

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 82-3

WASTE DISCHARGE REQUIREMENTS  
FOR  
PICACHO PEAK MINE  
North of Yuma - Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region, finds that:

1. Chemgold Inc. (hereinafter also referred to as the discharger), P.O. Box 2015, Yuma, Arizona 85364 submitted an updated Report of Waste Discharge, dated November 3, 1981.
2. The discharger proposes to expand a heap leaching gold removal operation from 200,000 tons to 300,000 tons of ore, which would be stacked to form a flat pile on one pad. A solution containing .05% or less Sodium Cyanide flows evenly over the top surface of this 20 foot high pile. The operation would leach a maximum of 100,000 tons at one time. Berms would be constructed on top to allow thorough leaching of the ore, and a berm would be constructed on the perimeter of the pad to contain the leaching solution and any rainfall runoff. The solution containing the gold would drain from the pad into two lined containment basins, where it is pumped through a gold removal process and returned for recirculation onto the pile. The basins have additional capacity for 7 inches of rainfall. This closed system would not contain more than 250,000 gallons of solution at any given time. The processing site is located ( in a non-surveyed area) about 1 mile north and 1/2 mile east of the NE corner of Section 16, T14S, R22E, SBB&M, which is about 18 miles north of Yuma, Arizona.
3. The discharger describes the impervious leaching pad as a layer of compacted soil that is covered with a 20 mil (0.020 in) thick P.V.C. (polyvinyl chloride) liner. About 1 foot of sand serves as the leaching medium. The containment basins are lined with 36 mil CPER (chlorinated poly-ethylene reinforced plastic).
4. The discharger states that at the end of all operations at this site, chlorine would be added to neutralize all cyanide present.

*Superseded*  
*9/23/87*  
*By 87-76*

5. The discharge from this mining operation has been subject to waste discharge requirements adopted in Board Order No. 79-105.
6. The Water Quality Control Plan for the East Colorado River Basin was adopted by the Board on April 10, 1975. The Basin Plan contains water quality objectives for the Colorado Hydrologic Unit.
7. The beneficial uses of the groundwaters of the Colorado Hydrologic Unit are:
  - a. Agricultural supply
  - b. Municipal supply
  - c. Industrial supply
8. The discharger reports the depth to groundwater at the site is in excess of 150 feet. The supply water used for this heap leaching operation is piped from the Colorado River, which is about 4 miles northeast of the pad site.
9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
10. The Board in a public meeting heard and considered all comments pertaining to the proposed discharge.
11. The Imperial County Planning Department has approved Negative Declaration EA No. 1277-81 (filing date November 10, 1981) for expansion of this mining operation. The below waste discharge requirements are designed to assure against any significant adverse effects on the quality of local groundwaters and of any surface waters resulting from infrequent storm runoff.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. Neither the mining process nor the discharge of wastewater or other wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. The cyanide solution shall be contained only in the processing system or leak-proof containers.
3. There shall be no wind transport of gold ore containing cyanide solution away from the leaching pad.
4. The leaching pad and containment basins shall have a permeability which does not exceed  $1 \times 10^{-6}$  cm/sec.

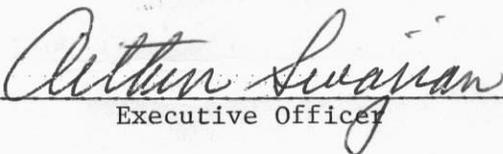
5. All drainage and collection facilities used to contain or transport leaching solution shall be effectively sealed to prevent exfiltration of these liquids.
6. A minimum freeboard of at least two (2) feet shall be maintained in the impervious pad and containment basins.
7. The processing area shall be protected from any washout or erosion which could occur as a result of floods having a predicted frequency of once in 100 years.
8. There shall be no discharge of wastewater containing any trace of cyanide at any location not approved by the Regional Board.
9. Adequate measures shall be taken to insure that the liner would not be punctured for the duration of this facility.
10. Prior to the removal of ore tailings from the impervious pad, the cyanide contained therein shall be neutralized and said tailings shall be discharged in an area permanently protected from a flood having a predicted frequency of once in 100 years.
11. Ore tailings may be abandoned on the pad, provided the cyanide in the ore is neutralized and said tailings are permanently protected from a 100 year flood. Lack of construction or operational activity on the site for a period of one year shall constitute abandonment for the purposes of this Order.
12. All industrial containers and other waste materials shall be discharged at a Class I waste disposal site, or neutralized and discharged at a Class II-2 disposal site provided said discharged wastes are immediately covered. Said containers shall be rendered unusable prior to final disposal.
13. Adequate measures shall be taken to assure that unauthorized persons and animal pets are effectively excluded from the processing area.

