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

Permittee Name: **Walker Lane Minerals Corp**

Project Name: **Isabella Pearl Mine Project**

Permit Number: **NEV2009102**
Review Type/Year/Revision: **Renewal 2024, Fact Sheet Revision 00**

A. Location and General Description

Location: The facility is located on public land in Mineral County, within Sections 27, 34, and 35, Township 9 North (T9N), Range 34 East (R34E), and Section 3, T8N, R34E, Mount Diablo Baseline & Meridian, approximately 6 miles north of the town of Luning, Nevada.

Site Access: From Hawthorne, Nevada travel east on US Highway 95 approximately 25 miles to the junction with Nevada State Route 361, just west of the town of Luning. Turn north on State Route 361 and travel approximately 5 miles to a maintained dirt road that turns off to the west. Follow this road approximately 0.6 miles to another dirt road that turns off to the north. The project area is approximately 1 mile north of this intersection.

General Description: The Isabella Pearl Mine Project facilities consist of an open pit mine, sulfide ore stockpile, waste rock disposal facilities, a heap leach pad, a carbon-in-column (CIC) circuit with Adsorption, Desorption and Refining (ADR) process plant for processing pregnant heap leach solution, a pregnant solution pond, a barren solution/storm event pond, primary, secondary, and tertiary crushers, upgradient and downgradient groundwater monitoring wells, a water supply well, and ancillary facilities for administrative, operational, and maintenance support. As proposed, the project has a life of up to seven years and has been permitted at an ore production rate of 2,000,000 tons per year. All facilities are required to be designed, constructed, and must be operated and closed in such a manner as to prevent discharge or release of process fluids in excess of those standards established in regulation except for meteorological events which exceed the design storm event.

B. Synopsis

General

The Isabella Pearl Mine Project is located within the historic Santa Fe mining district, with mining activity at the site dating to the 1930s. Most recently, the Combined Metals-Homestake Mining joint venture conducted mining and exploration activities, including the construction of a small heap leach pad (approximately 1,500 tons), at the site, which were terminated in 1990 due to financial considerations. The claims were transferred to Isabella/Pearl, LLC in 2004. Walker Lane Minerals Corp (the Permittee), a wholly owned subsidiary of Gold Resource Corporation, acquired the Project in August 2016.

In 2018, the Permittee commenced construction of the Project Facilities, and in the 4th Quarter of 2019, completed construction of all aspects of the site. To date, the Permittee

has maintained operational status, with no intended or unintended shut-downs or temporary closures.

Permit Modifications

The original Permit was issued to Isabella Pearl, LLC and became effective on 18 June 2013. The Permit was for open pit mining, waste rock disposal, a heap leach pad, two process/stormwater ponds, and a process plant that included a CIC circuit with loaded carbon to be shipped off site for gold refining and carbon regeneration.

The Permit was transferred to Walker Lane Minerals Corp (WLMC) with Division approval of a major modification on 22 June 2017. The 2017 major modification included the addition of an ADR plant with a refinery, which increased the process solution application rate from 1,200 gallons per minute (gpm) to 1,400 gpm, and extended the liner from the west pond under the processing plant and cyanide offloading area.

During the review and processing of the 2017 major modification, the Permittee submitted an Engineering Design Change (EDC) to increase the size and volume of the two process ponds from 3 million gallons to 11 million gallons each. The EDC was approved by the Division as an element of the major modification on 22 June 2017.

In the 2018 Permit renewal, the Permittee requested a change in the name of the Project from Isabella Pearl Joint Venture to Isabella Pearl (IP) Mine Project. Between the time of the approval of the 2017 major modification and the submittal of the application for the 2018 Renewal, the Permittee revised facility design plans to correct certain discrepancies and conflicts. The revised facility design plans and specifications were submitted as an EDC and approved by the Division on 2 August 2018. Included in these revised design documents the two parallel pregnant solution pipelines were increased from 8-inch diameter high density polyethylene (HDPE) to 10-inch diameter HDPE. Additionally, the closure cover growth media thickness on the waste rock was increased from 12 inches to 18 inches. The 2018 Permit renewal was approved by the Division on 20 October 2018.

