

**FACT SHEET**  
(pursuant to NAC 445A.401)

**Permittee Name:** Five Jokers Mining Company, LLC  
**Site Name:** Five Jokers Mine Project  
**Permit Number:** NEV2000112 (2014 Renewal, Rev. 00)

**A. Description of Facility**

*Location:* The **Five Jokers Mine Project** (Five Jokers) is a seasonally operated underground mine and gravity separation facility, located on both patented and public land (administered by BLM Battle Mountain District Office) in central Nye County. The project is located within portions of non-surveyed Sections 17 and 18 of Township 1 North, Range 50 East, Mount Diablo Baseline and Meridian. The Five Jokers site is approximately 2.5 miles southwest (by air) of the Eden Creek Ranch and approximately 17 miles south-southwest (by air) from Warm Springs, Nevada, on the east side of the Kawich Range and west of Reveille Valley. The Project's 8,000 ft elevation significantly limits mining and processing activity at the site from late spring through early fall.

*Site Access:* From Tonopah, proceed east approximately 50 miles on U.S.-6 to the junction of S.R.-375 ("*The Extraterrestrial Highway*") at Warm Springs. From Warm Springs, proceed east on S.R.-375 for approximately 0.81 miles to the junction of a wide, well maintained dirt road ("*Eden Creek Ranch Road*"). Proceed south then southwest for a distance of approximately 13.63 miles to the junction of a two-tracked road. Proceed with caution west for approximately 5.45 miles, paralleling Eden Creek (an ephemeral creek) and crossing several small unnamed ephemeral creeks to the gravity plant site.

*Characteristics:* The Permittee (Five Jokers Mining Company, LLC) utilizes physical (gravity) separation methods to extract gold from the ore. A maximum of 2,000 tons of ore will be processed per year. Chemicals are not authorized for use in the process and process water will be recirculated. The facility is designed and constructed to operate and close without any discharge or release from the fluid management system in excess of those standards established in regulation except for meteorological events which exceed the design storm event. Since the facility was first permitted in 2000, activity at the site has been minimal.

**B. Synopsis**

The facility consists of a grizzly, hoppers, conveyors, vibrating screen, trommel, water tank, rocker sluice box, vibrating sluice box, settling pond, make-up (reclaim) water pond and fresh water (seep) pond. Also on site are a generator and a diesel fuel storage tank within minimum 110-percent secondary containment.

*Mining and Gravity Separation:* Ore is obtained from several old underground workings at the South Gold Prospect site. Acid-Base Accounting (ABA) test results for the ore and waste rock indicate that both materials are non-Potentially Acid Generating (non-PAG). In addition, Meteoric Water Mobility Procedure (MWMP) test results show that the concentrations of the solubilized constituents are less than the Profile I reference values.

The mined ore is transported via front end loader to the gravity separation plant site less than a half mile away, where it is stockpiled or fed directly to a stationary grizzly for removal of oversize material. Undersize grizzly discharge is fed directly to a feed hopper and then conveyed to a vibrating screen for removal of fines (slimes) to optimize trommel efficiency. Screen oversize material is discharged to a hopper and fed to the trommel screen where it is combined with reclaim or make-up water.

The trommel oversize discharge product is conveyed to the waste stockpile. Because of the benign nature of the trommel discharge waste, the Permittee intends to use the waste material as backfill and road material. The trommel undersize is discharged via a launder to a vibrating sluice box for gravity separation, collection and removal of the gold content. Discharge from the vibrating sluice box is conveyed via a launder to a series of settling ponds for water clarification.

The vibrating screen undersize is discharged via a launder to a rocker sluice box for gravity separation, collection, and removal of the gold content. Slime discharge from the rocker sluice box is conveyed via a launder to a series of settling ponds for slime settling and water clarification.

Flow through the launders and sluice boxes is controlled by simple gates. Riffles in the sluice box bottoms provide sufficient turbulence to establish a hindered settling zone to retain heavy minerals and gold.

Reclaim water from the final settling pond (Reclaim Water Pond) is combined with water from the Seep Pond (Make-up Water Pond) and pumped to a storage tank prior to its return to the gravity separation process. The reclaim water generally meets the Profile I water quality reference values, with the exception of aluminum which exceeds the 0.2 milligram per liter (mg/L) Profile I reference value. Seep Pond water quality is discussed further under the section "*Receiving Water Characteristics*"

A trailer houses a generator and an elevated fuel storage tank (with greater than 110 percent secondary containment) is located adjacent to the trailer.

### **C. Receiving Water Characteristics**

*Site Hydrology:* The facility is located near a tributary of Eden Creek. Eden Creek is an intermittent creek, with run-off from the surrounding Kawich Range.

Eden Creek is typically dry during the summer and fall months of each year and has no designated beneficial uses or numerical water quality standards.

In the area of the gravity separation plant, near surface expressions of groundwater (i.e., springs) have not been observed. However, a discontinuous seep, adjacent to the manmade Seep Pond, appears to be fed by a complex fracture system. No natural body of water exists within one-half mile of the mine site and process facility.

*Background Water Quality:* Analytical results of samples obtained from the seep that feeds the Seep Pond indicate that the water meets the Profile I water quality reference values with the exception of aluminum, which exceeds the 0.2 mg/L reference value. Observed aluminum concentrations are naturally elevated between 0.6 and 0.9 mg/L.

**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 sent to the **Tonopah Times – Bonanza and Goldfield News** for publication. The Notice is being mailed to interested persons on the Bureau of Mining Regulation and Reclamation mailing list. Anyone wishing to comment on the proposed Permit can do so in writing within a period of 30 days following the date of public notice. The comment period can be extended at the discretion of the Administrator. All written comments received during the comment period will be retained and considered in the final determination.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected intrastate agency, or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.403 through NAC 445A.406.

**E. Proposed Determination**

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

**F. Proposed Limitations, Schedule of Compliance, Monitoring Requirements, 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.

The primary method for identification of escaping process solution will be placed on required routine monitoring identified 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 Ccode 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 (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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