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

Permittee Name:	**Nevada Gold Mines LLC**
Project Name:	**Storm Underground Mine Project**
Permit Number:	**NEV2004109**
Review Type/Year/Revision:	**Renewal 2025 Fact Sheet Revision 00**

A. Location and General Description

Location: The Storm Underground Mine is located in Elko County, approximately 30 miles northwest of Carlin, Nevada. The mine is located in Township 36 North (T36N), Range 49 East (R49E), Sections 3, 4, and 9 and T37N, R49E, Sections 27, 33, and 34, Mount Diablo Baseline and Meridian. The mine was accessed through the pit wall of the former Dee Gold Mining Company Dee Pit.

General Description: The Project consisted of the underground mine with support facilities such as an underground shop and a staging area located in the existing Dee Pit for ore and aggregate, fuel storage, vehicle wash bay, a lay down yard, and two portable batch plants. Ore from this mine was stockpiled, transported, and processed at the Barrick Goldstrike North Block Project (Goldstrike) (NEV0091029) approximately 4 miles from the Storm Underground Project. Waste rock generated from prior mining under this Permit will remain in the pit until the future expansion of the Arturo Mine Project (NEV2013101) will require the relocation of the material. The Project is located on unpatented mining claims administered by the Bureau of Land Management, Elko District Office, Tuscarora Field Office. All support facilities, underground and above-ground, have been removed and the two portal entrances have been overdumped and are currently being mined through as Arturo Pit expands – the Project is in closure, pending stabilization. Pending stabilization includes the rebound of groundwater to pre-mining levels and conditions, demonstrated through geochemical stability that aligns with historical background levels or remains below Profile 1 reference values. The Final Plan for Permanent Closure (FPPC) was approved by the Nevada Division of Environmental Protection (Division) on 29 February 2016.

B. Synopsis

Water Pollution Control Permit (WPCP) NEV2004109 was first issued to Barrick Gold Exploration in 2004, and renewed in 2010 and 2016. The Permit was transferred to Nevada Gold Mines (Permittee) in 2019. This is the 2025 renewal of the Permit for closure of the underground mine operation and will expire 12 May 2030.

Exploration drilling, both underground and surface, identified three ore zones that, in combination, comprised the Storm Underground Mine Project. The three ore zones referred to as the 49'er Zone, the End Zone, and the Discovery Zone, which occur at depths of 800 to 1,500 feet (ft.) below the surface, (i.e. 4,575 to 3,875 above mean sea level, AMSL). In addition, the Lower Dee Zone and South Dee Pit Target are former underground extensions of ore bodies previously mined by the Dee Gold Mining Company via their surface and underground operations.

A 3,400-ft. ramp (Storm Decline) was used to access the 49'er Zone. An extension of the decline, as well as access ramps to the mining areas, was developed as 15-ft. wide by 15-ft. high tunnels. Additional drifts were used to access the other identified ore zones for delineation and development.

Future expansion of the Arturo Mine Project will result in mining through the portal(s) and decline(s) to an elevation of approximately 4,900 ft. AMSL.

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 Storm Underground Mine Project is included. Revision 01 of the 2016 Permit reflects the transfer of the Permit from Barrick Goldstrike Mines Inc. to NGM.

Geology

The Storm Underground Mine is located in the historic Bootstrap Mining District along the northern terminus of the Carlin Trend. The mine is located on a structural window where the Bootstrap Limestone has been uplifted along major fault zones. In general, the stratigraphy at the mine is described as Paleozoic chert with interbedded shale and limestone lenses that are overlain by a sequence of Quaternary and Tertiary alluvium, colluviums, and volcanic deposits. The geology of the mine is in Devonian Bootstrap limestone and silicified Devonian Bootstrap limestone.

Open Pit

The Dee Pit did not intercept the groundwater table, therefore no active dewatering was required. Due to dewatering operations at Goldstrike beginning in 1988, the groundwater elevations have dropped to approximately 3,600 ft. AMSL. No open pit mine development occurred at Storm. Shallow groundwater was not encountered in the underground mining operations.

Per an engineering design change (EDC) submitted and approved in mid-April 2020, since the Dee Pit is encompassed with the Arturo Open Pit and mine, the Dee Pit is being transferred and will be monitored in accordance with WPCP NEV2013107.

Underground Mining

Ore and waste rock were mined using a drift and fill method with a retreating panel sequence. The method consists of excavating horizontal ore cuts through the ore body using standard underground development techniques. The resulting opening

was then backfilled using shotcrete and cemented rock fill or waste rock. The process was then repeated in a retreating manner until the 15-foot high horizontal section of ore has been depleted. Estimates indicate tonnage rates of approximately 1,000 tons of ore production per day and waste rock tonnage rates of approximately 200 tons per day.

