

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

Permittee Name: **Infinity Mining Inc.**

Facility Name: **Wishing Well Mine**

Permit Number: **NEV2014102 (New Permit 2014)**

A. Location and General Description of Facility

Location: The Wishing Well Mine is a placer mine and physical separation facility located in the historic Moapa-Las Vegas Mining District within Moapa Valley and the Meadow Valley Wash. The mine and process facility are located on public land administered by the U.S. Bureau of Land Management—Las Vegas Field Office (BLM-LVFO), approximately 52 miles north northeast (by air) of Las Vegas and 9 miles north (by air) of Moapa, Nevada within Section 27, Township 13 South, Range 66 East, MDB&M, in Clark County, Nevada.

Site Access: Detailed directions and maps to the Wishing Well Mine are included in the Water Pollution Control Permit application folder.

Characteristics: This existing permitted facility utilizes physical separation methods (i.e. magnetic separation and gravity concentration) to extract gold and black sands from alluvial material. The Permittee is authorized to process up to 20,000 tons of ore per year annually and no chemicals are permitted for use in the process. All process water is filtered and recycled back to the facility. The facility is designed and constructed to not release or discharge any process or non-process contaminants from the fluid management system that would result in degradation of waters of the State during operation and closure.

B. Synopsis

The Permittee intends to construct and operate a small physical separation facility to evaluate the feasibility of concentrating precious metals and black sands from placer material mined at the Wishing Well site. Multi-element spectrographic assay results for the alluvium indicate the presence of minor amounts of iron, magnesium, arsenic, and titanium, with trace amounts of zirconium. Meteoric Water Mobility Extraction Procedure (MWMP)-Profile II, and Acid Neutralization Potential/Acid Generation Potential (ANP/AGP) characterization results for the alluvial material, indicates that it is non-acid generating with no potential for metal liberation.

The process components include a grizzly and discharge hopper, magnetic separator, sand screw, spiral, and concentrating tables to produce magnetic, black sand, and precious metal concentrates, referred to the Permittee as “super concentrates”. Depending on the observed grades and recoveries from the initial physical separation tests, not all of the previously

mentioned process components may be utilized. The “super concentrates” will be collected and shipped off site to an in-state facility (Permitted by the Division) or an out-of-state facility for the purpose of additional concentration and recovery.

Maximum throughput for the Wishing Well process circuit is 8 tons per hour and up to 20,000 tons per year. Make-up water for the magnetic and gravity separation operations will be obtained from an off-site source (Moapa Municipal water supply) and stored in two, 2,500-gallon tanks at the Wishing Well site. Estimated water consumption is approximately 30 gallons per hour.

Mined alluvial material will be transported via front-end-loader and either stockpiled or fed directly to the grizzly. The grizzly oversize fraction (plus 1.5 inches) will be stockpiled for future backfilling and the undersize fraction (minus 1.5 inches) will be fed to a 2,500-gallon slurry tank, combined with water, and then discharged to the concentrating tables (and/or spirals and sand screw) to produce a rough concentrate (particle size approximately minus 40-mesh). The oversize fraction (plus 40-mesh) will be stockpiled for future backfilling. The rough concentrate is conveyed to the magnetic separation circuit to remove the magnetic fraction and produce a magnetic concentrate which will be collected and shipped off site for additional processing, the fines are conveyed to the 2,500 gallon recirculating tank for sedimentation. Decant water is returned to the gravity separation circuit as make-up water and the fines conveyed to the 2,500 gallon recirculating tank for sedimentation. Decant water is returned to the gravity separation circuit as make-up water.

The non-magnetic concentrate is fed to the “wave” tables for concentration of the fine gold fraction. The concentrates will be collected and shipped off site for additional processing. Sediment collected from the recirculating tank will be removed periodically and conveyed to the tailings impoundment for temporary storage prior to backfilling.

All fuels and lubricants are stored within lined containment. Diesel-fired electrical generators will be located on containment pads that meet or exceed 110-percent containment of their fuel capacity. The Permittee is not authorized to dispose of or treat Petroleum-Contaminated Soil (PCS) on the mine site without first obtaining from the Division approval of a petroleum contaminated soil (PCS) management plan.

C. Receiving Water Characteristics

No perennial surface waters exist within a three mile radius of the Wishing Well Mine site. Groundwater depth beneath the site is in excess of 350 feet below ground surface. Water will be obtained locally from the Moapa municipal water supply and transported to the site via tanker truck. Water will be recycled continuously during the process operations.

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 **Moapa Valley Progress** 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 Effluent Limitations, Schedule of Compliance, 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 identified in the Water Pollution Control Permit.

H. Federal Migratory Bird Treaty Act

Under the Federal Migratory Bird Treaty Act, 16 United States Code (USC) 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 [CFR] 10, April 15, 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.

<i>Prepared by:</i>	<i>Rob Kuczynski, P.E.</i>
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