In May 2021, the Permittee submitted an application for a major modification. The 2021 major modification included an expansion of the existing heap leach pad (Phase 2), expansion of the mining activities, and re-design of the location of the sulfide waste/ore encapsulation area. The major modification was submitted due to the discovery of additional economic-grade ore within the current mine area, and a small satellite pit located directly west of the existing pit. This discovery led to an increase in gold-bearing ore to be mined, which led to the need for additional capacity on the heap leach pad. The Permittee submitted engineered design plans for the leach pad expansion as part of the May 2021 application. The final as-builts for the Phase 2 HLP expansion was approved in March 2022.

The approved expansion of mining and leaching has not had a notable effect on the processing design or constraints. Likewise, no changes were made to total annual tons mined and stacked. In addition, no changes to the flow rate of gold-bearing effluent were observed, no other changes to the mine plan were proposed at that time. The 2021 major modification was approved by the Division on 24 September 2021.

In March 2023, the Permittee submitted an application for a permit renewal. The 2023 renewal application included the removal of the site monitoring well P-12-34 (it was mined

out), removal of IPMW-4 from the monitoring locations (replaced with IPMW-4R), updates to the Offsite Ore Stockpile monitoring, the placement and processing of offsite ore and offsite loaded carbon.

Subsequently, in August 2023, the Permittee submitted *the Civit Cat Engineering Design Change.* The 2023 EDC included several minor changes, including a small expansion of the footprint of the previously authorized Civit Cat pit (a sub-pit within the Pearl Pit), the construction of an engineered stormwater diversion upgradient to the Civit Cat pit, and a deepening of the Pearl Pit by approximately 80 feet, down to a proposed final elevation of 5,084 ft above mean sea level (amsl).

BMRR ultimately incorporated the EDC into the permit renewal and approved this permitting action with the 2024 Renewal.

All other developments, facilities, activities, environmental protection measures and the reclamation plan will remain the same as previously authorized in the 2018 Mine Plan of Operations (MPO) and subsequent permit and MPO amendments and modifications. All protective and mitigation measures previously analyzed and authorized would apply to the proposed action described herein.

Geology

The proposed facilities are situated on an alluvial fan and pediment at the south foot of the Gabbs Valley Range. This area is bounded on the west by an unnamed ephemeral drainage which discharges runoff from a 3.5 square mile watershed which is north of the project site and extends to the top of the Gabbs Valley Range. The ridge lines are predominantly exposed bedrock.

Volcanic rocks of middle Tertiary age underlie much of the Project area, including intermediate lava flows and ignimbrite ash-flow tuffs. The volcanic rocks unconformably overlie Mesozoic sedimentary and granitic rocks which have been tectonically displaced and eroded to an irregular, dominantly buried surface.

The principal pre-Tertiary sedimentary basement unit in the project area is the Triassic Luning Formation, composed of medium to thick-bedded limestone with some dolomite and siliciclastic rocks. This formation is intruded by stocks and dikes of Jurassic or Cretaceous diorite, porphyritic quartz monzonite, and granite. The basement rocks are overlain by sequences of late Oligocene ash-flow tuffs which exceed 3,000 feet in thickness and include minor associated lavas and hypabyssal intrusive rocks. Oligocene volcanic rocks are overlain by early to middle Miocene Lavas of Mount Ferguson, and are locally crosscut by associated rhyolitic intrusions. The younger volcanic rocks are the principal hosts for gold and silver mineralization. Other precious metal districts of central Walker Lane (Borealis, Aurora, and Paradise Peak) are temporally and spatially related to volcanic rocks of similar ages.

Three major fault zones trend through the project region. The Gumdrop Hills Fault Zone passes 1.7 miles southwest of the project boundary at its nearest approach. The Bettes Well – Petrified Springs Fault Zone passes 3.8 miles northeast of the project boundary at its nearest approach. The Benton Spring structure is a broad zone of en-echelon shearing that traverses the project site at an uncertain location. All three of these fault zones show no

evidence of movement since the late Quaternary and are thus considered to be inactive.

