

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

Permittee Name: **Mark Anderson, Jeff Thompson, and Robert Lutz**

Project Name: **After Work 1, 2, 4 Claims Project**

Permit Number: **NEV2013109 (New 2014)**

A. Location and General Description

Location: The facility is located in Pershing County, just south of the Humboldt County line, in the northwest and southwest quarters of Section 6, Township 34 North, Range 37 East, Mount Diablo Baseline and Meridian (MDBM), approximately 10 miles southwest of the town of Winnemucca, Nevada. All affected land is managed by the U.S. Bureau of Land Management (BLM), Humboldt River Field Office, in Winnemucca.

To access the facility, drive on Interstate 80 to Exit 168, Rose Creek. From the south side of the interstate, drive northeast on West Rose Creek Road approximately 1.6 miles and turn right onto Herschell Road. Drive 2 miles south on Herschell Road, and at a fork continue south on an unnamed dirt road for approximately 1.3 miles to an east-west dirt road that follows a power line along the Humboldt/Pershing county line. Turn right and drive west for approximately 0.5 miles to a drainage. Turn left and follow the drainage southwest (upstream) for approximately 0.2 miles to the facility.

General Description: The After Work 1, 2, 4 Claims Project is a physical separation mining and beneficiation facility, pursuant to NAC 445A.414, designed to extract placer gold, with a maximum permitted production rate of 1,000 tons of ore per year. The facility is comprised of a surface mine, backhoes, an excavator, dry ore classifiers, metal detectors, and gold pans. Water is used only for the final panning, and no chemicals or ore crushing are authorized in the process. The facility is required to be designed, constructed, operated, and closed without any discharge or release in excess of those standards established in regulation, except for meteorological events which exceed the 25-year, 24-hour storm event.

B. Synopsis

History and Setting: The Project is located within foothills of the northern flank of Rose Creek Mountain, at the north end of the East Range. The northern end of the East Range is underlain by a group of Triassic sedimentary rocks that are intruded, and locally contact metamorphosed, by Jurassic granodiorite. The

nearby Rose Creek mining district is believed to have been prospected in the 1860's, initially for gold and copper, but it was not extensively explored until tungsten was discovered in 1937 (*B. F. Bonham et al, 1985, A Mineral Inventory of the Paradise-Denio and Sonoma-Gerlach Resource Areas, Nevada Bureau of Mines and Geology Open File Report OF1985-03*). Gold has been reported in quartz veins in the granodiorite, and manganese and tungsten occur in a calcite-chalcedony vein in Triassic argillite (*ibid.*).

The Project is located near several other small gravel and/or placer gold mining operations. The ore at the Project consists of alluvium and colluvium deposited over the bedrock units within a small ephemeral drainage.

Mining and Processing: Operations will be seasonal, typically from April through November. Uncrushed alluvium and colluvium are mined from a normally dry ephemeral drainage on the project site using up to two combination backhoe-loaders and one excavator with a ¼-cubic-yard bucket.

The ore is spread out and a metal detector is used to locate any large gold nuggets. Then the ore is processed through one or two 5-horsepower gasoline-fueled ore classifiers. The ore classifiers utilize air blowers to separate the lighter and lower density material from the heavier and higher density gold-bearing concentrate. The ore classifiers are operated dry, without any water, and can each process ½ cubic yard of ore per hour. The gold-bearing concentrate is further processed using either manual gold pans or an automatic panning machine. Municipal tap water obtained from one of the Permittee's houses in Winnemucca is brought to the Project in jugs, or in a 75-gallon tank, for use in the panning process. The manual panning is performed over a plastic tub to catch the water spilled from the pan. The automatic panning machine is a self-contained unit, which includes a tank that holds approximately 30 gallons of water.

The Permit requires the return of all process reject material to mined areas for reclamation within 12 months after it is generated. The total project disturbance area must remain less than five (5) acres; otherwise the Permittee must cease operation until a separate reclamation permit is obtained from the Division and a Division-approved reclamation bond is posted.

Ore Characterization: A representative sample of the ore from the Project was analyzed via the Meteoric Water Mobility Procedure (MWMP) – Profile I method. The results meet drinking water standards, except for slightly elevated pH (8.89 standard units) and arsenic (0.0122 milligrams per liter). Because the ore is the same surficial material that is already present in the ephemeral drainage, and no chemicals will be used in the process, the proposed facility poses no potential to degrade waters of the State.

C. Receiving Water Characteristics

The depth to groundwater, and the background groundwater quality, at the Project site are unknown, as there are no wells in the immediate vicinity. The nearest well to the Project that is recorded with the State of Nevada Division of Water Resources (NDWR) is a private well located approximately 1 mile northeast and downgradient of the Project in the northeast quarter of the southeast quarter of Section 31, Township 35 North, Range 37 East, MDBM. A well log for that well, filed with NDWR, indicates that the static groundwater level was 170 feet below the ground surface (bgs) when the well was drilled in September 2013. Further to the north and northeast, numerous residential and farm wells are present approximately 1.5 to 2.5 miles from the Project. The NDWR database indicates that initial static water levels in those wells varied from 35 to 85 feet bgs. Water quality data are not available for any of the wells, as they are unassociated with the Project.

The Project is located within a small dry drainage that flows ephemerally only in response to large storm events. The drainage is a tributary to Clear Creek, and Clear Creek is a tributary to the Humboldt River. Water quality standards for the Humboldt River between the Comus and Imlay Gages apply to the dry drainage in the Project via the tributary rule. The Permit requires quarterly surface water analyses whenever there is flow in the ephemeral drainage. Based on the National Oceanic and Atmospheric Administration (NOAA) online database (Atlas 14 Point Precipitation Frequency Estimates), the 25-year, 24-hour storm event for the Project site is 1.78 inches.

Tap water used for panning is obtained from the Dutchman Acres municipal water supply system, in Winnemucca, Nevada, and meets Profile I drinking water standards. The Permit prohibits the release or discharge of any process or non-process contaminants from the fluid management system that may result in degradation of waters of the State.

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 **Humboldt Sun** newspaper 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 except for those accumulations resulting from a storm event beyond that required by design for containment.

The beneficiation process is operated dry, except for minor water used for panning within approved containment. No chemicals will be used in the process. The primary method for identification of escaping process solution will be visual inspection of the automatic panning machine, and required analyses of surface water in the ephemeral drainage whenever it flows. Specific monitoring requirements can be found in the 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 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: Thomas E. Gray
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