

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 92-002  
NPDES NO. CA0105139

WASTE DISCHARGE REQUIREMENTS  
AND NPDES PERMIT  
FOR  
PALO VERDE IRRIGATION DISTRICT  
GROUND WATER TREATMENT FACILITY  
Blythe - Riverside County

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

1. Palo Verde Irrigation District (hereinafter referred to as the discharger), with offices and maintenance yard located at 180 West 14th Avenue in Blythe, California 92225, submitted an NPDES application on October 30, 1991 for a permit to discharge wastewater from the facility.
2. Site investigations indicate that the ground water underlying the discharger's maintenance yard has been polluted by dissolved petroleum hydrocarbons. The pollution is the result of unauthorized releases of unknown quantities of diesel and gasoline fuels which were first reported in January 1987.
3. Ground water data from monitoring wells installed on-site indicate that a plume of dissolved and free product exists underneath the site. The lateral and vertical extent of the plume has been defined.
4. The discharger has proposed to begin cleanup of the free product and polluted ground water by operating an on-site recovery system. Based on the design criteria and the data from the ground water investigation, it is probable that the proposed cleanup system will remediate all polluted ground water. The performance of the cleanup system will be evaluated to determine if any additional extraction wells or treatment will be required.
5. This site is subject to Cleanup and Abatement Order No. 87-114, issued on November 10, 1987 by the Regional Board's Executive Officer and amended in July 26, 1991.
6. The discharger proposes to discharge an average daily flow of up to 190 gallons-per-minute (gpm) of treated ground water from a gravity separation and air stripping treatment system into the City of Blythe's 54-inch storm drain pipe in the NE $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 5, T7S, R23E, SBB&M which discharges into Lovekin Drain. The treated ground water will flow from Lovekin Drain to East Side Drain, to Township Drain, which flows to Palo Verde Outfall Drain, thence to the Colorado River, flowing about 33 miles from the point of discharge.
7. The City of Blythe storm drain pipe is continually flowing with drainage water from the City streets and other sources. Oil slicks have been

*Terminated  
5-17-94  
by Order No. 94-054*

- observed at its discharge point into Lovekin Drain. The discharger's treated wastewater will enter the storm drain pipe five miles upstream of its discharge point into the surface waters of the Lovekin Drain.
8. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified this discharge as a minor NPDES discharge.
  9. The discharge meets the "no salt" discharge requirement of less than one ton per day discharged salt load reaching the main stream of the Colorado River, established in the "Intercepted Ground Water Policy for Implementation of the Colorado River Salinity Standards Through the NPDES Permit Program", as adopted by the Colorado River Basin Salinity Control Forum on October 20, 1982.
  10. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted May 15, 1991 and designates the beneficial uses of ground and surface waters in this Region.
  11. The beneficial uses of waters in the Palo Verde Valley Drains are:
    - a. Water Contact Recreation (REC I)
    - b. Noncontact Water Recreation (REC II)
    - c. Warm Water Habitat (WARM)
    - d. Wildlife Habitat (WILD)
  12. The beneficial uses of the waters in the Palo Verde Lagoon and Outfall Drain are:
    - a. Water Contact Recreation (REC I)
    - b. Noncontact Water Recreation (REC II)
    - c. Warm Water Habitat (WARM)
    - d. Wildlife Habitat (WILD)
    - e. Preservation of Rare, Endangered or Threatened Species (RARE)
  13. The beneficial uses of the waters in the Colorado River and associated lakes and reservoirs are:
    - a. Municipal and Domestic Supply (MUN)
    - b. Agricultural Supply (AGR)
    - c. Aquaculture (AQ)
    - d. Industrial Service Supply (IND)
    - e. Ground Water Recharge (GWR)
    - f. Water Contact Recreation (REC I)
    - g. Noncontact Water Recreation (REC II)
    - h. Warm Water Habitat (WARM)
    - i. Cold Water Habitat (COLD)
    - j. Wildlife Habitat (WILD)
    - k. Hydropower Generation (POW)
    - i. Preservation of Rare, Endangered or Threatened Species (RARE)
  14. Effluent limitations specified in this Order are based upon State Department of Health Services action levels, primary drinking water standards, the USEPA's Water Quality Criteria, and best professional engineering judgement. The most stringent standards were selected that will protect all beneficial uses.

