

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

ORDER NO. 88-95

**WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA GAS COMPANY
BLYTHE COMPRESSOR STATION
Blythe - Riverside County**

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

1. Southern California Gas Company (hereinafter also referred to as the discharger), P. O. Box 670, Blythe, California 92225, submitted current information to update the waste discharge requirements for existing unclassified surface impoundments.
2. The facility is currently regulated by waste discharge requirements contained in Board Order No. 78-03. These requirements were developed prior to the adoption in November 1984 of the regulations in Subchapter 15, Chapter 3, Title 23 of the California Code of Regulations, which are more stringent than the previous applicable State regulations. The requirements in said Order No. 78-03 therefore do not adequately protect ground water to the extent required by current State regulations.
3. The discharger discharges brine wastes and cooling tower blowdown generated at a natural gas compressor station located at the intersection of Fourteenth Avenue and Arrowhead Road in Blythe as shown in Attachment A incorporated herein and made a part of this Order.
4. The brine waste and cooling tower blowdown generated from said facility are described as follows by the discharger:
 - a. From May to October the maximum has been 18,000 gallons-per-day of wastewater from the cooling towers and 4,000 gallons-per-week of swimming pool waste water which are discharged into a 3-acre basin for final disposal by evaporation and infiltration. However, it is expected that under the new mode of operation, to meet total dissolved solids (TDS) limits, the maximum discharge would be 30,000 gallons/day. Treatment of cooling tower blowdown water involves periodically adding a small amount of organic phosphate and dispersants to control scale, and sulfuric acid to lower the pH to about 7.5. The cooling tower blowdown TDS concentration ranges from water supply levels in the winter months to around 3,500 mg/l in the summer months when evaporation losses are greatest.
 - b. A maximum of 8,000 gallons-per-day of wastewater with a TDS of around 15,000 mg/l from zeolite-brine softener regenerative cycles is discharged alternately to one of three basins that total 6 acres, as shown in Attachment B incorporated herein and made part of this Order. Final disposal is by evaporation and infiltration. Under the present mode of operation, the

TDS concentration of this discharge is kept below 5,000 mg/l by diluting the wastewater with ground water.

5. The discharger has indicated that through revised operational procedures the TDS in the cooling tower blowdown water can be kept at or below 2,000 mg/l and therefore requests that wastewater below 2,000 mg/l TDS be allowed disposal to the evaporation/infiltration (unlined) basins.
6. In addition to the wastes described in Finding No. 4, the discharger discharges domestic sewage from the plant restrooms through a septic tank leach field system.
7. The disposal basins are located in the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 35, T6S, R22E, SBB&M.
8. "Designated Waste" is defined in Subchapter 15 as a "nonhazardous waste which consists of, or contains pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state".
9. The waste stream described in Finding No. 4, is a highly saline waste, about 15,000 mg/l total dissolved solids, which would cause degradation of the ground water if not adequately treated or contained.
10. Considering the quality of the shallow ground water in the vicinity of the site, designated waste for the purpose of these waste discharge requirements is any waste which has a TDS value greater than 2,000 mg/l and does not contain hazardous constituents.
11. The site is underlain by alluvial sediments composed of a heterogeneous mixture of gravel, sand and silt, with some clay.
12. Depth to ground water is estimated at 10 feet below the land surface. The discharger constructed two supply wells at the facility to a depth of 370 feet. Ground water flow is southward towards the Palo Verde Valley.
13. The principal water bearing zone in the vicinity of the site is the alluvial sediments deposited by the Colorado River. Ground water is unconfined.
14. Analyses of ground water samples collected from wells within a three mile radius of the site indicate that TDS values range from 450 mg/l to 1,600 mg/l. The TDS of the ground water appears to decrease with depth.
15. The nearest surface water to the site flows southward in canals constructed by the Palo Verde Irrigation District for the distribution of Colorado River water to farmlands in the Palo Verde Valley. At its closest point, the canal is 50 feet to the south of the site.
16. The average annual rainfall for the general vicinity of the site is 4 inches, while evaporation at the site averages 68 inches annually.
17. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Board on November 14, 1984.

18. The Basin Plan delineates the location of discharge to be in the Colorado Hydrologic Unit which has the following beneficial uses of ground water:
 - a. Municipal supply
 - b. Industrial supply
 - c. Agricultural supply
19. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge. The Board in a public meeting heard and considered all comments pertaining to the existing discharge.
20. 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, Chapter 3, Title 14 of the California Code of Regulations.

