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

ORDER NO. 92-018 NPDES NO. CA0104345

WASTE DISCHARGE REQUIREMENTS AND NPDES PERMIT FOR SUNSET MUTUAL WATER COMPANY El Centro - Imperial County

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

- Sunset Mutual Water Company (hereinafter referred to as the discharger), P.O. Bin 2414, El Centro, California, 92243, submitted an updated NPDES Application for Permit to Discharge, dated June 3, 1991. Said application is assigned Application No. CA0104345.
- 2. The discharger is discharging an average daily flow of 25,000 gallons-perday of domestic sewage into an activated sludge-type treatment plant with a design flow of 50,000 gallons-per-day. The treated wastewater is discharged into Lotus Drain in the SW½, NW½ of Section 1, T16S, R13E, SBB&M, and flows for about 50 miles via Central Drain and Alamo River before entering the Salton Sea.
- 3. The discharger reports that no industrial wastewaters will be discharged to the treatment plant.
- 4. This discharge has been subject to waste discharge requirements, Board Order No. 86-018, (NPDES No. CA0104345), adopted March 19, 1986, which allows discharge to Lotus Drain.
- 5. 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.
- 6. The beneficial uses of waters in the Imperial Valley Drains and Alamo River are:
  - a. Fresh Water Replenishment of Salton Sea (FRSH)
  - b. Noncontact Water Recreation (REC II)
  - c. Warm Water Habitat (WARM)
  - d. Wildlife Habitat (WILD)
  - e. Preservation of Rare, Endangered or Threatened Species (RARE)
  - f. Water Contact Recreation (REC I)
- 7. The purpose of this Order is to renew waste discharge requirements adopted in Board Order No. 86-018.

Jupererded Drd. # 97-033 5/28/97 by: Board Drd. # 97-033

- 8. In accordance with Section 13389, Chapter 5.5, Division 7 of the California Water Code, and Section 15263, Chapter 3, Title 14 of the California Code of Regulations, the issuance of these waste discharge requirements is exempt from the California Environmental Quality Act requirement to prepare an Environmental Impact Report or Negative Declaration (Public Resources Code, Section 21100 et seq.).
- 9. The Board has notified the discharger, and all known interested agencies and persons of its intent to update waste discharge requirements for said discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
- 10. The Board in a public meeting heard and considered all comments pertaining to this discharge.
- 11. This Board Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective at the end of ten (10) days from the date of the hearing at which this Board Order was adopted by the Regional Board, provided the Regional Administrator, U. S. Environmental Protection Agency, has no objections.

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 the regulations and guidelines adopted thereunder, shall comply with the following specifications:

- A. Effluent Limitations
  - 1. Representative samples of wastewater discharged to Lotus Drain shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	30-Day Arithmetic Mean <u>Discharge Rate</u>
20°C BOD <sub>5</sub>	mg/1	30
Suspended Solids	mg/1	30
Settleable Matter	ml/l	.03

- 2. The pH of the effluent shall be maintained within the limits of 6.0 to 9.0.
- 3. There shall be no acute toxicity in the treatment plant effluent being discharged to the Lotus Drain. Acute toxicity is defined as 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.

- B. Receiving Water Limitations
  - 1. Wastewater discharged to Lotus Drain shall not:
    - a. Depress the dissolved oxygen content of said drain below 5.0 mg/l. During periods when the drain's dissolved oxygen content is already below 5.0 mg/l, the discharge shall not cause any further depression.
    - b. Cause presence of oil, grease, scum and deposition of objectionable solids (like sludge).
    - c. Contain heavy metals, chemicals, pesticides, or other constituents in concentration which are toxic to or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life.
  - 2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Board Order in accordance with such more stringent standards.
- C. Discharge Specifications
  - 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. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the activated sludge discharge facilities inoperable.
  - 3. A minimum depth of freeboard of two (2) feet shall be maintained at all times in the activated sludge facility.
- D. Prohibitions
  - 1. The discharger shall not accept waste in excess of the design treatment capacity of the plant as specified in Finding No. 2 of this Order.
  - 2. The discharger shall not discharge untreated wastewater to Lotus Drain.
- E. Provisions
  - Wastewater discharged to the Lotus Drain shall be monitored for toxicity using bioassays as specified in "Monitoring and Reporting Program No. 92-018" (attached).