Alteration and mineral assemblages of the mineralized deposits in the Isabella, Pearl, Scarlet, and Civit Cat pits, including widespread argillic alteration, indicate that the deposits belong to the high sulfidation class of epithermal mineral systems. In this type of deposit, silicification at the core generally grades outward into argillation, which then grades into propylitically altered rocks. Silicification, which is associated with gold, is localized by faults and shears, and in many areas silica has replaced large masses of both the volcanic and granitic rocks.

Shallow Isabella mineralization is hosted mostly by tuff and is entirely oxidized, very siliceous, and contains numerous vugs. Gold occurs as very small (< 10 micron), liberated particles in cavities and along fracture surfaces. Civit Cat mineralization is associated with the northwest striking, southwest dipping Civit Cat Fault. The controls on mineralization by the Virginia and Civit Cat faults, which have similar striking but opposing dips, result in northwest trending, roughly lens-shaped zones of mineralization that flank both sides of a graben-like structural trough.

The Pearl deposit is hosted in welded tuff and, to a lesser extent, in Cretaceous granitic rocks. Mineralization is largely controlled by the northwest striking, northeast dipping Virginia fault zone that marks the contact between granite on the southwest and volcanic rocks on the northeast. Strong silicification accompanies gold mineralization and is associated with fracture fillings and replacement of the welded tuff and granitic rock. Silicified, mineralized zones are usually strongly brecciated.

The oxidation boundary is depressed over and immediately around the Pearl deposit, with oxide mineralization extending to more than 500 feet below the surface. Gold within the oxide mineralization occurs as locked and liberated particles, as well as electrum.

The Scarlet Pit, first described and included in the May 2021 major modification, is a smaller satellite pit located away from the other pits north of the heap leach pad and northwest of the other pits. The Scarlet deposit is located within the oxide cap of bedrock that is comprised of rhyolite/rhyodacite crystal tuff. The matrix is pervasively and strongly replacement silicified. The Scarlet satellite pit is not expected to encounter the oxide/sulfide boundary during mining.

Mining

The Isabella Pearl Mine Project includes mining of oxide gold ore from the satellite Scarlet Pit and of oxide and sulfide gold ore from the Isabella, Pearl, and Civit Cat pits, which will eventually merge into a single pit. Approximately 8,000 tons of run-of-mine (ROM) and crushed oxide ore are produced daily. Prior to placement on the leach pad, the ore may be agglomerated with lime and pre-wetted with water or barren solution to enhance gold recovery. All equipment from the point of cyanide application is located on engineered containment.

Groundwater depth data collected for upgradient, downgradient, and in-pit monitoring wells (ranging from 300 to over 800 feet below ground surface [ft bgs]) and results of exploration drilling on the project site, indicate that the lowest extent of mining planned will not intercept the water table. Current mine planning would deepen the Pearl Pit by approximately 80 feet, down to an elevation of 5,084 ft amsl, down froma previously approved elevation of 5,164 ft above mean sea level (amsl) to a final approved elevation

of 5,084 amsl. The water table in the location of the Isabella Pit has been confirmed to be 5,372 ft amsl. In addition, the Pearl Pit will be mined to an elevation of 5,084 ft amsl.

An updated hydrology report was prepared by Stantec in 2024 to support the *Civit Cat EDC* and renewal. The report supports previous hydrogeologic modeling that suggests that mining will not intercept the water table. Previously collected data, specifically water level measurements from well P-12-33 (abandoned, 2019) indicated that groundwater may be encountered below 5,133 ft amsl. The 2024 Stantec report states that if mining were to advance below 5,164 feet amsl, groundwater is likely to be minimal, and only encountered in discreet fracture zones, specifically the "Pearl Fault" zone. The 2024 update incorporates additional data from on-site monitoring wells, as well as an extensive database of exploration drilling in the Isabella Pearl pit area. This would likely result in a discharge of a few gallons per day at most, which does not present a material change to currently authorized and observed mining conditions. If mining is permitted to progress below the permitted 5,164 feet amsl, Stantec recommends that observations of groundwater be recorded and including locations, quantities, and association with lithological or structural features.

The Civit Cat sub-pit is part of the Pearl Pit with a final pit bottom elevation of 5,538 ft amsl, well above groundwater observations. As no pit lakes are expected to form, the Permittee does not anticipate the need for dewatering.

