FACT SHEET

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

Permittee Name: **Action Enterprises Nevada LLC**

Project Name: **Cloverdale Placer Project**

Permit Number: **NEV2010108**

Review Type/Year/Revision: **Renewal 2022, Fact Sheet Revision 00**

A. Location and General Description

Location: 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, 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). Continue on the road taking the left fork. 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.

General Description: The Cloverdale Placer Project (Project) has been in temporary closure since November 2014. The Project was permitted as a physical separation facility pursuant to NAC 445A.414 and, as such, no chemicals were permitted to be used or stored at the site. Ore processing was limited by the Permit to 600,000 tons of ore per year (tpy). This was an increase from the originally permitted 36,500 tpy, approved by the Division as a minor modification in September 2013. No changes in the physical separation circuit configuration were required as part of the minor modification since the equipment was originally designed for the higher processing rate. The facility is required to be closed without any discharge or release in excess of those standards established in regulation except for meteorological events which exceed the design storm event.

The WPCP was renewed in 2017 as a physical separation facility but did not operate during that period. Hence, Action Enterprises Nevada LLC (Permittee) was advised by the Division to close the facility per NAC 445A.446(b). The 2022 Permit renewal is being issued as a closure permit; no mining or beneficiation is authorized.

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

Mining: Mining consisted of removal of placer gravels and was carried out by excavators and loaders using an open-cut-and-fill method; transport of the material was via haul trucks to the ore stockpile near the physical separation facility. Overburden was stockpiled at the mine site and used as cover for any area where mining was concluded, and reclamation had begun. Excavation of placer gravels had penetrated the water table and requires dewatering. Infiltration of the dewatering water was carried out in a rapid infiltration basin (RIB). The Cloverdale Infiltration Project (WPCP NEV2010109) was closed and terminated on 2 March 2021, following the closure of the RIB.

Process Circuit: Material removed from the pit was first run through a belt feeder grizzly, with reject material returned to the mine to be used as fill in mined-out areas. Before the back-filling could occur, the Permittee was required to seek approval by the Division for use of this material based on the results of Meteoric Water Mobility Procedure (MWMP), Division Profile I, and Acid Neutralizing Potential/Acid Generating Potential (ANP/AGP) tests. The material passing the grizzly (approximately 7-inch minus) was then introduced to the main feeder of the wet feed screen deck wash plant. The ¾-inch plus material was screened out and sent by conveyor to the reject stockpile, with the material passing the screen moving on to 2 sluice boxes measuring 4 feet by 30 ft.

The sluice boxes separated ¾-inch minus gold bearing material, sending concentrate to the collection point, and the remainder in a slurry to the two mineral jigs, a 42-inch 4-plex and a 42-inch cleaner. Reject from these stages of the process were concentrate sent to the collection point. The water reported to Settling Pond 1 (SP1) where any remaining fines are allowed to settle out before reusing the water in the circuit.

Water was then added at the feed hopper stage for pre-wetting, and thereafter in the vibrating wet screen deck, with sluice boxes and jigs to aid in the separation process. The wet portion of the process took place over a 60-mil high density polyethylene (HDPE) lined apron which drained to SP1. Water was recycled to the greatest extent possible.

Reject material sent to stockpiles, and fines removed periodically from the settling ponds, were characterized quarterly using the MWMP-Profile I and ANP/AGP tests. Based on the results, material approved by the Division was used for backfill in the areas where mining has ceased, and reclamation is underway.

Material Characterization: In November 2014, the mine site went into temporary closure and regular sampling ceased. Hence, the most recent analysis data the Division has is from the third and fourth quarters of 2014 (partial sampling results from each). Analytical results of Profile I of effluent from the classifier (Pond 1) provided the following results: aluminum (0.098 milligrams per liter, [mg/L]), arsenic (0.038 mg/L, the only exceedance), chloride (78 mg/L), iron (0.046 mg/L), manganese (<0.005 mg/L), nitrate + nitrite (as N, <0.005 mg/L), pH (8.47 standard units, SU), and total dissolved solids (TDS, 640 mg/L). From the fourth quarter 2014, testing of overburden samples displayed exceedances for aluminum (0.69 mg/L), arsenic (0.22 mg/L), chloride (500 mg/L), pH (8.9 SU), sulfate (830 mg/L), and TDS (2,400 mg/L).

Representative tailings samples were also tested using MWMP, resulting in exceedances of aluminum (0.42 mg/L) and arsenic (0.034 mg/L). Due to these exceedances, the reject stockpiles in the process are on compacted soil (permeability of $1x10^{-6}$ centimeters per second or less) and are graded to drain any runoff from meteoric events to SP1.

November 2014 static test results from representative ore samples indicated that acid neutralizing potential versus acid generation potential (ANP:AGP = 16.4) was high enough that acid generation would not be an issue.

Settling Ponds: The two settling ponds are located just south of the former process area. The ponds are 23 feet deep and measure approximately 120 ft. by 220 ft. at the crest with 2:1 horizontal to vertical side slopes. Both ponds are lined with 60-mil HDPE geomembrane liner, over a compacted subbase (12 inches compacted to 90% of maximum dry density). Each pond is designed with an overflow weir so that the north pond (SP1) overflowed into the south one (SP2), thereby maintaining a minimum 2 ft. freeboard. Initial (Phase I) construction included Settling Ponds 1 and 2. The Phase II construction of Settling Pond 3 was never initiated.

