

## FACT SHEET

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

Permittee Name: **Supplement Green Two, LLC**

Project Name: **Sunshine Park Project**

Permit Number: **NEV0099101 (2015 Renewal, Fact Sheet Revision 00)**

### **A. Location and General Description**

**Location:** The facility, known as the Sunshine Park Project, is located on private land in northwest Churchill County within Section 11, Township 20 North, Range 28 East, Mount Diablo Baseline & Meridian (MDB&M), approximately 11 miles north of the town of Fallon, Nevada. Access to the project area is possible either by traveling approximately 11 miles north from Fallon on US 95 or by traveling approximately 24 miles south on US 95 from the Interstate Highway 80 Exit #83, also known as Trinity Junction, to the facility exit, located on the west side of US 95. The Sunshine Park facility is located approximately 1 mile west on a dirt access road.

**General Description:** The Sunshine Park Project is permitted in accordance with Nevada Administrative Code (NAC) 445A.410 as a small scale chemical facility to process a maximum of 36,400 tons of mined material/ore per year, and a maximum of 120,000 tons of mined material/ore over the life of the project. The facility will produce mineral supplements for fish food manufacturers as well as secondary amounts of gold and silver.

Mined material/ore is transported to the Sunshine Park facility from mine sites holding valid Water Pollution Control Permits, for introduction into the Permittee's proprietary chemical process. The primary product is treated, pressed through a filter, and roasted prior to packing into super sacks for shipment. A portion of the liquid waste stream is concentrated and taken off-site for precious metal recovery.

The project is anticipated to disturb less than five (5) acres of private land and is expected to remain in operation for more than five (5) years from the 2015 renewal.

### **B. Synopsis**

The project was originally permitted in April 2000, as a small-scale facility designed to beneficiate up to 18,250 tons of "Con-Ore" per year from the Yellow Camp Project (NEV0099100). In March of 2009, the permit was transferred from

the previous operator (ICM Corporation) to a new Permittee, Supplement Green Two, LLC (SGT). Later in that same month, SGT submitted a major modification to allow removal of the old processing equipment, installation of new components, improvements to the building containment, and an increase in ore throughput to 36,400 tons per year. The following description reflects the configuration of the facility after the major modification (approved 18 August 2009) is implemented.

Mined material/ore is transported from permitted mine sites and stored within the process building containment in large steel roller bins. A measured amount of material is loaded into one (1) of the three (3) 500-gallon mix tanks. The ore is treated in the mix tanks with a proprietary chemical mixture consisting primarily of hydrochloric acid and nitric acid. The slurry is then rinsed with water and the liquid portion removed in a filter press. Waste liquid is returned to the process for recycling while the solids are dried in a propane tube roaster, after which they are packaged for shipment. A portion of the liquid waste stream will be diverted to one (1) of three (3) 500-gallon precipitation tanks, after which the resulting concentrate is dried in a second roaster and shipped off-site for precious metal recovery at a facility holding a valid Water Pollution Control Permit if that facility is located within the State of Nevada.

In each leg of the process (mineral supplements and precious metal recovery) no solid waste will be produced; all material will be characterized and shipped off-site. The liquid waste will be primarily recycled into the process but a portion, which becomes too contaminated to reuse, will be discharged to the pond for evaporation. The solids left behind after evaporation will be periodically removed, characterized using meteoric water mobility procedure (MWMP)-Profile II analysis, and shipped off-site by a licensed waste disposal contractor.

An above-ground 7,000-gallon high density polyethylene liner (HDPE) Neutralizing Tank and an aboveground 7,000-gallon HDPE Mud Tank are located outside the Process Building. These components are not part of the modified system but will remain part of the Permit until they are properly decommissioned.

Except for the 7,000-gallon tanks identified above, two (2) HDPE water supply storage tanks, two (2) HDPE overflow tanks, and the evaporation pond, all process vessels and equipment are located within the 100-foot by 50-foot metal Process Building, which has a 6-inch thick reinforced concrete floor with a six-inch stem wall. As part of the major modification, 6-inch drive-over curbs will be added at the doors to complete the perimeter containment of the process area. Once completed the process building containment volume will be more than adequate to contain the 110% volume from the largest process vessel (500 gal).

The Process Building is also equipped with a central floor drain channel that collects and directs fugitive solution to a subgrade 1,000-gallon concrete overflow

tank. Any overflow from the subgrade tank will report to the two (2) HDPE overflow tanks via a buried 2.5-inch diameter Schedule 40 PVC pipeline placed within a 4-inch diameter PVC pipeline for secondary containment. The HDPE overflow tanks are located above ground in an excavation adjacent to the Evaporation Pond and are identified as Tank 'A' (6,300 gallons) and Tank 'B' (6,100 gallons). Any fluid reporting to the floor drain channel, concrete overflow tank, or HDPE overflow tanks is limited by the Permit to 20-day residence, before which time it must be pumped out and placed in double containment, or shipped off-site by a licensed waste disposal contractor.

The leak detected, double-lined Evaporation Pond has a capacity of approximately 180,000 gallons. The pond liner system was constructed on a prepared subbase of native soil that was scarified to a minimum depth of 6 inches and recompacted (no field compaction data available but a technical specification for preparation was provided and construction was observed) prior to placement of the 60-mil textured HDPE primary and secondary liners. A layer of geonet was placed between the HDPE liners to serve as a leak collection and recovery system (LCRS). Any fugitive solution collected in the LCRS is conveyed to a pea gravel-filled, 150-gallon subgrade sump. The leak detection sump may be evacuated through an inclined 3-inch diameter HDPE riser pipe. The pond measures approximately 95 feet on a side at the interior crest where the liner system is retained in a compacted key trench.

### **C. Receiving Water Characteristics**

The project site is located at the southern edge of the Upsal Hogback, a topographic high in the Forty Mile Desert. There are no perennial surface waters within one mile of the project site.

Make-up water is obtained from a well located on site. Depth to groundwater is approximately 78 feet below ground surface. Water quality analyses included in past annual reports indicate exceedances of the Profile I reference values for arsenic, chloride, and total dissolved solids.

### **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 Lahontan Valley 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 Renewed Permit.

**F. Proposed Limitations, Schedule of Compliance, Monitoring, 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 of leak detection systems as well as routinely sampling downgradient monitoring well(s) and surface water. 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 1340 Financial Boulevard, Suite 234, Reno, Nevada 89502-7147, (775) 861-6300, for additional information.

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