The Permittee will be installing a piezometer in the bottom of the Pearl Pit to monitor the groundwater elevation and collect more data. This will be completed at DATE

Waste Rock Disposal

Mined materials from all the existing and proposed pits will be handled in accordance with the authorized ore and waste rock handling procedures summarized in the 2018 MPO, WPCP and described in detail in the Project's Waste Rock Management Plan (WRMP) (Tierra 2018; Tierra 2022). In accordance with the previously authorized WRMP, sulfide ore will be placed in the Sulfide Ore Stockpile for blending or to be shipped off-site for processing. Leachable (oxide) ore will be crushed and placed on the existing heap leach facility (HLF), which has enough capacity to handle the anticipated quantities of ore that will be generated from the proposed actions and all waste rock will be placed within the existing South Dump.

Waste rock from mining operations is disposed of in a designated facility south of the pits and east of the heap leach pad, as well as used to backfill the mined-out portions of the pit(s). The area set aside for waste rock disposal covers approximately 3,000,000 square feet and will be graded on all sides to maintain slopes of 3 horizontal to 1 vertical (3H:1V) or more overall slope at closure. Stability analysis of the waste rock disposal facility resulted in minimum static factors of safety of 1.63 during operation and 2.32 in reclaimed condition. Minimum pseudostatic factors of safety are 1.08 during operation and 1.45 in reclaimed condition. Drainage control features will be added as needed for long-term stability. Once graded, the waste rock disposal site will be capped with a 1.5-ft growth media cover.

An extensive characterization program was conducted on the waste rock using Meteoric

Water Mobility Procedure (MWMP) – Profile I, Acid Neutralizing Potential: Acid Generating Potential (ANP:AGP) testing, and humidity cell testing. The results showed that the unoxidized waste has a significant potential to generate acid, with a 40-week humidity cell pH of approximately 3.5 and exceedances of the Profile I reference values in leachate from the humidity cell and MWMP tests for aluminum, arsenic, cadmium, chromium, iron, lead, manganese, sulfate, thallium, and total dissolved solids. Oxidized Rhyolite waste showed little potential for acid generation, with 40-week humidity cell pH ranging from 6.5 to 7.0 and exceedances of the Profile I reference values in MWMP leachate for only aluminum (one sample at 0.67 milligrams per liter [mg/L]) and arsenic (one sample at 0.14 mg/L). Oxidized Rhyodacite waste also showed little potential for acid generation, with 40-week humidity cell pH ranging from 6.4 to 8.3 and exceedances of the Profile I reference values in MWMP leachate for only aluminum (one sample at 0.63 mg/L) and manganese (one sample at 0.15 mg/L).

Based on these results, a location has been chosen within the proposed Isabella Pit backfill area for the encapsulation of unoxidized waste rock. The unoxidized waste will be encapsulated within a minimum 40-foot-thick oxidized waste rock envelope on all sides (bottom, sides, and top). The oxide waste rock for this envelope will be set aside in an upper bench of the Isabella Pit backfill area. At closure, the encapsulation area will be graded to maintain a 3H:1V overall slope, then covered with 2 feet of oxidized waste, which will be compacted to 85 percent (%) of maximum dry density (ASTM-1557), then capped with a 1.5-foot growth media cover. This design, combined with a relatively low annual rainfall (approximately 4.5 inches per year) will ensure that waters of the State are not degraded by the unoxidized waste.

Mining of the oxide ore deposits will require removal and stockpiling of approximately 57,817 tons of sulfide ore with the intent to process at an off-site facility. If no off-site buyer can be found prior to mining of the sulfide ore, the sulfide ore will be treated as unoxidized waste and encapsulated accordingly. If an off-site buyer is found, then sulfide ore will be temporarily stockpiled in the northeast corner of the heap leach pad.

In the event that some or all of the stockpiled sulfide ore is not transported to an off-site facility for processing, the stockpiled ore will be moved to the unoxidized waste location for encapsulation.

Heap Leach Pad

Ore is crushed to ½-inch minus and may be agglomerated with lime or cement prior to pre-wetting with water or barren solution and placement on the heap.

