo. These buildings and facilities, including the extraction tanks and related piping located in the process building, were removed between 2000-2002. The process building shell was removed in 2003. A steel I-Beam structure, trolley, and concrete lid and a steel IB-beam structure and concrete lid from monitoring locations HLPDB1 and DTDB, respectively, were removed in 2022. No additional modifications have been made since the 2017 renewal.

C. <u>Receiving Water Characteristics</u>

The Toiyabe Mine is located at an elevation of 7,200 feet above mean sea level (amsl). The estimated average annual precipitation, ranges from 14.7 inches to 17.6 inches, occurring mostly as snow. Estimated pan evaporation is 41 inches. Drainages within the Project boundary are primarily ephemeral and typically flow only in response to snowmelt and rainfall. One exception is Wood Springs Canyon, which has two known intermittent springs, Upper Wood Spring (UWS) and Upper Wood Spring No. 2 (UWS2), which typically have a longer seasonal flow. Upper Wood Spring is located approximately 150 feet west of the former solution ponds and flows until late summer; Upper Wood Spring No. 2 is approximately 2,600 feet downgradient and typically goes dry by mid-summer. There are no springs or seeps in the vicinity of the waste rock dumps or pits and there are no known downstream users of surface water originating at the site.

Two production wells previously serviced the mine. Due to the lack of groundwater resources onsite, the main water supply well was located approximately 6.7 miles south of the mine on the flank of Grass Valley and produced up to 150 gpm. An auxiliary well, TWS, is located between the two waste rock dumps, taps into groundwater in fractured bedrock and was used only on an intermittent basis, as it produced less than 10 gpm. Quarterly monitoring data, beginning in 1996, has shown this well to contain naturally elevated concentrations of arsenic, ranging from 0.042 to 0.122 mg/L, and indicating an overall slightly increasing trend.

<u>Groundwater Monitoring Wells</u>

Three types of groundwater zones/regimes have been identified at the mine: perched zones in the alluvium near the heaps; an alluvial groundwater zone; and a fracture-controlled groundwater zone found in the bedrock near the dumps and pits. Below the heap leach pads, shallow perched zones occur at depths of less than 20 feet and at approximately 60 feet; an alluvial aquifer exists at depths ranging from 116 feet below ground surface (bgs) on the east side of the pads to 281 feet bgs on the west side of the pads. Near the dumps, the static water level was measured at 124 feet bgs in fractured bedrock. Drilling in the pit area to depths exceeding 1,000 feet bgs intersected variable amounts of fracture-controlled groundwater at varying depths.

Groundwater monitoring beneath the North leach pad had been accomplished by well WBT-04, which is located approximately 500 feet east of the pad. Monitoring of the groundwater quality beneath the South leach pad has been accomplished through monitoring well WBT-08, located approximately 10 feet from the southwest toe of the heap. Groundwater downgradient of the ETB has been monitored by WBT-05, located approximately 1000 feet directly downgradient of the ETB.

At a meeting between Cortez and the Division on 15 May 2012, Division personnel suggested that since Monitoring Well WBT-04 has been sporadically dry since June 2006, monitoring well WB-02 should be investigated and possibly sampled as a replacement for WTB-04, going forward. Field investigation by Cortez indicated that WBT-02 was also dry so water samples have, since the third quarter of 2011, been taken from monitoring well WBT-01 as a replacement for WBT-04. Both wells WBT-04 and WBT-01 are located downgradient of the North heap leach pad (HLP). WBT-04 is approximately 198 feet downgradient from the western toe of the heap whereas WBT-01 is approximately 173 feet downgradient. The wells are approximately 300 feet apart from each other in a north-south direction. The wells were both drilled in the same formation, to a total depth of 300 feet bgs and screened at 295 feet to 300 feet.

Wells WBT-01 and WBT-4 have been monitored since 2001, and with the exception of arsenic, which averages 0.019 mg/L for both wells, comparison of the water quality correlates very well, and the groundwater meets Division Profile I reference values for all constituents.