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

A. Discharge Specifications

1. Neither the treatment nor the discharge of wastewater shall create pollution or nuisance as defined in Division 7 of the California Water Code.
2. Wastewater shall be discharged only into waste management units specifically designed for their containment.
3. Wastewater which has a TDS value greater than 2,000 mg/l shall be discharged only to a Class II surface impoundment as defined in said Subchapter 15 after April 1, 1989.
4. By April 1, 1989 the discharge of wastewater with TDS concentrations greater than 2000 mg/l to the unlined basins, as presently practiced, shall be discontinued after which only wastewater of 2,000 mg/l TDS or less may be discharged.
5. Surface impoundments shall have sufficient freeboard to accommodate seasonal precipitation. In no instance shall there be less than 2 feet (measured vertically) of freeboard.
6. There shall be no surface flow of wastewater away from the discharge facilities to adjacent geologic materials during disposal operations, closure and post-closure maintenance period.
7. Domestic sewage shall not be combined with the reported disposal of brine wastewater.
8. Sewage effluent discharged subsurface shall be retained underground with no materials of sewage origin evident on the ground surface.
9. The discharger shall remove and properly relocate any wastes which are discharged at this site in violation of these requirements.
10. There shall be no discharge of liquid wastes to the surface impoundments other than those identified in Finding No. 4.

11. The discharger shall not cause degradation of ground or surface water.
12. Adequate measures shall be taken to ensure that flood or surface drainage waters do not erode or otherwise render the surface impoundments inoperable.
13. The discharger's proposed procedures to ensure that no wastewater exceeding 2,000 mg/l TDS is discharged to the evaporation/infiltration basins shall be submitted by January 1, 1989 to the Regional Board for review and approval by the Regional Board's Executive Officer. The procedures shall be implemented by April 1, 1989.
14. The discharger shall accurately characterize the wastes to determine appropriate location of discharge.
15. Discharges into unlined basins shall cease in the event of any failure in the disposal system which threatens beneficial water uses.
16. The facility shall be fenced to prevent unauthorized access.

B. Prohibitions

1. The discharge or deposit of hazardous waste (as defined in said Subchapter 15) at this facility is prohibited.
2. The discharge or deposit of designated waste (as defined in said Subchapter 15) to the evaporation/infiltration basins is prohibited after April 1, 1989.
3. The discharge of wastes to surface water, or water drainage courses is prohibited.

C. Provisions

1. The discharger shall maintain a copy of this Order at the site and make it available at all times to site operating personnel.
2. Prior to the discharge of designated waste into the Class II surface impoundments, the discharger shall submit to the Regional Board, a technical report showing construction of said impoundment and certification signed by a California Registered Civil Engineer stating that the impoundments are constructed to meet the construction standards of said Subchapter 15.
3. The discharger shall notify the Regional Board, in writing, of any proposed change in ownership or responsibility for construction or operation of the waste management facility.
4. By August 1, 1988 the discharger shall submit for approval by the Regional Board's Executive Officer the design plans for installation of upgradient and downgradient monitoring wells at the facility. By October 1, 1988 a report of completion of construction of the wells shall be submitted to the Board.
5. The discharger shall adhere to the following schedule for the design, construction, and operation of the Class II surface impoundment:

<u>Task</u>	<u>Completion/Due Date</u>
a. Conceptual Design	August 1, 1988
b. Progress Report	September 1, 1988
c. Award Contract	December 1, 1988
d. Progress Report	February 1, 1989
e. Completion of Construction	March 1, 1989
f. Begin Operation	April 1, 1989
6. The design and construction of a Class II surface impoundment shall be in accordance with the applicable provisions of Subchapter 15.	
7. The Class II surface impoundment shall be designed by, and construction shall be supervised and certified by, a Civil Engineer registered in the State of California.	
8. The discharger shall notify the Regional Board of any material change or proposed change in the character, location or volume of wastes discharged and of any proposed expansion plans. This notification shall be accompanied by an amended report of waste discharge and any additional information as may be required by the Regional Board's Executive Officer.	
9. The discharger shall comply with "Monitoring and Reporting Program No. 88-95", and future revisions thereto, as specified by the Executive Officer.	
10. The discharger shall maintain legible records on the volume and type of each waste discharged. These records shall be available for review by representatives of the Regional Board at any time during normal business hours.	
11. The discharger shall maintain monuments identifying the boundary limits of the entire waste management facility.	
12. One year prior to the anticipated closure of the surface impoundment(s) the discharger shall submit to the Regional Board, for review and approval by the Executive Officer, a closure and post-closure maintenance plan.	
13. The Board shall be notified immediately of any failure which threatens the integrity of any feature of the waste management facility. Such failure shall be promptly corrected.	
14. Upon abandonment of this facility, or as required, residual solids shall be removed from the surface impoundments and discharged at a disposal facility approved by the Regional Board.	
15. 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. Transmit a copy of this Order to the succeeding owner or operator, and file a copy of the transmittal letter with this Board.	

16. The discharger shall comply with all applicable provisions of said Subchapter 15 that are not specifically referenced in this Order.

IT IS FURTHER ORDERED that Board Order No. 78-03 be superseded by this Order.

