

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 85-99

WASTE DISCHARGE REQUIREMENTS
FOR
PACIFIC GAS AND ELECTRIC COMPANY
TOPOCK COMPRESSOR STATION
Southeast of Needles - San Bernardino County

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

1. Pacific Gas and Electric Company (hereinafter also referred to as the discharger), 77 Beale Street, San Francisco, California, 94106, submitted a Report of Waste Discharge dated August 21, 1985, to discharge industrial wastewater from a natural gas compressor station located one-half ($\frac{1}{2}$) mile west of the Colorado River, across from Topock, Arizona.
2. The discharger is presently discharging a maximum of 30,000 gallons-per-day of industrial wastewater to four (4) evaporation basins in the SW $\frac{1}{4}$, Section 8, T7N, R24E, SBB&M. A general location map is shown as Attachment "A" appended hereto as a part of this Order.
3. The wastewater discharged is primarily cooling tower blowdown, but also contains a small amount of wastewater from other miscellaneous plant operations. Presently, the cooling tower blowdown contains added chromates (used for corrosion control) and has a total dissolved solids concentration of approximately 6,500 mg/l.
4. The discharge has been subject to waste discharge requirements adopted in Order No. 75-52 (Revised). The disposal of any remaining chromic hydroxide sludge residue (from flocculation or evaporation of cooling tower blowdown) is subject to waste discharge requirements adopted in Order No. 70-73.
5. The discharger proposes to replace the hazardous chromate-based cooling tower water treatment process currently in use with a nonhazardous phosphate-based water treatment process (Betz Dianodic II Treatment Program). The Dianodic II Treatment Program is an organic treatment process that reportedly produces no hazardous waste.
6. The Dianodic II treatment process consists of the following products which are added to the cooling tower makeup water to prevent corrosion, scaling and fouling of the heat exchangers and cooling tower structure.
 - a. Betz 2020: A scale inhibitor composed of a low molecular weight polymer. Treatment level - 60 ppm.
 - b. Betz 2040: A corrosion inhibitor composed of ortho - and polyphosphates. Treatment level - 80 ppm.

*replaced
by 88-030*

- c. Betz C-63P: A nonoxidizing biocide designed to control microbiological growth. Treatment level - 2 ppm.
 - d. Betz C-30: A nonoxidizing biocide designed to control microbiological growth. Treatment level - 25 ppm.
 - e. Sulfuric Acid: Used to lower the pH to inhibit scaling.
7. Domestic sewage from employee working areas is disposed of by means of septic tank and leach field systems.
 8. The Water Quality Control Plan for the Colorado River Basin Region was adopted by the Regional Board on November 14, 1984. The Basin Plan contains water quality objectives for the Colorado River Hydrologic Unit.
 9. The beneficial uses of the waters to be protected are:
 - a. Surface Waters: The nearest surface water is the Colorado River, located approximately one-half ($\frac{1}{2}$) mile east of the evaporation basins. The beneficial uses of the Colorado River below the Needles-Topock Bridge are:
 1. Municipal supply
 2. Agricultural supply
 3. Industrial supply
 4. Ground water recharge
 5. Contact and noncontact water recreation
 6. Warm freshwater habitat
 7. Wildlife habitat
 8. Hydropower generation
 9. Preservation of rare and endangered species.
 - b. Ground Water: Ground water in the vicinity of the compressor station is not presently being used. Recent analysis of ground water from a monitoring well located on the plant site, approximately 1,000 feet from the evaporation basins, show TDS concentration between 2,000 and 20,000 mg/l. Ground water elevation is approximately 460 feet above mean sea level. The bottom of the lowermost evaporation basin is 670 feet above mean sea level.
 10. The discharger states that the nonhazardous phosphate-based treatment process produces wastewater with total dissolved solids (TDS) concentration of approximately 1,400 mg/l with a pH of approximately 8.0. The surface impoundments contain approximately 28,000 mg/l TDS concentration with a pH of approximately 8.0.

11. Pacific Gas and Electric Company plans to submit, by November 8, 1985, a closure plan for all hazardous waste facilities at Topock Compressor Station including the surface impoundments, in compliance with Subchapter 15, Chapter 3, Title 23, of the California Administrative Code.
12. Pacific Gas and Electric Company reports that upon closure, the existing surface impoundments will be reconstructed as Class II surface impoundments in accordance with Subchapter 15, Chapter 3, Title 23, of the California Administrative Code.
13. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
14. The Board in a public meeting heard and considered all comments pertaining to the discharge.
15. These waste discharge requirements govern an existing facility, which the discharger is currently operating, and therefore is exempt from the provisions of the California Environmental Quality Act in accordance with Section 15301 of Title 14, Chapter 3, of the California Administrative Code.