Water from the process was conveyed to the settling ponds for clarification and then reused in the process. Fines that settled out were 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 inactive mined areas.

In 2021, the Division was notified via email by the Permittee that SP1 had been vandalized. Person or persons unknown had damaged the perimeter fence, entered the property, and cut away all sections of liner that were not part of seams or corners. Very large portions of the liner from the pond slopes were removed and, somewhat mysteriously, left in piles on the mine site. SP2 was not damaged, presumably due to its steep slopes.

The Permittee was advised by the Division at the time of the damage report that the pond was no longer useable and should be closed if mining had ceased. It was suggested that slimes from SP1 be excavated and moved into SP 2. Then SP2 could be covered and re-seeded per the reclamation plan.

Stormwater Control: The east side of the settling pond area is protected from upgradient run-on by a stormwater diversion ditch. The ditch measures 4 ft. across and 1 foot 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 included equipment storage containers, a small office, and parking area. A small area designated for refueling of vehicles included a 60-mil HDPE liner with containment berms around the perimeter. A separate area with the same liner design was 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 above mean sea level. Depth to groundwater is as little as 6 feet below ground surface (bgs) within the placer gravels. In February 2010, before the initiation of

mining, the Permittee submitted a groundwater sample for Profile I analysis; all constituents met Division standards with the exception of arsenic (0.10 mg/L), iron (26 mg/L), manganese (0.39 mg/L), pH (8.73 SU), and TDS (1,500 mg/L).

Monitoring wells were installed upgradient (MW-1) and downgradient (MW-2) from the mine area. Two other wells, MW-3 and MW-4 were not needed for compliance and were installed for the Permittee's own benefit. The depth to water in September 2014 for MW-1 was 15.7 bgs, and MW-2 at 22.5 feet bgs. Groundwater quality is generally good with analyses of samples taken from these two wells showing exceedances only for arsenic at 0.019 mg/L (MW-1) and 0.018 mg/L (MW-2). The groundwater gradient is generally north to south through the project area.

The last Profile I results to be received by the Division were submitted shortly before the site entered temporary closure in the Third and Fourth Quarters of 2014. See Table 1.

Table 1: Third Quarter 2014 monitoring results for on-site wells.

Constituent	Division Reference Value (mg/L)	MW-1 (mg/L)	MW-2 (mg/L)
Alkalinity	--	300	310
Arsenic	0.01	0.019	0.018
Chloride	400	39	43
Iron	0.6	0.092	0.087
Manganese	0.1	0.014	0.0085
Nitrate + Nitrite (as N)	10	0.19	0.11
pH	6.5 – 8.5 S.U.[a]	7.6	7.8
Sulfate	500	52	60
Total Dissolved Solids	1,000	470	540

(a): Standard Units

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 feet 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. There are no perennial waterbodies with water quality standards within one mile of the Project. The closest waterbody, Peavine Creek, is upgradient and approximately 14 miles to the northeast.

Precipitation in the area of the mine averages approximately 5 inches annually, mainly as snow in winter and rain in early spring. Surface runoff 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 close, subject to the conditions within the Permit, is being published on the Division website: https://ndep.nv.gov/posts. The Notice is being emailed 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. Proposed Determination

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

F. Pathway to Final Closure and Permit Termination

See Section I of the Permit.

In accordance with NAC 445A.409 and 445A.446, for final closure and Permit termination the Permittee must demonstrate to the Division that: 1) all sources at the facility have been stabilized, removed, or mitigated; 2) any applicable requirements in NAC 445A.429, 445A.430, and 445A.431 have been achieved; and 3) sufficient post-closure monitoring has occurred to verify the adequacy of these actions to ensure the long-term protection of waters of the State, human health, and wildlife under the physical, chemical, and climatic conditions reasonably expected to occur at the site. If the facility includes a long-term trust and/or requires perpetual treatment or maintenance, post-closure monitoring may never be reached, and the Division may not be able to terminate the Permit.

The pathway to final closure and Permit termination at this facility includes the following specific actions:

1. Completion of closure of both settling ponds including all associated earthwork.
2. Removal of all equipment, solid waste, and debris from the mine site.
3. Abandonment of all four site wells per Nevada Division of Water Resources regulations.
4. Submit a Final Closure Report for the entire site once closure activities have been completed.

5. Discuss with the Division whether the facility is ready for final closure and Permit termination. If so, submit, for review and approval, a written request for final closure and Permit termination including a demonstration of compliance with all applicable closure requirements per NAC 445A.379, 445A.409, 445A.424, 445A.429, 445A.430, 445A.431, 445A.446, 445A.447, as applicable.

The Division may require additional actions if warranted in accordance with site conditions and applicable statutes, regulations, orders, and Permit conditions.

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. 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 2800 Cottage Way, Room W-2606, Sacramento, California 95825, (916) 414-6464, for additional information.

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