Evaporative Mineral Precipitates

During a Bureau of Mining Regulation and Reclamation (BMRR) site inspection conducted in 2011, Division personnel discovered evaporative mineral precipitates (EMPs) located in the lower levels of the workings (below approximately 4,800-foot AMSL level). The nature and extent of EMP salts that form were evaluated by the Permittee.

Underground mining at Dee (Storm) intersected highly mineralized rock zones, which locally are de-calcified and enriched in silica and sulfides. Abundant efflorescent salts are found in discrete areas where sulfide-enriched rock with low neutralizing potential is intersected by fractures. EMP formation appears to be strongly influenced by desiccation since the ionic strength of solutions seeping through the wall is much lower than that necessary to form these highly soluble salts. Desiccation causes an increase in sulfate and metals levels, as well as acidity, and results in formation of many exotic hydrated acid-sulfate salts of iron, aluminum, manganese, zinc, copper, and cobalt. Dissolution of the EMPs in distilled water results in low pH and high acidity.

EMP enrichment zones are confined to less than a 1 percent area of the underground wall rock and are also limited to the rock-void interface. Consequently, the abundance of EMPs is presumed to be quite small in relationship to the void space of the entire underground mine. Nearly 95 percent of mine voids have been backfilled with either cemented rockfill or cemented paste tailings. The remaining approximately 5 percent remain as open mine voids.

The Division and Permittee collaborated to develop an engineering solution to prevent the flow of air, eliminate evaporation and further precipitation/formation of EMPs, the Permittee submitted an EDC for the construction of pressure-grouted, airtight bulkheads in the Storm mine above the zone of most of the EMPs and below the anticipated base of the North Arturo Pit. The EDC was approved by the Division in May 2015 and construction completed in February 2016.

Waste Rock Stockpile (WRS)

During active operations, waste rock encountered was characterized by analyzing leachate from Meteoric Water Mobility Procedure and by determination of Acid Generating Potential vs. Acid Neutralizing Potential.

Waste rock generated was placed in the main pit area or within a Potentially Acid Generating (PAG) satellite pit which is located in the southeast corner of the Dee Pit. In June 2008, the Permittee submitted a corrective action plan (CAP) stating that all waste rock would be deposited within the PAG-satellite pit and would no longer be placed in the main pit area of the Dee Pit. With the 2008 CAP, all waste

rock has been placed within the PAG-satellite pit. The PAG-satellite pit has been predicted to be above the post-mining groundwater table which is projected to be approximately 5,100 ft. AMSL. Prior to placement of waste rock in the PAG-satellite pit, non-acid generating material (minimum 10-foot limestone base) was placed in the bottom of the satellite pit to provide a base for encapsulating the PAG material. The existing PAG waste rock stockpile, located within the southeast corner of the Dee Pit will be re-mined and relocated within the Arturo waste rock disposal areas.

Per an EDC submitted and approved in mid-April 2020, since the WRS is encompassed with the Arturo Open Pit and mine, the WRS is being transferred and will be monitored in accordance with WPCP NEV2013101.

Buildings/Structures

During active operations, ancillary facilities included two water storage tanks, storage container areas, electrical compressor pad, portable batch plants, vehicle wash bay, and a fuel storage containment area. Water used for this Project originated from an existing Dee Gold Mining Company water supply well that was pumped to the water tanks. Containment was provided for the fuel storage containment area equal to 110% of the largest fuel tank. Blasting agents such as ammonia nitrate fuel oil mixture supplied in 50-pound sacks were stored in an underground magazine.

The original mine plan called for construction of underground facilities for maintenance and refueling of vehicles. However, these facilities were never built and all vehicle maintenance and fuel handling was done at the shop located adjacent to the mine portal.

In September 2006, the Permittee submitted an EDC proposing to construct a vehicle wash facility in the pit adjacent to the portal. The facility included the wash pad and sediment trap containment, a 2,880-gallon high density polyethylene oil/water reclaim tank and associated piping. The EDC was approved by the Division in October 2006 and construction was completed in March 2007.

Management of petroleum contaminated soil (PCS) for the site is covered by the approved PCS Management Plan for the North Block Project NEV0091029. All testing and disposal activity for the Storm Underground is to be included in the report for North Block. This includes a hazardous waste determination which must be made prior to shipment of the subject material off-site.

Site Closure Plan

A revised Final Plan for Permanent Closure (FPPC) was submitted 29 June 2015 and formally approved by the Division 29 February 2016. The FPPC consisted of removal of all underground and surface facilities, construction of 2 airtight bulkheads [Dee bulkhead, #1, at 4840 ft amsl and EZ bulkhead, #2, at 4850 ft amsl], and closure of the portals at the pit surface.

The vehicle wash bay and fuel facilities were closed out in 2015.