IT IS HEREBY ORDERED, Pacific Gas and Electric Company shall comply with the following:

A. Discharge Specifications

1. Neither the treatment nor the discharge of wastes shall create a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. The discharge of industrial wastewater shall be confined to the evaporation basins shown on Attachment "B" appended hereto as a part of this Order.
3. A minimum freeboard depth of at least one (1) foot shall be maintained at all times in each basin.
4. Measures shall be taken to assure that wastewater discharged to the basins shall not overflow.
5. Adequate protective works shall be provided to assure that flood or surface drainage water do not erode or otherwise render portions of the disposal facilities inoperable.
6. Remaining chemical residues containing chromates obtained by chemical flocculation or evaporation of process wastewaters shall be discharged only at a solid waste disposal site approved by the Board to receive such wastes.
7. The discharger shall implement and maintain the Dianodic II Treatment Program as specified in the above Finding No. 6.

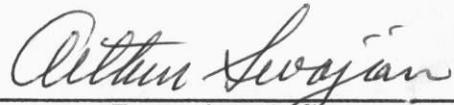
B. Prohibitions

1. The discharge of wastewaters to Colorado River or to any channel draining to Colorado River is prohibited.
2. The use of hazardous chemicals including chromates in the cooling tower water treatment process is prohibited.

C. Provisions

1. The discharger shall maintain a copy of this Order at the site to be available at all times to site operating personnel.
2. The discharger shall comply with "Monitoring and Reporting Program No. 85-99", 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 quality or quantity of wastewater discharged, or any material change in location of discharge, the discharger shall report thereon to the Regional 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 the Regional Board in writing of such change; and
 - b. Notify the succeeding owner or operator in writing of the existence of this Order; a copy of which shall be filed with this Board.
5. This Order does not authorize violation of any federal, state or local laws or regulations.
6. This Order supersedes Board Order No. 75-52 (Revised).

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, adopted on October 2, 1985.



Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 85-99
FOR
PACIFIC GAS AND ELECTRIC COMPANY
TOPOCK COMPRESSOR STATION
Southeast of Needles - San Bernardino County

Location of Discharge: SW $\frac{1}{4}$, Section 8, T7N, R24E, SBB&M

MONITORING

Discharge wastewater samples shall be taken from each evaporation basin. Pacific Gas and Electric shall report monitoring data to the Regional Board in accordance with the following:

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>
Total Dissolved Solids (TDS)	mg/l	Quarterly
pH	pH Units	Quarterly
Specific Conductance	micromhos/cm	Quarterly
Total Chromium	mg/l	Quarterly
Total Phosphorus	mg/l	Quarterly
Total Wastewater Delivered to Ponds	Gallons	Quarterly

Monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15 and October 15 of each year.

The discharger shall implement the above monitoring program within 30 days following the effective date of this Order.

Forward monitoring reports to:

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

Arthur Swajan

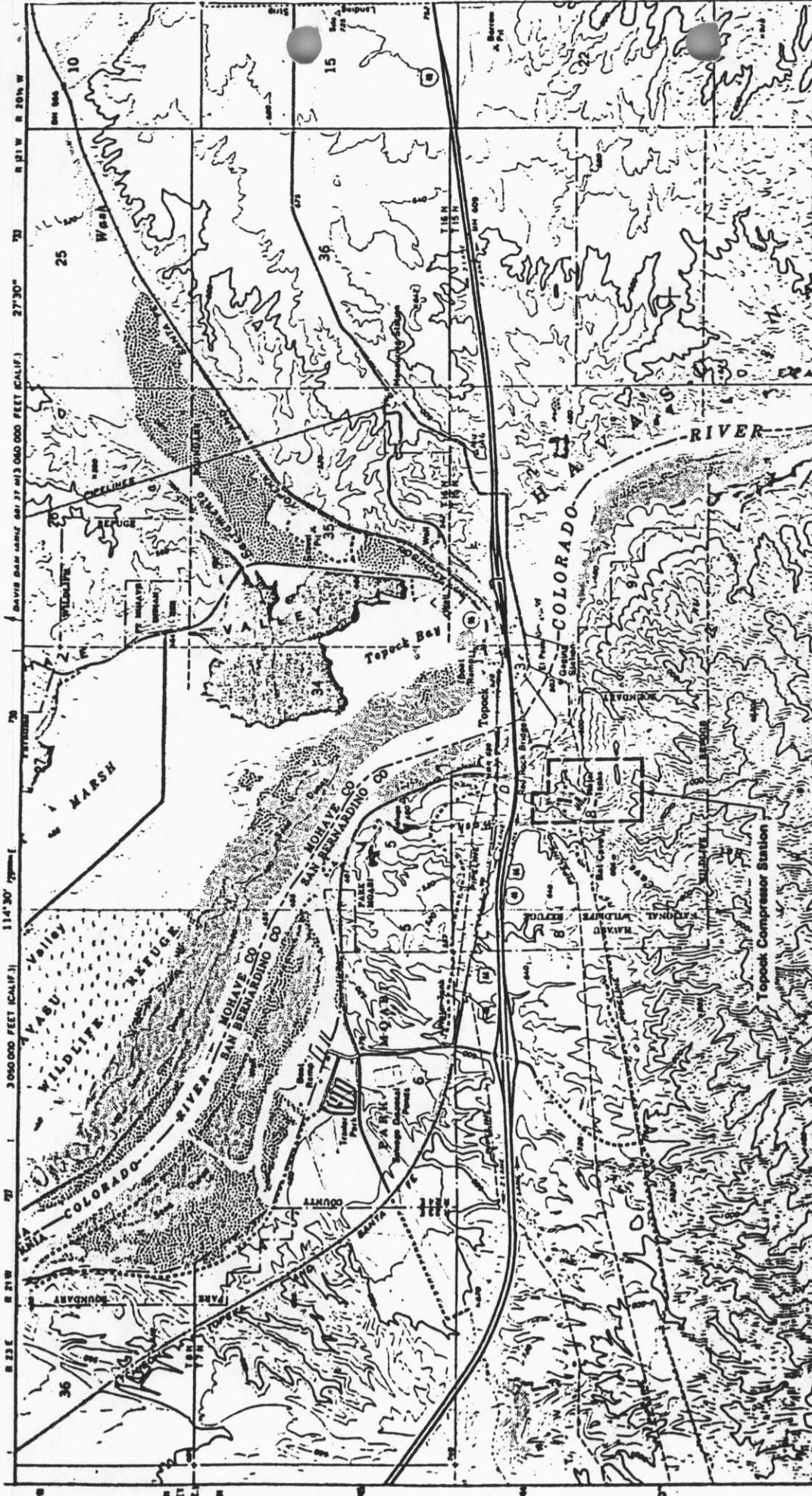
Executive Officer

October 2, 1985

Date

*Revised by:
Pd. Ord. # 96-021
3/29/96*

*Superseded
12/5/85*



WHOLE MTN. QUADRANGLE TOPOCK QUADRANGLE
 CALIFORNIA - ARIZONA
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 MEAN SEA LEVEL DATUM 1983