B. Provisions

1. The discharger shall submit to the Board, at least 10 days prior to commencement of expanded operations, a technical report showing the construction of said pad, basins and flood protection facilities, and a certificate signed by a California Registered Civil Engineer stating that the pad, basins and attendant facilities are constructed to meet the requirements of this Order.

2. The discharger shall comply with the "Monitoring and Reporting Program No. 82-3" and the "General Provisions for Monitoring and Reporting", and future revisions thereto, as specified by the Executive Officer.
3. Prior to any modifications in this facility which could result in material change in the quality or quantity of wastes discharged, or any material change in location of discharge, the discharger shall report thereon to the Board.
4. In the event of any change in operation, or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:
  - a. Notify this Board of such change; and
  - b. Notify the succeeding owner or operator by letter of the existence of this Order, a copy of which shall be filed with this Board.
5. The discharger shall submit to the Board, at least 30 days prior to commencement of expanded operations, written adequate assurance that money is available, upon abandonment of facilities, in an amount sufficient to insure neutralization of all cyanide, plus cleanup and closure of the processing and tailing disposal sites in a manner that will not adversely effect water quality.
6. This Order prohibits the processing of gold ore at this site in excess of 300,000 tons.
7. This Order supersedes Board Order No. 79-105.

I, Arthur Swajian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on January 27, 1982.

  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 82-3  
FOR  
PICACHO PEAK MINE  
North of Yuma - Imperial County

Location: 1 mile north and 1/2 mile east of NE corner of Section 16,  
T14S, R22E, SBB&M.

MONITORING

Chemgold Inc. (discharger) shall report to the Regional Board concerning the following:

MONITORING AND REPORTING NO. 1

The discharger shall submit to the Regional Board monthly reports containing the following information:

- A. The current status of mining operations - whether the operation is active or inactive.
- B. An estimate of the total amount of ore (tons) that has been processed to date.

MONITORING AND REPORTING NO.2

- A. Immediate reporting of any accidental spillage or release of waste material, and also, plan for immediate measures being taken to correct same and limit detrimental effects.
- B. Upon request from this Board's Executive Officer, the discharger shall furnish technical and/or monitoring reports on the treatment and discharge of wastes.
- C. At least thirty (30) days prior to any proposed discharge of ore tailings or wastewater, or termination of the operation described in this Order, the discharger shall submit a copy of the results of analysis of cyanide concentration of wastewater and/or ore tailings, and shall request a Regional Board staff inspection to approve the proposed discharge or cleanup procedure.

- D. Report of completion of cleanup of premises shall be submitted to the Regional Board in writing within one week following completion of work.

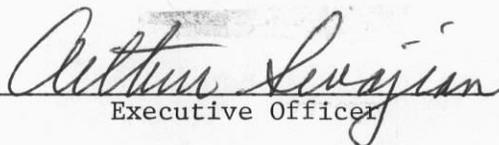
REPORTING

The above monitoring program shall be implemented immediately upon adoption of this Order.

Monthly reports shall be submitted to the Regional Board by the 15th day of the following month. Reports for Items 2 A, B, C, and D (above) shall be forwarded immediately and if at all possible shall be preceded by phone communication to the Regional Board's office. Phone No. (714) 346-7491. Copies of the reports submitted to the Board pursuant to this Monitoring and Reporting Program shall be maintained at the operations site, and shall also be made available to staff of the Regional Board upon request.

Mail reports to:

California Regional Water Quality Control Board  
Colorado River Basin Region  
73-271 Highway 111, Suite 21  
Palm Desert, CA 92260

  
Executive Officer

January 27, 1982

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



Winterhaven ↓ 12 miles

SITE MAP

PICACHO PEAK MINE

North of Yuma - Imperial County

Location: 1 mile north and 1/2 mile east of  
NE corner of Section 16, T14S, R22E, SBB&M  
USGS Picacho Peak 15 min. Topographic Map

Order No. 82 - 3