CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

ORDER NO. 83-88 NPDES NO. CA0104248

WASTE DISCHARGE REQUIREMENTS
FOR
IMPERIAL IRRIGATION DISTRICT
EL CENTRO STEAM POWER PLANT
El Centro - Imperial County

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

- Imperial Irrigation District (hereinafter also referred to as the discharger), 333 East Main Street, P. O. Box 937, Imperial, California 92251, submitted an updated NPDES Application for Permit to Discharge dated July 22, 1983. Said application is assigned Application No. CA0104248.
- 2. The discharger's Self-Monitoring Reports for a twelve-month period, July 1982 through June 1983, shows discharge of cooling tower and evaporator blow-down wastewater with the following flows to Central Drain No. 5:

a. Peak day discharge

830,000 gallons

b. Peak week discharge

446,000 gallons-per-day

c. Peak month discharge

254,000 gallons-per-day

d. Twelve month average

112,000 gallons-per-day

- 3. The discharger estimates the peak day discharge for the next five years at 228,000 gallons and the peak month discharge at 142,000 gallons-per-day.
- 4. The discharger reports that there is no discharge to surface waters of:
  - a. Bottom ash transport water
  - b. Fly ash transport water
  - c. Metal cleaning wastes
  - d. Once through condenser water
  - e. Filters, softeners, and demineralizer blowdowns
  - f. Turbine gland and after condenser drips
  - g. Boiler blowdown
- 5. Wastewaters from this facility other than as set forth herein as being discharged to surface waters, are discharged into evaporation basins governed by waste discharge requirements contained in Board Order No. 77-68.
- 6. The discharge is into Central Drain No. 5, within the NE<sup>1</sup>/<sub>4</sub>, Section 32, T15S, R14E, SBB&M. The wastewater flows approximately one mile to Central Drain, and then flows 6½ miles and enters Alamo River at a point 38.75 miles from Salton Sea.

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- 7. The Water Quality Control Plan for the West Colorado River Basin Region was adopted on April 10, 1975. The Basin Plan contains water quality objectives for Imperial Hydrologic Unit.
- 8. Beneficial uses of Imperial Valley irrigation drains that discharge to Alamo River, which are to be protected by this Order are as follows:
  - a. Transport of dissolved solids to Salton Sea for agricultural soil salinity control.
  - b. Freshwater replenishment for Salton Sea.
  - c. Warm freshwater habitat.
  - d. Recreation non-water contact.
- 9. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 et. seq.), of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
- 10. The discharge has been subject to waste discharge requirements adopted in Order No. 79-10 (NPDES No. CA0104248) which allows discharge to Central Drain No. 5.
- 11. The discharger and interested agencies and persons have been notified of the Board's intent to update requirements for the existing discharge and have been provided with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 12. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Imperial Irrigation District, 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, as amended, and regulations and guidelines adopted thereunder, shall comply with the following:

### A. Effluent Limitations

# Low Volume Waste Sources

1. The concentration of pollutants discharged from low volume waste sources shall not exceed the following:

Effluent Characteristic	Maximum for Any One Day	Average of Daily Values for Thirty Consecutive Days Shall Not Exceed-
Total Suspended Solids	100 mg/l	30 mg/l
Oil and Grease	20 mg/l	15 mg/l

# Cooling Tower Blowdown

2. The increase in concentration of pollutants added for cooling tower maintenance and discharged in cooling tower blowdown shall not exceed the following:

<b>a.</b>	Effluent Characteristic	Maximum Concentration	Average Concentration	
	Free available	0.5 mg/l	0.2 mg/l	

b.

Effluent Characteristic	Maximum for Any One Day
Zine (Zn)	1.0 mg/l
Chromium (Cr)	<b>0.2</b> mg/l

c. There shall be no discharge in detectable amounts of any of the 126 priority pollutants (Appendix A, FR Vol. 47, No. 224, November 19, 1982) contained in chemicals added for cooling tower maintenance, except for chromium and Zinc as set forth in 2.b., above.

# Total Discharge to Central Drain No. 5

3. The quantity of pollutants discharged to Central Drain No. 5 shall not exceed the following:

Constituent	Unit	Maximum For Any One Day	Average of Daily Values for Thirty Consecutive Days Shall Not Exceed	
a. Total dissolved solids	mg/l	4,500	4,000	
b. 20°C BOD <sub>5</sub>	mg/l	45	30	
c. Settleable Matter	ml/l	1.0	0.3	

- 4. The pH of the discharge to Central Drain No. 5 shall be within the range of 6.0 to 9.0.
- 5. There shall be no discharge of polychlorinated biphenyl compounds.
- 6. Neither free available chlorine nor total residual chlorine may be discharged from any generating unit for more than two hours in any one day; and not more than one unit may discharge free available or total residual chlorine at any one time.

7. 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.