- 2. If the discharge consistently exceeds the applicable chronic or acute toxicity limitation, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.
- 3. 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.
- 4. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
- 5. The discharger shall ensure that all site operating personnel are familiar with the content of this Board Order.
- 6. This Board Order does not authorize violation of any federal, state, or local laws or regulations.
- The discharger shall comply with "Monitoring and Reporting Program No. 92-018", and future revisions thereto, as specified by the Regional Board's Executive Officer.
- 8. The discharger shall comply with "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated October, 1990.
- 9. The discharger's wastewater treatment plant (WWTP) shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Division 4, Chapter 14, Title 23 of the California Code of Regulations.
- 10. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
- 11. The discharger shall provide a plan as to the method of treatment, handling and disposal of sludge that is acceptable to the Regional Board's Executive Officer. Treated or untreated sludge or similar solid materials shall not be disposed at a new location with the prior approval of the Executive Officer.
- 12. The discharger shall provide a report to the Regional Board when it determines that the plant is operating at 80 percent of the design capacity specified in Finding No. 2. The report should indicate what steps, if any, the discharger intends to take to provide for expected wastewater treatment capacity necessary when the plan reaches design capacity.
- 13. The discharger shall implement acceptable operation and maintenance at the wastewater treatment plant so that needed repair and maintenance are performed in a timely manner.

- 14. In the event the discharger allows industries to discharge to the wastewater treatment plant, then the discharger shall do so by developing and implementing an approved Industrial Pretreatment Program in accordance with the applicable Federal Pretreatment Regulations in 40 CFR Part 403.
- 15. This Board Order expires five years from March 11, 1992, and the discharger shall file a complete Report of Waste Discharge in accordance with Title 23, California Code of Regulations, at least 180 days in advance of such date as an application for issuance of new waste discharge requirements.

IT IS FURTHER ORDERED that Board Order No. 86-018 be superseded by this Board Order.

I, Philip A. Gruenberg, 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 <u>March 11, 1992</u>.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

# MONITORING AND REPORTING PROGRAM NO. 92-018 REVISION 1 FOR SUNSET MUTUAL WATER COMPANY El Centro - Imperial County

Location of Discharge: Lotus Drain, in the SW; NW; of Section 1, T16S, R13E, SBB&M

#### MONITORING

## A. <u>EFFLUENT MONITORING</u>

Wastewater treatment plant effluent discharged to the Lotus Drain shall be monitored for constituents indicated below. A sampling station shall be established where representative samples of the effluent can be obtained.

<u>Constituent</u>	<u>Unit</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>
Discharge to Lotus Drain	MGD	Average Daily	Daily <sup>1</sup>
Settleable Matter	m1/1	Grab at Peak Flow	Monthly
Suspended Solids	mg/l	8-Hr. Composite	Monthly
20°C BOD <sub>5</sub>	mg/l	8-Hr. Composite	Monthly
рН	pH Units	Grab at Peak Flow	Monthly
Bioassay (Toxicity Test)	tu <sub>c</sub>	Composite	Yearly (See Section on Chronic Toxicity Testing)

# B. <u>INFLUENT MONITORING</u>

The wastewater influent to the treatment facility shall be monitored monthly for  $20^{\circ}C BOD_5$  and suspended solids, using 24-hour composite samples.

# C. <u>OPERATION AND MAINTENANCE</u>

#### <u>Activity</u>

#### Reporting

Yearly

To inspect and document any operational and maintenance problems by reviewing each unit process.

<sup>1</sup> Reported monthly

### D. <u>EFFLUENT CHRONIC TOXICITY TESTING</u>

The discharger shall conduct chronic toxicity testing on the treatment plant effluent as follows:

<u>Test</u>	<u>Units</u>	Type of <u>Samples</u>	Minimum Frequency of <u>Test</u>
Chronic Toxicity	tu <sub>c</sub>	Composite	Yearly

Both test species given below shall be used to measure chronic toxicity:

### Critical Life Stage Toxicity Tests

<u>Species</u>	Effect	Test Duration <u>(Days)</u>	Reference
fathead minnow (Pimephales promelas)	larval survival and growth rate	7	Horning & Weber, 1989
water flea (Ceriodaphnia dubia)	survival; number of young	7	Horning & Weber, 1989