The primary crushing circuit consists of a 48-inch x 20-foot vibrating grizzly feeder with a 22-inch x 48-inch jaw crusher fabricated as a single trailer mounted unit. The secondary crusher circuit consists of a 6-foot x 20-foot vibrating screen with a T300 cone crusher also fabricated as a trailer mounted unit. Tertiary crushing is by a second trailer unit identical to the secondary circuit. Conveyors connect the units sequentially and a silo adds lime/cement regulated by an automatic weight totalizer linked electronically to a belt scale. A drum agglomerator may be added at this point if clay content in the ore is too high. All segments of the system are covered by a wet dust suppression system and any conveyors where barren solution is applied to the ore prior to stacking are located on the heap leach pad containment.

The heap leach pad (Phase 1 and Phase2) covers approximately 1,900,000 square feet, including perimeter roads and berms. The leach pad has a series of internal longitudinal dividers to allow for solution separation. The pad liner system in the existing Phase 1 heap leach pad consists of 6 inches of prepared subgrade overlain by a geosynthetic clay layer (GCL) which is in turn covered by a 60-mil high density polyethylene (HDPE) geomembrane. The pad liner on the expansion will substitute out GCL for a bentonite-amended low-permeable clay layer. This will allow for better stability as the pad is expanded westward. The liner and piping system in the existing pad is connected to the new pad area. As the mining tonnage is not planned to increase, the total solution flow rate will remain the same as in the 2018 Permit.

Ore is placed in four 25-foot lifts by a moveable radial stacker or trucks to a maximum height of 100 feet above the synthetic liner. The setback between lifts is 45 feet, creating an overall slope of 3H:1V.

Solution is applied to active leach areas of the heap at an aerial rate of 0.005 gallons per minute per square foot (gpm/ft^2), with a total maximum permitted solution flowrate of 1,400 gpm. Pregnant solution is collected by a system of 4-inch diameter perforated HDPE pipes, arranged in a herringbone pattern on 20-foot centers, which convey fluid to 10-inch diameter HDPE header pipes. These in turn convey solution to the ponds, with shuttle valves providing control over the final destination – barren/stormwater pond, pregnant pond, or the process plant pregnant solution tank. The 4-inch diameter collection pipes on the heap leach pad are covered by a 14-inch layer of free-draining crushed ore (overliner) to protect the pipes. The total thickness of the overliner placed on the liner system is 18 inches.

The portion of the conveyance pipe that is between each leach pad cell and the ponds lies in lined secondary containment ditches which drain to the ponds. The liner system consists of a prepared subgrade, a 60-mil HDPE secondary liner, and an 80-mil HDPE drain-liner (or equivalent) as primary liner. A 36-inch layer of free-draining overliner material, a portion of which came from the unloading of the existing (~1985) heap leach pad, protects the 80-mil liner and the solution collection pipes from damage due to vehicle traffic. Any seepage collected between the leach pad primary HDPE liner and the GCL/bentonite layer reports to the pregnant pond leak detection sump via the pipe containment ditch. This is achieved by extending the GCL/bentonite layer over the 60-mil secondary liner which reports to the leak detection sump.

Stability analyses of the heap leach pad which reviewed several cross-sections in each mode of failure (block, circular, etc.) resulted in minimum factors of safety of 1.52 (static) and 1.10 (pseudostatic) during operation, and 2.60 (static) and 1.57 (pseudostatic) in the reclaimed condition. Analysis results met all Division minimum requirements.

Process Plant

The ADR plant consists of five 7-foot diameter vertical adsorption towers in series with a carbon screen on the barren discharge; a 3-ton carbon-stripping plant with a carbon conditioning and sizing screen; and barren and pregnant solution tanks. Electro-winning is done in a 150-cubic foot (ft^3) electrolytic cell. Smelting is done in a T-200 melt furnace. The strip heater and the furnace are propane fired.