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 JUN 30 1988.


Executive Officer

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

MONITORING AND REPORTING PROGRAM NO. 88-095 (REVISION NO. 1)

FOR

SOUTHERN CALIFORNIA GAS COMPANY
BLYTHE COMPRESSOR STATION
Blythe - Riverside County

Location of Discharge: SW $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 35, T6S, R22E, SBB&M

The discharger shall monitor for all wastes discharged to waste management units and report to the Regional Board as follows:

WASTE MONITORING

I. <u>Item</u>	<u>Reporting Unit</u>	<u>Frequency</u>
a. Cooling Tower Blowdown Wastewater	Gallons	Quarterly
b. Swimming Pool Backwash Wastewater	Gallons	Quarterly
c. Zeolite-Brine Softener Wastewater	Gallons	Quarterly
d. Domestic Wastewater	Gallons	Quarterly

II. The discharge to the evaporation/infiltration units (except the septic tank/leach line unit) shall be sampled quarterly during March, June, September and December except as noted. The samples shall be analyzed for the following:

<u>Parameter and Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
1. pH	Number	Grab	Monthly
2. TDS	mg/l	Grab	Monthly
3. Electrical Conductivity	micromohs/cm	Grab	Monthly
4. Calcium	mg/l	Grab	Quarterly
5. Sulfate	mg/l	Grab	Quarterly
6. Sodium	mg/l	Grab	Quarterly
7. Magnesium	mg/l	Grab	Quarterly
8. Chloride	mg/l	Grab	Quarterly
9. Phosphate	mg/l	Grab	Quarterly
10. Potassium	mg/l	Grab	Quarterly
11. Fluoride	mg/l	Grab	Quarterly
12. Bicarbonate	mg/l	Grab	Quarterly
13. Nitrate	mg/l	Grab	Quarterly
14. Boron	mg/l	Grab	Annually
15. Chromium (hexavalent)	mg/l	Grab	Annually
16. Zinc	mg/l	Grab	Annually
17. Volatile Organics (EPA Methods 601, 602)	mg/l	Grab	Annually

GROUND WATER MONITORING

The ground water in the monitoring wells shall be sampled quarterly during March, June, September and December except as noted. The samples shall be analyzed for same parameters and constituents as for the wastewater in the waste management units.

Sampling procedures shall be in accordance with EPA approved methods. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

REPORTING

1. Monthly monitoring reports shall be submitted by the 10th day of the following month; quarterly monitoring reports by January 15, April 15, July 15, and October 15 of each year, and annual monitoring reports shall be submitted by January 15 of each year.
2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner to clearly illustrate whether the waste management unit is operating in compliance with waste discharge requirements.
3. Submit monitoring reports to:

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

ORDERED BY:

Philip A. Greenberg
Executive Officer

6-28-89

Date

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

MONITORING AND REPORTING PROGRAM NO. 88-95
FOR
SOUTHERN CALIFORNIA GAS COMPANY
BLYTHE COMPRESSOR STATION
Blythe - Riverside County

Location of Discharge: SW $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 35, T6S, R22E, SBB&M

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2. TDS	mg/l	Grab	Monthly
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4. Calcium	mg/l	Grab	Quarterly
5. Sulfate	mg/l	Grab	Quarterly
6. Sodium	mg/l	Grab	Quarterly
7. Magnesium	mg/l	Grab	Quarterly
8. Chloride	mg/l	Grab	Quarterly
9. Phosphate	mg/l	Grab	Quarterly
10. Potassium	mg/l	Grab	Quarterly
11. Fluoride	mg/l	Grab	Quarterly
12. Bicarbonate	mg/l	Grab	Quarterly
13. Nitrate	mg/l	Grab	Quarterly
14. Boron	mg/l	Grab	Annually
15. Chromium (hexavalent)	mg/l	Grab	Annually
16. Zinc	mg/l	Grab	Annually
17. Volatile Organics (EPA Methods 601,602)	mg/l	Grab	Annually

*Superseded
By m&R
88-95R1*

GROUND WATER MONITORING

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Sampling procedures shall be in accordance with EPA approved methods. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.

