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FACT SHEET
(pursuant to NAC 445A.401)

Permittee Name: **Action Enterprises Nevada LLC**
Project Name: **Cloverdale Placer Project**
Permit Number: **NEV2010108 (New 2012)**

A. Location and General Description

The facility is located on private land in Nye County, Nevada, within Section 24, Township 8 North, Range 39 East, Mount Diablo Baseline and Meridian (MDB&M), approximately 37 miles northwest of the town of Tonopah. The site can be accessed by proceeding north on State Highway 95 from Tonopah approximately 4 miles, then turning right (north) onto the Gabbs Pole Line Road (initially paved, then transitioning to maintained dirt road). After 31 miles, turn right on an unnamed dirt road and proceed 4 miles, turning left onto another unnamed dirt road, and proceeding approximately ½ mile to the project site.

The Cloverdale Placer Project is a surface mining and beneficiation facility operated for the purpose of extracting gold in a physical separation circuit. The Cloverdale Placer Project is permitted as a physical separation facility pursuant to NAC 445A.414 and, as such, no chemicals are permitted to be used or stored at the facility. Ore processing is limited by the Permit to 36,500 tons of ore per year. The facility is required to be designed, constructed and must be operated and closed without any discharge or release in excess of those standards established in regulation except for meteorological events which exceed the design storm event.

B. Synopsis

Geology

Bedrock in the project area consists of one or more Tertiary volcanic units collectively mapped as the Toiyabe quartz latite. Regionally, this unit is part of the hypothetical Cloverdale Caldera, an intrusive and extrusive volcanic complex. Mineralization is found in placer gravels covering the bedrock in the western two-thirds of the property.

The gravels pinch out on the eastern third of the property which is mainly covered by shallow colluvial sediments. An eroded remnant of the Gold Flats Alluvial Fan, most of which lies a few miles to the east, covers the southeast corner of the property and is the highest topographical point in the project area. Near the center

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of the property, the gravels are covered by a layer of mud, about two (2) feet (ft) thick, some of which is encrusted with alkali salts.

Mining

Mining will consist of removal of placer gravels and will be carried out by excavators and loaders using an open-cut-and-fill method, and transport of the material using haul trucks to the ore stockpile near the physical separation facility. Overburden will be stockpiled at the mine site and used as cover for any area where mining has concluded and reclamation begun. Excavation of placer gravels will penetrate the ground water table and will require dewatering. Reinfiltration of the dewatering water will be carried out in a rapid infiltration basin (RIB) and is described in more detail in the Fact Sheet for Cloverdale Infiltration WPCP NEV2010109.

Process Circuit

Material removed from the mine will be first run through a grizzly, with reject material returned to the mine to be used as fill in mined-out areas. The material passing the grizzly (approximately 9-inch minus) will then be introduced to the main feeder of the physical separation circuit. The 3-inch plus material is screened out and sent by conveyor to the reject stockpile, with the material passing the screen moving on to a five (5) ft by 22 ft long trommel.

The trommel separates ¾-inch minus, gold bearing, material, sending it to the sluice boxes, while the oversize is conveyed to the reject stockpile. The size reduction continues through two four (4) ft by 30 ft sluice boxes and then to two (2) mineral jigs, a 42-inch 4-plex and a 26-inch cleaner. Reject from these stages of the process are sent to a sand screw for dewatering and then to the reject stockpile. The water goes to Settling Pond 1 where any remaining fines are allowed to settle before reusing the water in the circuit.

Water is added at the feed hopper stage for pre-wetting, and thereafter in the trommel, sluice boxes and jigs to aid in the separation process. The wet portion of the process takes place over a 60-mil high density polyethylene (HDPE) lined apron which drains to Settling Pond 1. Water is recycled to the greatest extent possible.

Reject material sent to stockpiles, and fines removed periodically from the settling ponds, are characterized quarterly using the Meteoric Water Mobility Procedure (MWMP)-Profile I and Acid Neutralizing Potential/Acid Generating Potential (ANP/AGP) tests. Based on the results, material approved by the Division will be used for backfill in the areas where mining has ceased and reclamation is underway.