As of February 2016, construction of the bulkheads has been completed. The Permittee submitted a final as-built report in March 2016 and was approved by the Division in April 2016. With this completion, all electrical and ventilation was removed from the underground workings. A final closure report was submitted in August 2016 and approved by the Division later that month. As of 28 April 2025, the 2 Storm portals have been overdumped and 1 Dee portal is currently being mined through as Arturo Pit continues to expand.

Monitoring Well and Piezometers

Monitoring well DW-5 had previously been included with the Storm Underground Mine Permit. It is also included in the Arturo Permit (NEV2013101) as DGWS-5. As of the 2018 Renewal of the Dee Mine Permit, the Division decided to include the well DW-5 in Dee's Permit (NEV0050005) as it is adjacent to the DDTF. Per the Annual 2017 Monitoring Report (22 February 2018), the depth to water in this well is 2,077 feet below ground surface (bgs) due to the cone of depression caused by the Nevada Gold Mines LLC North Block Project (WPCP NEV0091029) Goldstrike UG mine dewatering activities. Repeated problems with sampling this well has led the Permittee to request the Division to approve the American Society for Testing and Materials (ASTM) D7929-14 method for HydraSleeve. The Division approved this passive method for sampling on 19 December 2017. Sampling has resumed and results are included in Table 3 below. DW-5 has been sampled since 2006 and was first reported dry in the second quarter of 2022. NGM requested a temporary reduction in monitoring as there is additional risk of monitoring equipment getting caught in the 2,000 foot deep dry well. As approved in the EDC dated 30 January 2023, sampling of DW-5 would be reduced to BIENNIAL (every other year, odd years) on contingency that if there is overdumping in the vicinity of DW-5, becomes inaccessible, or rendered inoperable, then a new monitoring well must be installed as it is the only deep well in the area for groundwater monitoring. Monitoring of DW-5 will resume to be annually monitored once dewatering at the Goldstrike Mine ceases, currently projected for 2033. All other monitoring wells installed for the active mining operation in the 1980s and 1990s have been closed and abandoned per Nevada Division of Water Resources regulations.

Table 3: Monitoring Location Data

Constituents of Concern	**Division Profile I Reference Values** (mg/L)	**DW-5[(a)] Concentration as of 2Q2021** (mg/L)
Lab test date	…	4-15-2020
Aluminum	0.2	<0.050
Antimony	0.006	<0.0025
Arsenic	0.01	<0.005
Cadmium	0.005	<0.001
Fluoride	4	1.1
Iron	0.6	<0.1

Constituents of Concern	**Division Profile I Reference Values** (mg/L)	**DW-5[(a)] Concentration as of 2Q2021** (mg/L)
Magnesium	150	14
Manganese	0.1	0.063
Mercury	0.002	<0.00045
Nitrate + Nitrite (as N)	10	<0.1
pH (SU)[(b)]	6.5 – 8.5	7.49
Selenium	0.05	<0.005
Sulfate	500	4.7
Total Dissolved Solids	1,000	310
WAD Cyanide	0.20	<0.010

(a) DW-5 last sampled in 2nd Quarter 2021, has remained dry since
(b) SU = Standard Units

Site Hydrology and Background Water Quality

There are two groundwater flow regimes at the site: several discontinuous shallow zones of perched groundwater and a regionally extensive carbonate aquifer at depth. There is no hydraulic contact, and very limited flow, between the local systems and the regional aquifer.

There are no streams, creeks, or springs within the immediate Project area. There are no surface water bodies down gradient of Storm. However, Boulder Creek is within one-half mile down gradient of the Dee Pit area. Local discharge of perched groundwater contributes to flow in Boulder Creek. The regional aquifer is disconnected from Boulder Creek as the water table, due to ongoing dewatering operations related to the Goldstrike operation, is at approximately 3,515 ft. AMSL, and is expected to deepen to about 3,400 ft. AMSL, far below the level of the creek bed elevation.

As part of the Arturo Project North Pit, which will impact portions of the Storm Underground, a pit lake water quality study was conducted by the Barrick-Dee Mining Venture in January 2013 and updated in 2016 that indicated that after approximately 400 years following mine closure and cessation of dewatering at Goldstrike, groundwater is expected to eventually recover to about 5,114 ft. AMSL, and result in the formation of a pit lake. Portions of the Dee Pit/Storm Underground will be mined-out to an approximate depth of 4,700 ft. AMSL. The Dee Pit Lake Model is being addressed as a part of the Permittees Arturo Mine Project under Permit NEV2013101.

The study indicates that the Storm Underground Workings will not impact pit lake quality. The primary source of recharge to the underground mine will be groundwater from the regional carbonate aquifer. It is estimated that the recovery of groundwater levels at Storm would begin to flood the underground workings about 70 years following cessation of dewatering.