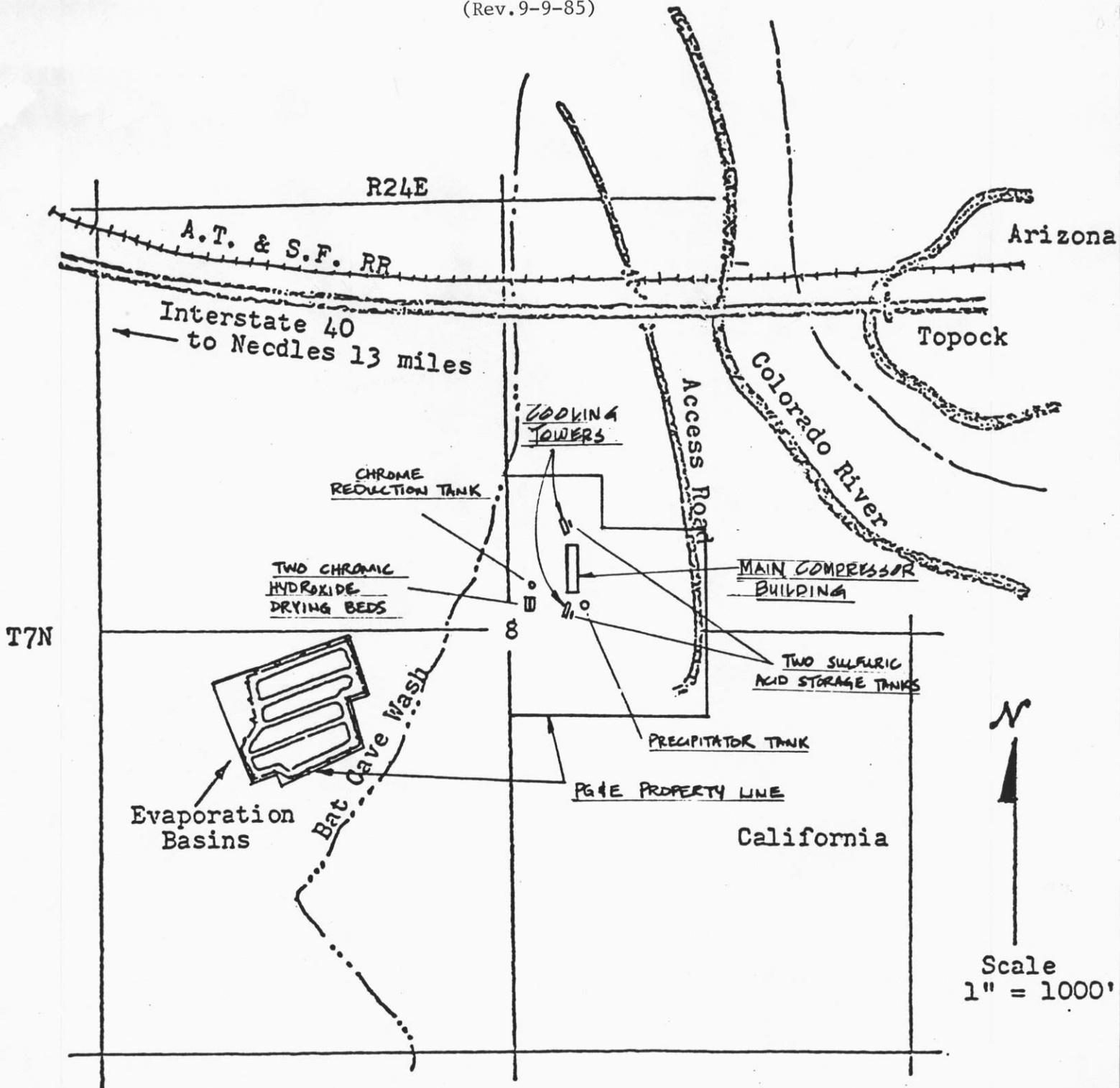
SCALE 1:24,000



CONTOUR INTERVAL 40 FEET
 DOTTED LINES REPRESENT 20-FOOT CONTOURS
 DATUM 1983 MEAN SEA LEVEL

ATTACHMENT "A"

ATTACHMENT "B"
(Rev. 9-9-85)



SITE MAP

PACIFIC GAS AND ELECTRIC COMPANY - TOPOCK COMPRESSOR STATION
Southeast of Needles - San Bernardino County

Evaporation Basins in SW $\frac{1}{4}$, Section 8, T7N, R24E, SBB&M

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

MONITORING AND REPORTING PROGRAM NO. 85-99 (REVISED 12/5/85)

**FOR
PACIFIC GAS AND ELECTRIC COMPANY
TOPOCK COMPRESSOR STATION
Southeast of Needles - San Bernardino County**

Location of Discharge: SW¼, Section 8, T7N, R24E, SBB&M

MONITORING

Pacific Gas and Electric Company shall report monitoring data to the Regional Board in accordance with the following schedule:

A. Evaporation Basin Wastewater Monitoring

1. Discharge wastewater samples shall be taken from each evaporation basin. Pacific Gas and Electric shall report monitoring data to the Regional Board in accordance with the following:

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>
Total Dissolved Solids (TDS)	mg/l	Quarterly
pH	pH Units	Quarterly
Specific Conductance	micromhos/cm	Quarterly
Total Chromium	mg/l	Quarterly
Total Phosphorous	mg/l	Quarterly
Total Wastewater Delivered to Ponds	Gallons	Quarterly

B. Ground Water Monitoring

1. The discharger shall obtain representative samples of ground water from each ground water monitoring well and analyze for the following constituents:

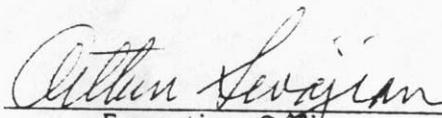
<u>Constituent</u>	<u>Unit</u>	<u>Sampling Frequency</u>
Total Dissolved Solids (TDS)	mg/l	Quarterly
pH	pH Units	Quarterly
Specific Conductance	micromhos/cm	Quarterly
Total Chromium	mg/l	Quarterly
Total Phosphorus	mg/l	Quarterly

Monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15 and October 15 of each year.

The discharger shall implement the above monitoring program within 30 days following the effective date of this Order.

Forward monitoring reports to:

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


Executive Officer

December 5, 1985

Date