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

Permittee Name:	Rebel Mining, Inc.
Project Name:	Quartette M21
Permit Number: Review Type/Year/Revision:	NEV2020121 New Permit 2023, Fact Sheet Revision 00

#### A. Location and General Description

Location: The facility is located in Clark County, in Section 2 and 3, Township 29 South, Range 63 East, Mount Diablo Baseline and Meridian approximately 2 miles south-southwest of Searchlight, Nevada. The project is located on private land.

To access the facility, travel west out of Searchlight on Nipton Rd for about 0.6 miles and turn left on an unnamed dirt road. Continue south for a half mile and then turn left and follow the dirt road for about 0.75 miles following the main road. The site will be on the right side of the road.

General Description: The Quartette M21 (Project) is a physical separation mining and beneficiation facility, designed to extract placer gold with a maximum processing rate of a maximum 150,000 tons of ore per year, with an expected average of 70,000 tons per year. The facility is composed of an open pit. The processing circuit will consist of a crusher, ore hopper and conveyers, a ball mill, classifier, jig, concentrating table, tailings storage area/process water storage with dam, and smelting furnace. The project is permitted as a processing facility per NAC 445A.394 since the slag from the smelting furnace will be placed back in the process for additional metal recovery. No chemicals 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 that exceed the 25-year, 24-hour storm event.

# B. <u>Synopsis</u>

The Project is located approximately 1 mile to the south, southwest of Searchlight. The Project is planned to have an initial start-up phase and then will ramp up to the full scale operation which is expected to have five to ten years of mining reserves.

*Mining and Processing:* The crushing circuit at the Project will consist of a dry crushing plant (either a jaw and cone crusher and/or a critical or horizontal shaft impactor), ball mill, feed hopper and discharge tank and pump, cyclones or classifier, concentrating jigs and shaker tables, tailings sump, transfer pumps, and associated double walled piping to the tailings storage area.

The processing facility will have three major containment pads: the Mill Containment Pad, Refining Containment Pad, and Base Metal Drying and Storage Containment Pad. All the containment pads will be constructed with water stops at any cold joint. The Mill Pad will be approximately 32 feet by 84 feet with a containment curb and sloped to the tailings sump. The containment will contain approximately 8,150 gallons of process fluid. The tailing sump will be added in

Phase 2 of the operation and will contain 5,200 gallons. The Refining Pad will be approximately 16 feet by 32 feet with containment curbs and will contain approximately 720 gallons of process solution. The Base Metal Drying and Storage Pad will be approximately 32 feet by 30 feet with containment curbs to contain 950 gallons.

*Tailings Facility/Process Water Storage Pond:* The tailings pond will be approximately 180 feet by 117 feet wide by 8 feet deep and hold approximately 6,250 tons of material. The tailings pond will be constructed from bottom to top of: a prepared subgrade, 4-inches of bedding material, an 8-ounce per square yard geotextile, a 30-mil reenforced polyethylene (RPE), a geogrid, and a 30-mil coextruded RPE with ultraviolet (UV) protected.

The Permittee will need to permit additional tailings ponds to contain more material once the facility is operating. The Permittee is also not allowed to remove material from the tailings pond unless authorization is provided by the Division in writing.

*Material Characterization:* The material characterization for the project consisted of an ore sample and representative waste rock samples. The ore sample MWMP results indicated elevated concentrations of nitrogen (26 mg/L) and antimony (0.014 mg/L) with an acid neutralizing potential: acid generating potential ratio of 115 utilizing total sulfur. The waste rock samples did not indicate any elevated constituents above Profile I and were acid neutralizing. Water from the tailings pond will be sampled and submitted to the Division on a quarterly basis.

*Public Notice Considerations:* The Division attempted publishing the Notice of Proposed Action in a local newspaper due to the location of the proposed project near Searchlight. Other than the Las Vegas Sun Newspaper, published in Las Vegas, no local newspapers were available. Since the publishing of the Notice in a newspaper is not required per NAC 445A.402 (outlined below in Part D), the Division determined the posting of the Notice to the website and sending to interested parties on the mailing list met the regulation.

# C. <u>Receiving Water Characteristics</u>

Water for the processing circuit will be pumped from an existing well (Tiger Well) located to the northwest of the project site. The water from the well meets Profile I reference values.

Depth to groundwater is approximately 175 to 200 feet below ground surface. Locally, groundwater flow is generally in a south-southeasterly direction, toward Paiute Valley and the Colorado River and meets Profile I reference values.

## D. <u>Procedures for Public Comment</u>

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 published on the Division website: <u>https://ndep.nv.gov/posts/category/land</u>. 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. <u>Proposed Determination</u>

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

### F. <u>Proposed Limitations, Schedule of Compliance, Monitoring, Special</u> <u>Conditions</u>

See Section I of the Permit.

#### G. <u>Rationale for Permit Requirements</u>

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 of leak detection systems as well as routinely sampling downgradient monitoring wells. 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 2800 Cottage Way, Room W-2606, Sacramento, California 95825, (916) 414-6464, for additional information.

Prepared by: Natasha Zittel, P.E. Date: 25 January 2023 Revision 00: New Permit.