Monitor well WBT-07, located upgradient of the South Pad, meets all Division Profile I reference values with the exception of arsenic. Arsenic values, as compared to background well TWS, have been elevated. As part of the 2002 renewal, a Schedule of Compliance (SOC) item was included in Permit Part I.B.2 that required an investigation into the elevated arsenic. SRK Consulting submitted a report in July 2004, entitled “Toiyabe Mine Draft Investigation Plan”, as required by the SOC item. This report essentially stated that the auxiliary water well, TWS, is representative of background groundwater chemistry and that, at the writing of the report, the concentration of arsenic in WBT-07 was decreasing/trending towards pre-2000 levels. Review of the arsenic concentrations since 2003, i.e., 0.543 mg/L, indicates an overall decreasing trend. As of July 2017, the arsenic concentration was 0.075 mg/L.

However, the upward trending nitrate and zinc concentrations in well WBT-07, although not exceeding the Profile I reference value, are of concern to the Division. The background groundwater concentration for nitrate at TWS is non-detect (0.1 mg/L), whereas the nitrate concentrations at WBT-07 suggest an upward trending, albeit erratic, pattern. Historic results range from a low of 0.5 mg/L to a high of 6.1 mg/L, having an average concentration of 3.4 mg/L. Zinc concentrations also indicate an occasional increasing level since the fourth quarter of 2003, ranging from approximately 0.02 mg/L to 4.6 mg/L. As there is no zinc present in the HLPDD, the presence of zinc may be a result of localized mineralization or poor sampling practices. Until such time as the concentration either decreases to background levels or stabilizes at some concentration, the Permittee will be required to continue monitoring of these wells. If concentrations exceed the Division reference values, an investigation and corrective action plan may be required.

Additionally, in 2012, the Division became concerned with the elevated levels of alkalinity in well WBT-07. The Permittee initiated a study to investigate the concern, the conclusions of which are provided below:

- The total alkalinity concentration in WBT-07, while greater than that of other monitoring wells at the Toiyabe site (approximately 100 to 200 mg/L as CaCO3), ranges from 550 to 730 mg/L CaCO3. This is similar to the concentration observed in WBT-07 since 2000. Other constituents have typically remained constant in WBT-07 over the period of record.
- The alkalinity in WBT-07 occurs at a circumneutral pH and total alkalinity is consistent with the carbonate alkalinity (after accounting for unit conversions). Therefore the elevated alkalinity appears to be total carbonate alkalinity, rather than a result of hydroxide alkalinity. Hydroxide alkalinity is commonly used for maintaining pH in cyanide leach solutions.
- Based on the observations and interpretations that (a) the elevated alkalinity in WBT-07 is bicarbonate alkalinity, (b) the residual draindown solution from the HLP has much lower alkalinity than in WBT-07, (c) the sodium enrichment observed in HLPDB1 is absent in WBT-07, and (d) the calcium and magnesium enrichment observed in WBT-07 is absent in HLPDB1, the anomalous water quality observed in WBT-07 appears to not be associated with heap leach process solutions.
- The partial pressure of carbon dioxide (CO_2) in WBT-07 is elevated relative to other wells at the site, but has generally decreased over the period of record. The water composition in WBT-07 is consistent with the weathering of magnesium and calcium carbonate minerals in response to elevated CO_2.

Monitoring of the groundwater beneath the infiltration field will continue to be accomplished through wells WBT-10 and WBT-11. Well WBT-10 is located approximately 100 feet northeast (up-gradient) of the infiltration field. Groundwater generally flows in a southwesterly direction.

Well WBT-11 was installed in November 2002 and is located approximately 200 feet directly downgradient of the furthest lateral extent of the infiltration lines. During drilling and installation of well WBT-11, lithological data were collected that indicated zones of fine-grained material which included sandy and gravely clay, clayey sands, clayey gravels, silty clayey sands and clay in suspension encountered throughout the entire horizon.

Both WBT-10 and WBT-11 water quality data indicates that groundwater meets all Division Profile I reference values, however, comparison of nitrate concentrations in groundwater from WBT-11 background (based on initial chemistry when drilled) to current chemistry indicate that the nitrate has more than doubled from the background level of approximately 2 mg/L to an average of approximately 5.3 mg/L. In contrast, WBT-10 has remained relatively stable, averaging approximately 1.8 mg/l.

Well WBT-10 shall be monitored on an annual basis whereas WBT-11 shall continue to be sampled on a quarterly basis to verify background water quality adjacent to and downgradient of the infiltration field and monitor groundwater chemistry. If either well indicates elevated levels of constituents above the Division Profile I reference values, the operator may be required to investigate and remediate, as warranted.