Groundwater Model

Groundwater flow was modeled to determine the effects of the Storm Underground Mine on long-term groundwater quality and to ascertain the proportional contribution of EMPs to overall groundwater chemical loading.

The analysis consisted of two components. First, the rate of groundwater recovery after the end of mine dewatering at Goldstrike was evaluated. The hydrologic model included a particle tracking assessment to predict the rate and direction of groundwater flow through the Storm Mine. The second phase entailed prediction of groundwater quality. The Division is concerned about the potential effects of underground mines on the water quality in the Carbonate Aquifer. One particular concern is the effect that acidic EMPs that form in portions of the development headings may have on water quality. These effects were evaluated through use of a model sensitivity analysis where various assumptions about the Storm Mine, including presence or absence of EMPs, were varied to evaluate effects on predicted downgradient groundwater. Modeling of the potential effects of the underground mines on the rate of recovery of the Carbonate Aquifer and the effects on water quality consisted of:

- Estimation of void volumes in the mines as a function of elevation;
- Comparative evaluation of groundwater recovery - with and without consideration of the underground mine voids;
- Predicting the flow rate and flow direction for groundwater that flow through the mine voids;
- Assessment of likely water quality that will develop in the mine void as the system floods;
- Predicting chemical transport from the underground mines; and
- Overall assessment of effects on the Carbonate groundwater.

Groundwater that floods the Storm Mine is predicted to remain static for nearly 150 years, then will move to the west between year 150 and 250 with an estimated travel distance of approximately 3,300 ft. The overall flux through the mine is zero for about 100 years after dewatering ends and then gradually increases to 15 gallons per minute (gpm) after 250 years. The groundwater contribution to the Carbonate Aquifer is much smaller than the infiltration from the open pits, which would range up to 90 gpm in the first 100 years of groundwater recovery. Potentially affected groundwater is expected to remain more than 1,000 ft. below ground surface in the volcanic unit west of the Storm mine area. The main effect on the Carbonate groundwater will be higher calcium and sulfate levels. Sulfate is predicted to remain below 500 milligrams per liter (mg/L). The increased major ions levels that result from interaction with the underground mines is similar to the changes in groundwater that are predicted when water flows through the weathered highwall in a pit lake. Most metals are predicted to remain below Division Profile I reference values except for locally higher values in close proximity to the Storm mine void. The model predicts that arsenic, antimony, nickel and thallium will exceed reference values more than a few hundred meters from the Storm workings.

The factors that most strongly influenced metal behavior were the proportions of water in mine voids and in the carbonate rocks, the amount of ferrihydrite precipitates that will form and the amount of ion exchange capacity and whether ions were allowed to undergo exchange reactions. The presence or absence of EMPs was a significant factor that contributed to groundwater transport for thallium and nickel; but eliminating EMPs would not cause these elements to decline to below reference values. The predicted groundwater effects from metals was mostly associated with metal release from PAG wall rock in open voids, independent of EMPs.

Carbonate aquifer water quality is defined as a calcium-magnesium bicarbonate type with generally low concentration of total dissolved solids. The pH is in the neutral range. Manganese is the only constituent noted above the Nevada Profile I reference values.

D. Procedures for Public Comment

The Notice of the Division's intent to issue a Permit authorizing the facility to close and monitor this mine subject to the conditions contained within the Permit, 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 renewed Permit.

F. Pathway to Final Closure and Permit Termination

Except as detailed in the Permit, no proposed limitations or special conditions are stipulated.

See Section I of the Permit.

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:

- Compliance with Schedule of Compliance requirements in Part I.B of the Permit as well as the Continuing Investigation requirements in Part I.N of the Permit.
- Monitor the facility through major storms and large winter/spring seasons to verify that closed components remain functional with no potential for degradation of waters of the State;
- Due to the on-going dewatering associated with nearby mining operations and the potential for localized groundwater degradation in the area of the underground workings and groundwater flow path, this closure Permit will remain in effect and will not be placed into a post-closure monitoring status until the groundwater level has fully recovered and stabilized to the predicted level of approximately 5,100 ft. AMSL, which is expected to occur in approximately 400 years. During and after groundwater has recovered the potential degradation impacts from the presence of the EMPs and mineralized rock will be monitored downgradient along the flow path of groundwater discharging from the Storm underground mine workings. Currently the permit remains in pending stabilization status until monitoring demonstrates that geochemical conditions are stable - either aligning with historical background levels or remaining below Profile 1 reference values.
- 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 in closure. 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 potential degradation will be placed on groundwater monitoring in the predicted flow path of groundwater leaving the

Storm underground workings. 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.

Prepared by: Crystal Borotto
Date: 14 November 2025

Revision 00: Permit Renewal 2025; effective date 3 January 2026