Pregnant solution from the heap is pumped through the carbon columns where the gold is adsorbed. The barren solution from the last carbon column is screened and returned to the heap for further leaching. The loaded carbon from the first of the column stages is pumped to the strip vessel in 3-ton batches. The gold is desorbed in the strip vessel by heat and electrolytes. The strip solution then flows to the electrolytic cell, where the entrained gold is deposited on cathodes or as sludge. The cell discharge is reheated and circulated through the strip vessel. Once stripping is complete, the barren carbon is acid washed, sized, and returned to the adsorption circuit. The cathode washings and sludge at 85-90 percent gold from the electrolytic cell are dyed, mixed with fluxes, and melted into Dore bars.

The heap leach pregnant solution is conveyed via a closed-circuit pipeline to the pregnant tank at the ADR Plant. The pregnant solution is pumped from the pregnant tank to the feed box in the CIC circuit where it is contacted with activated carbon for extraction of the gold via carbon adsorption. The CIC circuit consists of five columns. Solution from the last column overflows to the barren tank where liquid sodium cyanide, fresh water and anti-scalant are added on an as-needed basis prior to the solution returning to the heap leach pad for additional leaching of the ore. Due to the special bilateral design, the heap and pipelines, pumps and valves can be used to drain and redirect any pregnant solution to the pregnant pond or from either the pregnant pond or the barren/stormwater pond to the barren tank or between ponds through the 3-foot weir should the need arise. The pregnant pond and the barren/stormwater ponds will be used as stormwater storage ponds not as process solutions ponds unless the need arises.

The plant site area is underlain by a 60-mil smooth HDPE geomembrane to provide a solution barrier 3 feet below the plant site and slab foundation. The geomembrane was graded to drain any solution in the plant site area to the east end of pregnant solution pond. The geomembrane also extends under the cyanide offloading pad.

The ADR processing plant is housed in a concrete-lined area with an 8- to 12-inch stem wall that provides a containment capacity of ll0% of the volume of the largest tank/vessel in each of the four separate containment areas in the plant. Any solution, if present, drains into the sumps to be pumped back into the circuit.

The cyanide and caustic offloading area is located directly south of, and adjacent to, the process plant. The truck pull-in area is underlain with 60-mil HDPE over a prepared subbase, and overlain by a 12-inch aggregate layer to protect the surface from damage due to vehicle traffic.

All process plant components, including the cyanide and caustic tanks, are contained within a concrete slab floor system, with 12-inch stem walls with sufficient volume to contain 110% of the full capacity of the largest vessel in the process circuit. The entire area is located over 60-mil HDPE secondary liner which directs any leakage to the pregnant pond.

Process Ponds

Two process ponds, the barren/stormwater pond and pregnant pond, are located immediately south of the heap leach pad. Although pregnant solution will normally be conveyed directly to the pregnant tank in the process plant, valves in the solution pipes allow the solution to be diverted to either of the two ponds, if necessary.

Each pond has overall dimensions of approximately 350 feet long by 350 feet wide, with a

depth of approximately 20 feet. The two ponds are connected by a weir 3 feet below the crest of each to allow overflow of one pond to be collected in the other. Total volume of each pond at 2 feet of freeboard is approximately 11 million gallons. The full volume of each pond at the pond crest is 13 million gallons.

Both ponds are designed with, (from the bottom), a 6-inch prepared subbase, 60-mil smooth HDPE secondary liner, and 80-mil HDPE drain-liner (or equal) as primary. The button side of the primary liner faces the secondary liner to create a flow path for fugitive solution to reach the leak detection sump. The leak detection sump is located on the south side of each pond and includes a 6-inch diameter perforated PVC pipe to allow monitoring and evacuation when necessary. Total fluid capacity of the gravel-filled sump as designed is 987 gallons.

The two ponds also provide storage volume for runoff from the heap leach pad due to the 25-year, 24-hour storm event within the 2-foot freeboard, and the 100-year, 24-hour storm event at the crest. This capacity includes 24 hours of drain-down from the heap leach pad due to power loss.

Stormwater Diversions

The facility design includes a system of stormwater diversion ditches to divert runoff around the crushing and process areas and into natural drainages. These include:

Heap Leach Pad Northwest Diversion – this channel protects the crusher and heap leach pad from runoff originating northwest of the facility, diverting the water to a natural drainage west of the heap leach pad. The channel is trapezoidal in cross- section with a working depth of 5 feet, a base width of 15 feet, and 3H:1V side slopes. The base and sides are armored with stone rip-rap with 50% of the material smaller than 24 inches in diameter (D_{50} = 24-inch).