Toxicity Test Reference: Horning W.B. and C.I. Weber (eds). 1989. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organism. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution water should be used if the above source exhibit toxicity greater than 1.0 tu<sub>c</sub>. The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tuc) where:

#### $tu_c = 100/NOEL$

and the No Observed Effect Level (NOEL) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

#### **REPORTING**

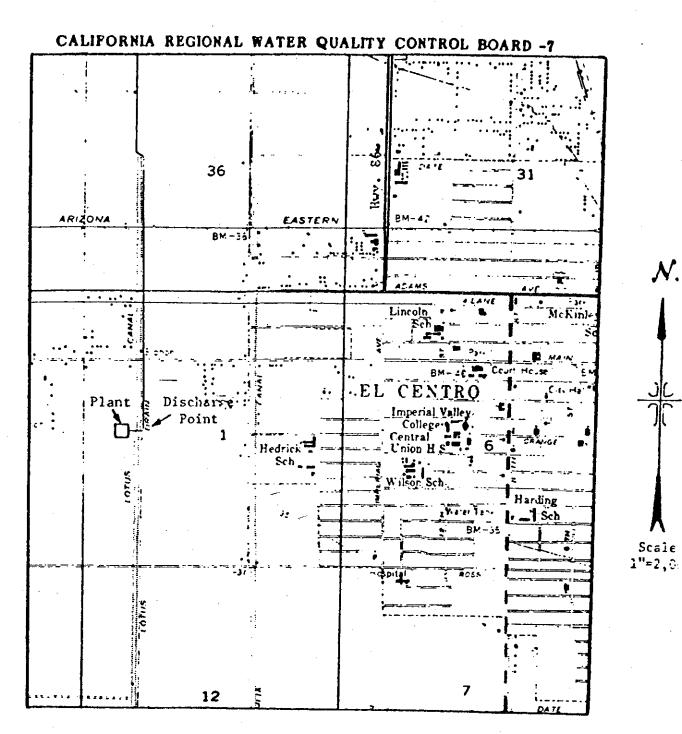
Daily and monthly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month. Annual monitoring report (bioassay) shall be submitted by January 15th of the following year. Samples for the chronic toxicity testing shall be collected and tested during the month of November every year for the annual monitoring report.

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:

Officer ecutive 6-8-93 Date



SITE MAP SUNSET MUTUAL WATER COMPANY El Centro - Imperial County Location of Discharge: SW1, NW1 of Section 1, T16S, R13E, SBB&M USGS El Centro 7.5 min. Topographic Map

Board Order No. 92-018

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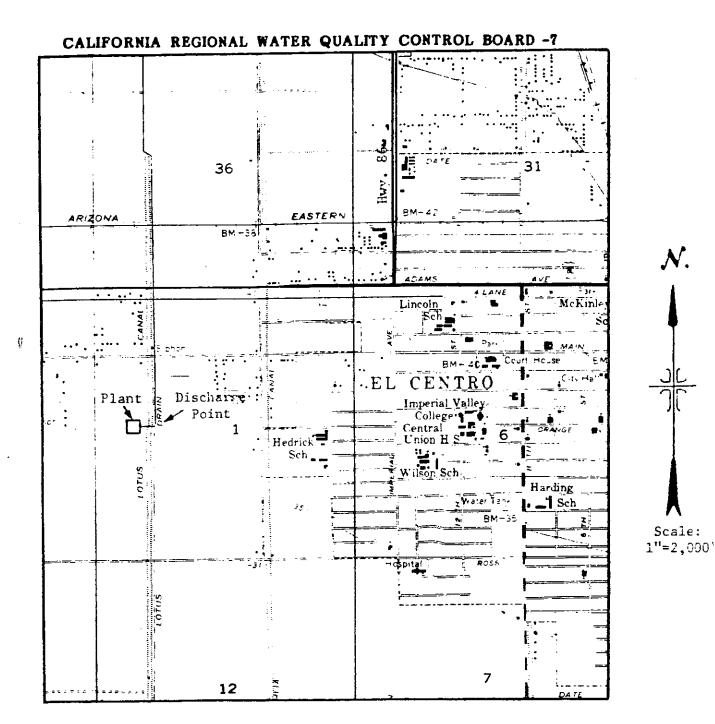
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ORDERED BY:

Executive Office March 11, 1992 Date



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