Material Characterization

Analytical results of MWMP-Profile I of leachate from ore samples indicate that sulfate (600 mg/L), nitrate + nitrite (23 mg/L), arsenic (0.12 mg/L), and Total Dissolved Solids (TDS – 1,900 mg/L) exceed the Profile I reference values. Testing of overburden samples resulted in exceedances for nitrate + nitrite (12 mg/L), aluminum (0.74 mg/L), and arsenic (0.025 mg/L).

Representative tails samples were also tested using MWMP, resulting in exceedance only of the arsenic reference value (0.034 mg/L). Due to these exceedances, the reject stockpiles in the process will be on compacted soil (permeability of 1×10^{-6} cm/s or less) and are graded to drain any runoff from meteoric events to Settling Pond 1.

Static test results from representative ore samples indicate net acid neutralizing potential (0.44 AGP vs. 11.4 ANP – ANP:AGP = 25.9), suggesting that low pH will not be an issue. Ore and tails solids will be characterized quarterly, as required by the permit.

Settling Ponds

Three Settling Ponds are located just south of the process area. The ponds measure 120 ft by 220 ft at the crest and are lined with 60-mil HDPE geomembrane liner, over a compacted subbase (12 inches compacted to 93% of maximum dry density). Each pond is designed with an overflow weir so that the north pond (Settling Pond 1) overflows to the second (Settling Pond 2) and the second to the third (Settling Pond 3), thereby maintaining a minimum 2 ft freeboard. Initial (Phase I) construction will include Settling Ponds 1 and 2, with Settling Pond 3 planned for future construction (Phase II).

Water from the process is conveyed to the settling ponds for clarification and then reused in the process. Fines that settle out are periodically removed and, if approved by the Division based on characterization, dried using a sand screw and, if necessary, a cyclone, and then used for backfilling of inactive mine areas.

Stormwater Control

The east side of the settling pond area is protected from upgradient run-on by a storm diversion ditch. The ditch measures four (4) ft across and one (1) ft deep. The diversion is designed to divert run-off from the 100 year, 24-hour storm event into natural drainages south of the ponds.

Ancillary Facilities

Ancillary facilities at the site include equipment storage containers, a small office, and parking area. A small area designated for refueling of vehicles includes a 60-mil HDPE liner with containment berms around the perimeter. A separate area with the same liner design is used for equipment maintenance and used oil temporary storage.

C. Receiving Water Characteristics

The Cloverdale Placer Project is located at an elevation of approximately 5,650 feet amsl. Depth to groundwater is as little as 6 ft below ground surface (bgs) within the placer gravels. Monitoring wells were installed upgradient (MW-1) and downgradient (MW-2) from the mine area. MW-1 encountered groundwater 7 feet bgs, and MW-2 at 12 feet bgs. Groundwater quality is good with analyses of samples taken from these two wells showing exceedances only for arsenic at 0.014 mg/L (MW-1) and 0.011 mg/L (MW-2). The groundwater gradient is generally north to south through the project area.

Surface water at the site consists of intermittent flows in Cloverdale Creek which runs from north to south just to the west of the property, crossing over briefly in the northwest corner approximately 300 ft west of the mine site. Seasonal flows are strongest during storm events or during spring runoff, and normally completely dry in Summer and Fall. No springs are within the project boundary or directly downgradient.

Precipitation in the area of the mine averages approximately 5 inches annually, mainly as snow in winter and rain in early spring. Runoff on the surface is ephemeral and runs from north to south on the western side of the property, with a strong east to west component on the east side.

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 & 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 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 solution will be placed on required routine inspections of process equipment secondary containment, stormwater diversion berms, as well as sampling of the site 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.C. 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 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.

Prepared by: Paul Eckert
Date: **September** 2012
Revision: New Permit 2012