



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

A division of the
Nevada Department of Conservation & Natural Resources

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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET
(Pursuant to NAC 445A.874)

Permittee Name: **Nevada Gold Mines**
Permittee Address: **1655 Mountain City Highway, Elko, NV 89801**
Project Name: **Nevada Gold Mines - Carlin**
Project Type: **Mining Dewatering**
UIC Well Class: **Class V**
Permit Number: **UNEV93209**
Injection Wells: **Three (3)**
Other Permits: **NV0022675 & NS0094002**
Permit Action: **Draft UIC Permit - Renewal**

A. Location: Three (3) injection wells located in T.35N, R.48E, Sections 24; T.35N, R.49E., Section 18; MDB&M, in Eureka County, Nevada.

Latitude: **116 29' 31"N**

Longitude: **40 55' 03" W**

Injection Well Construction:

WELL NAME / NO.	TYPE OF CONSTRUCT.	TOTAL DEPTH	SCREEN INTERVAL
BVI-2	29" bore hole w/ 24" casing	1695'	1170'-1690'
BVI-4	31" bore hole w/ 24" casing	1820'	1160'-1760'
BVI-5	31" bore hole w/ 24" casing	1480'	873'-1475'

Monitoring Well Construction:

WELL NAME / NO.	TYPE OF CONSTRUCT.	TOTAL DEPTH	SCREEN INTERVAL
IMW93-2	7-7/8" bore hole w/ 4" casing	1220'	701'-1180'
IMW93-4	7-7/8" bore hole w/ 4" casing	1210'	800'-1200'
IMW95-1	7-7/8" bore hole w/ 4" casing	1495'	1179'-1490'

Injection Parameters:

Injection Wells	Maximum Injection Pressure (psig)	Maximum Flow Rate (gpm)
BVI-2	189	12,000
BVI-4	189	8,000
BVI-5	189	4,000

Injectate Characteristics:

Injectate consists of ground water produced in conjunction with a mining and underground dewatering program and a ground water collection/irrigation canal from the Boulder Valley seeps and springs. In addition to the above injectate, Nevada Gold Mines LLC. (NGM) will accept water produced from underground or surface collection points from NGM's Leeville, Goldstrike, and Genesis Mines, or mineralized areas contiguous to or in the vicinity of those mines. Water received from NGM will be sampled prior to entering NGM's water management system and must meet all requirements as required in Permit UNEV93209 issued to Nevada Gold Mines LLC. The injectate meets federal and State standards for drinking water unless a naturally occurring receiving-aquifer constituent is established to be higher than the drinking water standard. Analyses of the reservoir water where the injectate will be stored prior to discharge indicate concentrations of TDS - 420 ppm; arsenic - 0.016 ppm; iron - 0.015 ppm; and fluoride - 1.3 ppm. Analysis of water from the springs indicate concentrations of TDS - 630 ppm; arsenic - 0.042 ppm; iron - 0.005 ppm; chloride - 56 ppm; and fluoride - 3.1 ppm.

Receiving Water Characteristics:

The injection zone is between 1000-1200 ft within the Tertiary volcanic rock units and, to a lesser extent, within the Tertiary tuffaceous sedimentary unit.

Original testing showed the water table within the area was approximately 150-300 ft. Ground water analyses of injection zones indicated concentrations of TDS - 216-563 ppm; arsenic - 0.025 ppm; iron - 0.02-1.2 ppm; and fluoride - 0.5-1.7 ppm

Ground water testing around the injection areas completed in August 2007 indicated concentrations of TDS - 360-160 ppm; arsenic - 0.003-0.009 ppm; iron - <0.006-0.129 ppm; and fluoride - 0.83-2.19 ppm.

Wellhead Protection Areas

- ☐ Injection well/Facility within a 2-, 5-, or 10-year groundwater protection area
- ☐ Injection well/Facility within 7000-foot buffer zone for any public water supply well

B. Timeline

2026 Renewal: BVI-1 and BVI-3 have been plugged and abandoned. The Division was informed upon receiving the renewal application and requested the plugging reports, for the two wells, which are on file. There is no active injection, but the Permittee would like to keep the injection permit open in case of future need. The Permittee is compliant and good standing with all permit and monitoring requirements.