While the 2021 Heap Leach Pad Expansion did not affect the Northwest Diversion Channel, a temporary stormwater diversion channel on the northwest edge of the Phase 2 HLF expansion was needed. Stormwater runoff will flow into the northern and western temporary perimeter channel and flow to the southeast after passing through the existing laydown yard. Stormwater runoff falling east of the stormwater basin from the crushing area north of the Phase 1 HLF will flow into the Phase 1 pad and eventually report to the solution ponds. The Phase 2 temporary diversion channel is channel is sized to convey the 1 in 25-year, 24-hour storm event with 6 inches of freeboard. The channel is a V-shaped ditch with 2H:1V side slopes that is 1-foot deep with a minimum longitudinal slope of 1.5%.

East Haul Road Diversion – The east side of the crusher pad and heap leach pad are protected by the haul road which passes along the perimeter of this area, creating a bermed diversion for any runoff originating from the pits or waste rock disposal facility. Water is diverted into a natural drainage southeast of the heap leach pad.

The 2024 *Civit Cat EDC* included the addition of an engineered stormwater diversion upgradient of the Civit Cat sub-pit.

Civit Cat Diversion – This channel upgradient of the Civit Cat sub-pit will divert non-contact stormwater around the pit. The siversion will be a permanent feature and was

designed in accordance with the NDEP statutory guidelines and regulatory requirements for closure and sized to handle a 500-yr, 24-hr storm event (1-ft freeboard) as a 2H:1V trapezoidal channel with grouted riprap at the entrance. Flow will be directed to a settling basin to allow for infiltration.

Ancillary Facilities

There are two petroleum storage areas, one at the crusher pad and one at the process area. Diesel fuel and lubricants are stored within the perimeter berm along with waste oil and petroleum contaminated soil waiting for transport off-site. The entire area of each are lined with 60-mil HDPE geomembrane and covered with a minimum 12-inch gravel overliner for liner protection.

The process area includes office buildings, sanitary facilities, and an assay laboratory. Chemical waste from the assay lab is containerized and taken off-site for disposal. A contractor's yard with vehicle maintenance facilities is located north of the crusher pad.

C. Receiving Water Characteristics

Bedrock throughout the project area has generally low permeability, but fracturing, weathering, and alteration have locally improved the ability of bedrock units to store water. A well developed for the Santa Fe Mine, located approximately 1 mile west of the proposed facility, encountered groundwater at a depth of 305 ft bgs and was able to produce approximately 100 gpm.

Three exploratory wells were drilled in 2010 in the deepest portion of the planned Pearl pit. Two encountered groundwater at depths of 410 ft bgs and 440 ft bgs, while the third was dry down to a depth of 380 feet. Neither of the wells which encountered groundwater produced enough for pump testing.

This investigation was followed up in 2012 with the drilling of two new monitoring wells and the rehabilitation of an existing well installed in 1973. The 1973 well is located within the Isabella Pit shell near the deepest bench. One new well was installed between the Isabella Pit and the Pearl Pit, and the second new well was installed at the point where the Pearl Pit will be at its deepest (P-12-33). All three of these wells have since been abandoned and mined out.

Profile I analyses of samples from the three wells showed exceedances of the reference values for aluminum (up to 2.3 mg/L), antimony (up to 0.021 mg/L), arsenic (up to 0.19 mg/L), fluoride (up to 6.2 mg/L), iron (up to 2.2 mg/L), manganese (up to 0.82 mg/L), total nitrogen (up to 24 mg/L), sulfate (up to 790 mg/L), and total dissolved solids (up to 1,900 mg/L). Most of the exceedances, including the total nitrogen, were from the Pearl Pit well which was in an area of previous exploration drilling.

