

Congress Sand Plant Drying Bed  
Aquifer Protection Permit No. P-513559  
Place ID 212050, LTF No. 88044

**I. Introduction:**

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) for the subject facility that covers the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

**II. Permittee**

Solid Gold, Inc.

**III. Facility Name & Location:**

Congress Sand Plant Drying Bed  
24150 S. Ghost Town Road  
Congress, Arizona 85332  
Yavapai County

**IV. Facility Description:**

The Congress Sand Plant operated intermittently during the period September 2018 through February 2021. During the period the facility operated, the sand plant recycled historic mine tailings at the Congress Mine. On-site groundwater was used to remove very fine particles from historic tailings to create the primary product, a sorted high-silica sand that was sold commercially as a soil amendment. The sand plant tower is a series of cyclones (centrifuges) and screens that separated tailings mixed with water into sand, gravel, and fine material. Conveyor systems, stockpiles, water tanks, water ponds, and a drying bed were part of the process. The drying bed that received discharge from the thickener tank is the subject of this APP permit application. The thickener tank overflow (clarified water) was pumped to the fresh water tank and recycled through the sand plant. The thickener tank underflow consisted of settled fine particles in slurry which was approximately 50% water; this "slurry concentrate" was discharged to the drying bed. Additional fine particles settled out of the slurry concentrate and the recoverable water was pumped back to the thickener. The slurry concentrate remained in the drying bed to allow residual water to evaporate sufficiently to be removed from the drying bed.

The drying bed will be closed as a requirement of this permit.

**V. Regulatory Status**

Solid Gold, Inc., was issued a Consent Judgment, Civil Action No. CV202-004041, filed with the Clerk of the Superior Court for Maricopa County on February 11, 2021, for discharging fines and liquids into a surface impoundment (Congress Sand Plant Drying Bed) without first obtaining an aquifer protection permit for such discharge from ADEQ. This permit is issued to address the closure of the Congress Sand Plant Drying Bed.

**VI. Best Available Demonstrated Control Technology (BADCT):**

After the soil sampling and analysis has been completed and clean closure criteria are met, the Drying Bed shall be backfilled and graded to prevent stormwater from ponding in this area.

**VII. Compliance with Aquifer Water Quality Standards (AWQS):**

Closure of the drying bed, including confirmation soil sampling and backfilling, will ensure that pollutants previously discharged will not contribute to an exceedance of AWQS at the POC. The PMA and DIA were estimated to extend to the limit of the Drying Bed due to the brief, intermittent and limited discharge.