15. This Order permits the discharge of treated ground water to surface waters subject to the effluent and receiving water limitations, and the provisions of this Order. It does not pre-empt or supersede the authority of municipalities, flood control agencies, or other local agencies to prohibit, restrict, or control discharges of waste to storm drain systems or other watercourses subject to their jurisdiction.
16. The issuance of waste discharge requirements for the discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100), Division 13, of the Public Resources Code pursuant to Section 13389 of the California Water Code.
17. The Board has notified the discharger, and all known interested agencies and persons of its intent to prescribe waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
18. The Board in a public meeting heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. Wastes discharged shall be limited to treated ground water, as proposed in the findings.
2. The effluent, at the point of discharge to the storm drain pipe, shall not contain constituents in excess of the following instantaneous maximum limits:

<u>Constituent</u>	<u>Unit</u>	<u>Instantaneous Maximum</u>
a. Benzene	μg/l	1.0
b. Toluene	μg/l	100
c. Xylene(s)-total	μg/l	1750
d. Ethylbenzene	μg/l	680
f. Lead	μg/l	50

3. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

4. There shall be no acute toxicity<sup>1</sup> in the wastewater discharged to the storm drain.

B. Provisions

1. The treatment or disposal of wastes at this facility shall not cause pollution or nuisance as defined in Sections 13050(1) and 13050(m) of Division 7 of the California Water Code.
2. The discharger shall comply with all parts of this Order immediately upon discharge.
3. The discharger shall ensure that all site operating personnel are familiar with the contents of this Order.
4. The discharger shall notify the Regional Board if any activity by the discharger has occurred or will occur which would result in the discharge of any pollutant not limited by this Order.
5. The discharger shall submit an operation and maintenance plan acceptable to the Regional Board's Executive Officer prior to the addition of chemicals to the waste stream for the control of scaling or biological growth.
6. The discharger shall comply with the attached "Monitoring and Reporting Program No. 92-002", and future revisions thereto, as specified by the Regional Board's Executive Officer.
7. Prior to "on line" discharge from the facility, laboratory analysis of "trial run" treated effluent will be performed to confirm the wastewater quality is within the limits specified by this permit. Effluent, containing contaminants in excess of the limits, will not be discharged to the City of Blythe storm drain pipe. Should contaminated levels in treated wastewater exceed permit specifications, alternative disposal or additional treatment followed by substantiating laboratory analysis shall be required.
8. The discharger shall comply with all applicable items of the attached "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated October 1990.
9. Prior to any modifications in this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board; and obtain revised requirements before any modifications are implemented.
10. This Order expires five years from January 22, 1992 and the discharger shall file a complete Report of Waste Discharge in accordance with Title

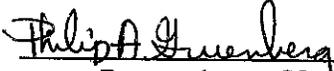
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<sup>1</sup> Acute Toxicity is less than ninety percent survival, fifty percent of the time, and less than seventy percent survival, ten percent of the time, of standard test organisms in undiluted effluent in a 96-hour static or continuous-flow test.

23, California Code of Regulations, at least 180 days in advance of such date as an application for issuance of new waste discharge requirements.

11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall become effective at the end of ten (10) days from date of hearing provided the Regional Administrator of the USEPA has no objection.

I, Philip A. Gruenberg, Regional Board 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 22, 1992.

  
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Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
 COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 92-002  
 FOR  
 PALO VERDE IRRIGATION DISTRICT  
 GROUND WATER TREATMENT FACILITY  
 Blythe - Riverside County

Location of Discharge: NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , Section 5, T7S, R23E, SBB&M.

INFLUENT MONITORING

Extracted ground water shall be monitored for the constituents listed below immediately prior to any treatment or dilution. A sampling station shall be located where representative samples of the influent can be obtained.

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
EPA 602 for: Benzene Toluene Xylene(s)-total Ethylbenzene	$\mu\text{g}/\text{l}$	Grab	Once during the first and fifth day of operation; monthly thereafter.
EPA 601	$\mu\text{g}/\text{l}$	Grab	Once during the first day of operation; biannually thereafter.

EFFLUENT MONITORING

Treated ground water discharged into the City of Blythe storm drain pipe shall be monitored for the parameters listed below. A sampling station shall be located where representative samples of the effluent can be obtained.

<u>Parameter</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow discharged to drain	GPD	-	Continuous flow readings: Report average daily flow based on weekly total.
pH	pH Units	Grab	Daily for 5 days; monthly thereafter.
Temperature	$^{\circ}\text{C}$	Grab	Daily for 5 days; monthly thereafter.

<u>Parameter</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Priority Pollutant Metals	mg/l	Grab	Once during first day of operation; biannually thereafter.
EPA 602 for: Benzene Toluene Xylene(s)-total Ethylbenzene	µg/l	Grab	Once during the first and fifth day of operation; monthly thereafter.
Total Dissolved Solids	mg/l	Grab	Once during the first and fifth day of operation; monthly thereafter.
Modified EPA 8015 for Total Petroleum Hydrocarbons as Gasoline and Diesel	µg/l	Grab	Once during the first and fifth day of operation; monthly thereafter.
EPA 601	µg/l	Grab	Once during first day of operation; biannually thereafter.
Bioassays	-	-	Quarterly for the first year; annually thereafter.

Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Board's Executive Officer. Pimephales promelas (Fathead Minnow) and Ceriodaphnia are suggested test species which may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/4-85/013 Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms.

#### REPORTING

1. The discharger shall inform the Regional Board of the location and condition of all sampling stations for the above monitoring.
2. The discharger shall submit quarterly reports summarizing the work accomplished toward ground water pollution cleanup. The report shall include the following:
  - (a) An assessment of the remediation action taken to date, including its degree of effectiveness and adequacy.
  - (b) Updated ground water maps and cross-sections depicting isoconcentration and isothickness contours; and

(c) Description and schedule of any additional site work and modifications anticipated for the coming quarter.