Table 3 – Groundwater Monitoring Well Construction Details & Location

Monitor Well I.D.	Total Depth, Feet bgs	Depth to Water, Feet bgs	Screen Interval, Feet bgs	Location Relative to Component
North Heap Leach				
WBT-01	300	273	295 – 300	Downgradient
WBT-02	300	240	295 – 300	Cross-gradient
WBT-04	300	280	295 - 300	Downgradient
South Heap Leach				
WBT-05	120	96	115 - 120	Downgradient
WBT-07	240	164	235 - 240	Upgradient
WBT-08	200	185	195 - 200	Downgradient
Infiltration Field				
WBT-10	310	278	245 - 305	Up-gradient
WBT-11	220	165	180 - 210	Downgradient

Table 4 - Average Concentration, Range, and Current Concentration of Monitoring Wells WBT-10 and WBT-11

Parameter	Division Profile I Reference Values (mg/L, except as noted)	WBT-10 Average Concentration and (Range) (mg/L, except as noted)	WBT-10 Current Concentration as of 3Q2023 (mg/L, except as noted)	WBT-11 Average Concentration and (Range) (mg/L, except as noted)	WBT-11 Current Concentration as of 3Q2024 (mg/L, except as noted)
Alkalinity, HCO_3	---	174 (140 - 187)	150	156 (120 - 178)	140
Arsenic	0.010	0.009 (<0.005 – 0.016)	0.01	<0.005 (<0.005 –0.013)	0.0053
Iron	0.6	<0.020	<0.010	<0.020 (<0.020 – 0.064)	<0.010
Mercury	0.002	<0.001	<0.00045	<0.001	<0.00045
Nitrate + Nitrite (as N)	10	1.8 (1.5 – 2.3)	1.7	5.3 (2.7 – 6.9)	2.8
pH (SU)	6.5 – 8.5	8.1 (6.08 – 8.5)	8.19	8.1 (6.1– 8.4)	6.83
Sulfate	500	25 (22 - 42)	30	46 (37 - 57)	38
Total Dissolved Solids	1,000	270 (130 - 670)	240	348 (220 - 390)	270
WAD Cyanide	0.2	<0.010 (<0.010 – 0.030)	<0.010	<0.010 (<0.010 – 0.010)	<0.010

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 the public notice is posted to the Division website. 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 or 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. Pathway to Final Closure and Permit Termination

In accordance with NAC 445A.409 and 445A.446, for final closure and Permit termination the Permittee must demonstrate to the Division that: 1) all sources at the facility have been stabilized, removed, or mitigated; 2) any applicable requirements in NAC 445A.429, 445A.430, and 445A.431 have been achieved; and 3) sufficient post-closure monitoring has occurred to verify the adequacy of these actions to ensure the long-term protection of waters of the State, human health, and wildlife under the physical, chemical, and climatic conditions reasonably expected to occur at the site. If the facility includes a long-term trust and/or requires perpetual treatment or maintenance, post-closure monitoring may never be reached and the Division may not be able to terminate the Permit.

The pathway to final closure and Permit termination at this facility includes the following specific actions:

- Monitor the facility through major storms and large winter/spring seasons to verify that closed components and the fluid management system remain functional with no potential for degradation of waters of the State;
- Submit a final closure report compilation which includes each component at the Toiyabe Mine Project; and
- Discuss with the Division whether the facility is ready for final closure and Permit termination. If so, submit for review and approval a request for final closure and Permit termination including a demonstration of compliance with all applicable closure

requirements (e.g., NAC 445A.379, 445A.409, 445A.424, 445A.429, 445A.430, 445A.431, 445A.446, 445A.447).

The Division may require additional actions if warranted in accordance with site conditions and applicable statutes, regulations, orders, and Permit conditions.

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 well(s) and surface water. Specific monitoring requirements can be found in the Water Pollution Control Permit.

The site is in post-closure monitoring. The heap draindown chemistry has remained stable since the 2002 renewal and is of relatively good quality. The modeled long-term heap draindown curve indicates a discharge of less than 0.3 gpm. The remaining fluid management components, the ETB, infiltration field, and groundwater monitoring wells will continue to be monitored. The ETB is a double-lined former process pond and the infiltration field has its own upgradient (WBT-10) and downgradient (WBT-11) monitoring wells. These well locations are designed to recognize any potential impacts to waters of the State in the least amount of time.

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 1340 Financial Boulevard, Suite 234, Reno, Nevada 89502-7147, (775) 861-6300, for additional information.

Prepared by: Crystal Borotto
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