The final pit floor elevation of the Scarlet Satellite Pit is expected to be 5,520 ft amsl. No water was encountered during exploration drilling within the depths planned for the Scarlet Satellite Pit. Therefore, no pit pooling is expected to occur. WLM plans to backfill the Scarlet Satellite Pit to a final pit floor elevation of 5,532 ft amsl, which will conform with the backfilling of a minimum of 20 feet above the projected ground water table. This will equate to the backfilling of approximately 15,600 cubic yards of backfill material. Backfill material will be hauled from the Isabella backfill area.

The Isabella Pearl pit was permitted to an elevation of 5,164 feet amsl in the 2018 Permit. With the 2023 Renewal, the Permittee was authorized to mine an additional three benches, deepening the Pearl portion of the Isabella-Pearl pit by 80 feet to an elevation of 5,084 feet amsl. As of 2024, mining operations have advanced to 5,164 feet amsl, which is 30 feet below the 2018 static groundwater elevation and have not encountered significant water. This lack of water is additional evidence that the encountered water was limited and likely only present in a perched system within isolated fractures.

In 2024, the Permittee submitted an update to the groundwater model that concluded that groundwater occurrence in the Isabella Pearl pit footprint has been identified at elevations above and below the proposed pit bottom elevation of 5,084 feet amsl. Dozens of exploration holes have been drilled to depths below the proposed pit bottom without encountering groundwater. Mining advancement to 5,164 feet amsl is below groundwater elevations encountered in MW-1 and PW-12-33; aside from minor seeps, groundwater has not been encountered. Low yields and inconsistent encounters with groundwater suggest that groundwater within the permitted and proposed pit volume is isolated to discreet fractures where groundwater has become perched due to low permeability of surrounding rock and clay-bearing fracture zones. It is anticipated that when mining advances below 5,164 feet amsl, groundwater is likely to be encountered, but limited to discreet zones, discharging a few gallons per day at most; this quantity of water does not present a material change to what was authorized in the 2018 Permit,

The following monitoring wells were previously used for monitoring at the site, but have since been mined out or abandoned:

1973 Well – Groundwater elevation was approximately 5,375 ft amsl from 2012 through 2018, when it was abandoned due to advancing mining. Located near the Isabella Pearl pit.

P-12-33 – Groundwater elevation was approximately 5,194 ft amsl from 2012 through 2018, when it was abandoned due to advancing mining. Located within the Isabella Pearl pit footprint.

P-12-34 – Groundwater elevation was approximately 5,175 ft amsl from 2012 through June 2018, when this well rapidly declined and became dry in August 2018. Located within the Isabella Pearl pit footprint.

IPMW-4 – west of the heap leach pad (This monitoring well will be plugged and abandon with the construction of the leach pad Phase 2 expansion as the current location exists within the leach pad Phase 2 expansion footprint. This well was consistently dry and was abandoned in 2021.)

The groundwater gradient, although variable due to faulting, runs generally from north to south. Monitoring wells currently installed at the site and used for compliance monitoring include the following:

IPMW-2 – upgradient of the entire facility

IPMW-3 – downgradient of the pits (Since 2018, this has been consistently dry, and is checked quarterly)

IPMW-4R – west of the leach pad Phase 2 expansion. This monitoring well is a replacement for IPMW-4 which was within the Phase 2 expansion footprint.. IPMW-4R

was drilled to a depth of 601 ft bgs and has been dry since it was installed in 2022. This well is checked quarterly.

IPMW-1 – downgradient of the heap leach pad and process area (since 2018, this has been consistently dry, and is checked quarterly)

Other monitoring requirements include pregnant solution, heap leach pad ore characterization, waste rock characterization, sulfide ore stockpile characterization, and water supply wells (IPPW-1, IPPW-2, IPPW-3, and IPPW-4).

In December 2013, the Division approved a reduction in monitoring frequency from quarterly to semi-annual during the first and third quarters only. The variance was granted due to the delay in site construction. Upon initiation of facility construction or other operational activities, the quarterly monitoring requirement in the Permit was once again effective. Facility construction was initiated in the spring of 2018. Quarterly monitoring requirements have been reinstated.

In the 2023 Renewal, the Division approved the removal of P-12-34 and IPMW-4 from the permit because the wells were mined out or abandoned.

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 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 modified 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 (the 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.

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