There is one Schedule Of Compliance item, where the Permittee will need to update the O&M Manual to reflect the plugging and abandonment of BVI 1 and 3. The permit previously had an injection rate limit of 25,000 gpm, from the original permit which was issued for 5 constructed and up to 11 injection wells. The Injection rates have been modified, since there are only three wells now, to reflect each wells highest recorded injection rate.

2020 Minor Modification Transfer of Ownership : Change of ownership from Barrick Goldstrike Mines Inc. to Nevada Gold Mines LLC.

2015 Renewal: no injection has occurred since previous renewal and no modification to permit have been requested.

Original - 2008: The subject site is a mining dewatering facility. The discharge location is in northern Boulder Valley approximately 6 miles southwest of the Nevada Gold Mines - Carlin. NGM has completed five (5) of the eleven (11) allowable injection wells (BVI-1,2,3,4,5) within the Boulder Valley Injection area. Monitoring wells, listed in the above table, are utilized as groundwater monitoring locations for five (5) completed injection wells.

Currently, the NGM - Carlin injection wells are used for water management on a needs basis for use in their dewatering process. In addition, NGM receives water from the Leeville Dewatering Project which has the potential to deliver up to 25,000 gpm to the NGM infiltration program and potentially the injection systems via a pipeline system. The Leeville water undergoes a ferric sulfate treatment process to reduce arsenic levels for compliance with the permit limits found in NEV89068 and UNEV93209. Compliance sampling is conducted immediately downstream of their treatment facility in accordance with the Leeville operating permit and is verified by NGM at their sampling location GFPD-2A. This water agreement began on August 1, 2003.

The injection wells are kept as a backup system to their surface discharge and infiltration basins. If injection were needed NGM would most like use the southern injection wells (BVI-2, BVI-4, and BVI-5). NGM intends to keep the injection wells as a back-up water disposal system in the future.

The permit has been drafted with two monitoring schedules for both when injection is active and idle. The permit does however require sampling of the wells one month prior to the initiation of injection.

Timeline:

Feb 2020	Permit Minor Modification Transfer of Ownership
June 2019	Permit Minor Modification Transfer of Ownership application received
Mar 2015	Permit renewal
Mar 2013	Permit renewal application received
Jul 2008	Permit renewal
Mar 2008	Permit renewal application received
Nov 2003	Notification of water acceptance (up to 25,000 gpm)
May 2001	Barrick requests modification to report frequency
Nov 1999	Permit renewal application received
Nov 1999	Monitoring modifications approved
Aug 1999	Barrick requests monitoring report modifications
Mar 1997	Injection discontinued
May 1996	Well BVI-5 authorized
May 1995	Well BVI-4 authorized
May 1995	Modified Permit Issued
Nov 1994	Permit Modification Application
Aug 1994	Permit Modification Application
May 1994	Well BVI-3 authorized
Mar 1994	Well BVI-2 authorized
Feb 1994	Well BVI-1 authorized
Oct 1993	Original Permit Issued
June 1993	Initial UIC permit application received

D. Proposed Injectate Limitations and Requirements

Refer to **Part I.A** of the permit.

E. Rationale for Permit Requirements

The permit conditions will help to ensure that the injectate does not adversely affect the existing water quality or hydrologic regime. Verification will be performed to ensure that injected fluid quality remains constant and meets drinking water standards. In particular, NDEP is concerned that recharge projects do not create chlorinated organics in the ground water due to the chlorination treatment of injected water.

F. Proposed Determination

The Division has made the tentative determination to renew the permit.

G. Procedures for Public Comment

Anyone wishing to comment on the proposed permit modification can do so in writing for a period of 30 days following the posting date of public notice. All written comments received during the comment period will be retained and considered in the final determination. A public hearing on the proposed determination can be requested by the applicant, any affected state, any affected interstate agency, the regional administrator of EPA or any interested agency, person or group of persons.

Opportunity for a public workshop shall be provided with 30-day advance notice pursuant to NAC 445A.890. 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 will be conducted in accordance with NAC 445A.238.

Prepared by: Lisa Aleman
Date: October 06, 2026