REPORTING

1. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year. Annual monitoring reports shall be submitted by the 15th day of January of each year.
2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data shall be summarized in such a manner to clearly illustrate whether the waste management unit is operating in compliance with waste discharge requirements.
3. Submit monitoring reports to:

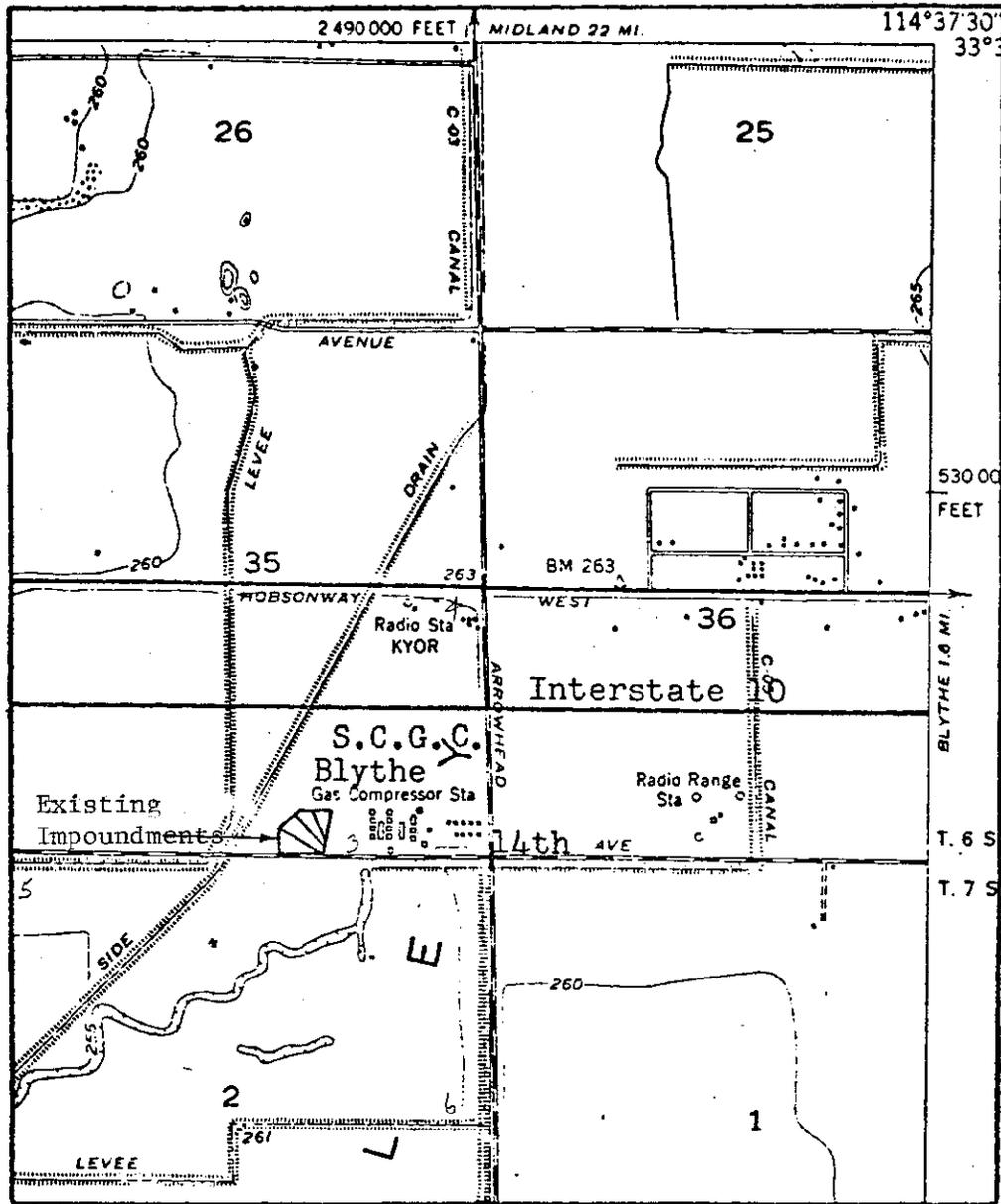
California Regional Water Quality Control Board
Colorado River Basin Region
73-271 Highway 111, Suite 21
Palm Desert, CA 92260

ORDERED BY:

Arthur Swajian
Executive Officer

July 15, 1988
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7

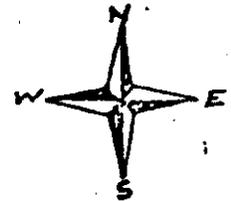


ATTACHMENT A

SOUTHERN CALIFORNIA GAS COMPANY
 BLYTHE COMPRESSOR STATION
 Blythe - Riverside County

Location of Discharge: SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 35, T6S, R22E, SBB&M
 U.S.G.S. Ripley 7.5 min. Topographic Map

Interstate 10



No Scale

Drainage Canal

ARROWHEAD BLVD.

Cooling Tower
Blowdown from
Pit No. 2-Plant
No. 2. Wastewater is
pumped to evaporation
infiltration basin that
is approximately 3 acres.

Zeolite-Brine Softener
Regenerative Wastewater from
Plant No. 1 is discharged al-
ternately to 1 of 3 infiltration-
evaporation basins that total
Pit No. 1 6 acres.

14th AVE.

ATTACHMENT B

EXISTING IMPOUNDMENTS
SOUTHERN CALIFORNIA GAS COMPANY
BLYTHE COMPRESSOR STATION
Blythe - Riverside County