3. The data collected the first week shall be submitted within 30 days; the monthly data collected the first three months shall be submitted monthly, thence quarterly along with the quarterly data which shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15, of each year. Bi-annual reports shall be submitted by January 15 and July 15 of each year. Annual reports shall be submitted by January 15 of each year.

Submit monitoring reports to:

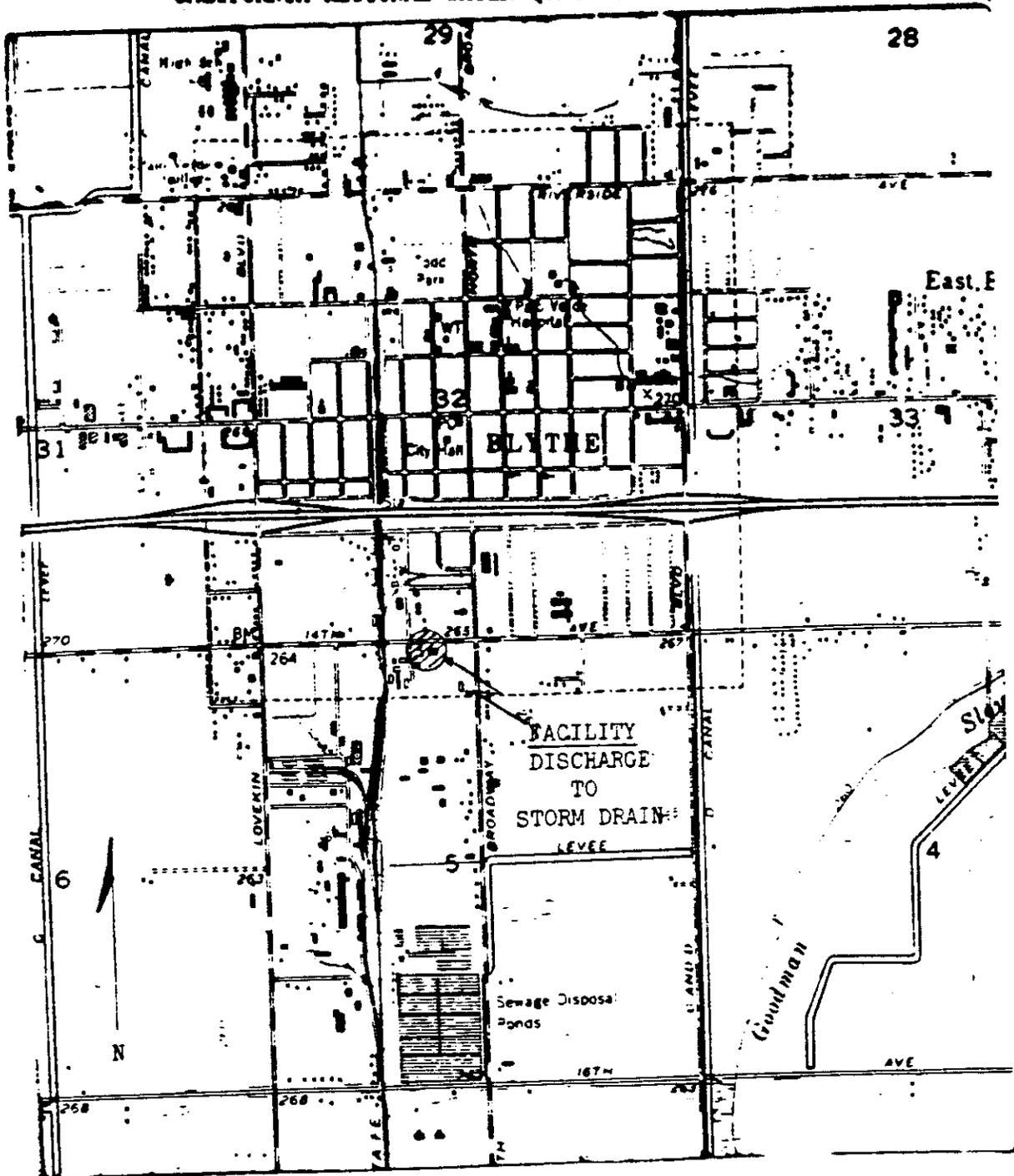
California Regional Water Quality Control Board  
Colorado River Basin Region  
73-271 Highway 111, Suite 21  
Palm Desert, CA 92260

ORDERED BY:

Philip A. Gruenberg  
Executive Officer

January 22, 1992

Date



SCALE:  
1 inch = 2000'

SITE MAP

PALO VERDE IRRIGATION DISTRICT  
GROUND WATER TREATMENT FACILITY  
Blythe - Riverside County

NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , Section 5, T7S, R23E, SBB&M  
USGS Blythe 7.5 Min. Topographic Map