## B. Provisions

- 1. Neither the treatment nor the discharge of waste shall cause a pollution or a nuisance.
- 2. In the event that waste streams from various sources are combined for treatment and discharge, the quantity of each pollutant or pollutant property set forth in Effluent Limitations A.1., and 2., attributable to each controlled waste source shall not exceed the specified limitation for that waste source.
- 3. Adequate protective works shall be provided to assure that a flood which would be expected to occur on a frequency of once in a 100-year period, would not erode or otherwise render portions of the treatment and discharge facilities inoperable.
- 4. This Order supersedes this Board's Order No. 79-10.
- 5. This Order includes the attached "Monitoring and Reporting Program No. 83-88", and future revisions thereto, as specified by the Executive Officer.
- 6. This Order expires November 16, 1988, and the discharger shall file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as an application for issuance of new waste discharge requirements.
- 7. 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 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections.
- 8. Any proposed corrosion control or biological control treatment(s) utilized in the cooling towers, shall be reported to the Board along with a listing of any of EPA's 126 priority pollutants contained in said treatment(s).
- 9. Compliance with the limitations for the 126 priority pollutants set forth in A.2.c. (above) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical method set forth in 40 CFR Part 136.

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 November 16, 1983

Executive Officer

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

# MONITORING AND REPORTING PROGRAM NO. 83-88 FOR IMPERIAL IRRIGATION DISTRICT EL CENTRO STEAM POWER PLANT El Centro - Imperial County

Location of Discharger: SE 1/4, Section 32, T15S, R14E, SBB&M

# EFFLUENT MONITORING

Wastewater discharged into Central Drain No. 5, and wastewater from each of the source waste streams designated in the Effluent Limitations, shall be monitored separately and reported as follows:

Constituent	Unit	Type of Sample	Sampling Frequency	Waste* Stream
Total Suspended Solids	mg/l	Grab	Daily	a, c
Total Residual Chlorine	mg/l	Grab	Daily	c
Free Available Chlorine	mg/l	Grab	Daily	b .
Zine (Zn)**	mg/l	Grab	Daily	b
Chromium (Cr)**	mg/l	Grab	Daily	. b
Total Dissolved Solids	mg/l	6-Hr. Composite	Monthly	c
20°C BOD <sub>5</sub>	mg/l	6-Hr. Composite	Monthly	c
Settleable Matter	ml/l	Grab	Monthly	c
Oil and Grease	mg/l	Grab	Monthly	a
Flow of each waste stream in GPD			Daily	
Flow discharge to Central Drain No. 5, in GPD			Daily***	

<sup>\*</sup> a) Low volume waste sources

b) Cooling water blowdown

c) Discharge to Central Drain No. 5

\*\*\*For each day with average monthly flow calculated.

<sup>\*\*</sup> A statement in each report that no additives containing chromium or zinc are being used may be submitted in lieu of an analysis for these constituents.

Prior to commencement of use of any new cooling tower maintenance chemical, the discharger shall report thereon in accordance with Provisions B.8. and B.9 of Order No. 83-88.

# REPORTING

The discharger shall inform the Regional Board concerning the location of all sampling stations for the above monitoring, including the proposed combination of source waste streams for treatment and/or monitoring.

Monthly and daily reports shall be submitted to the Regional Board by the 15th day of the following month.

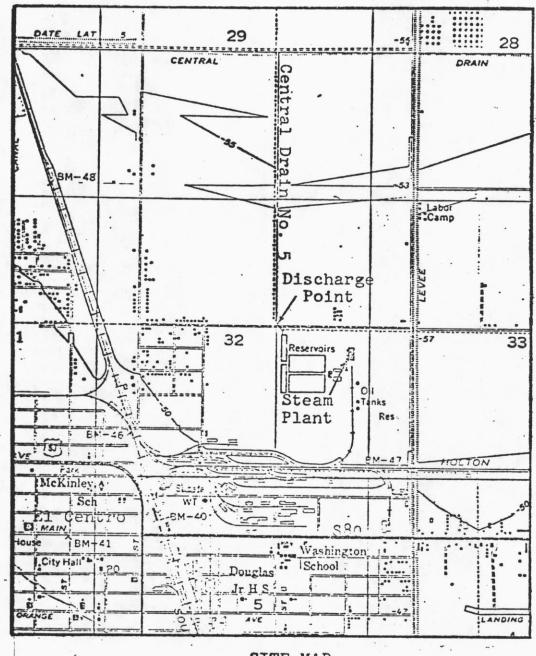
The discharger shall implement the above monitoring program within 30 days of the effective date of this Order.

Forward monitoring reports to:

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

ORDERED BY:

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



Scale 1"= 2000

SITE MAP

IMPERIAL IRRIGATION DISTRICT - EL CENTRO STEAM POWER PLANT.

Discharge Point: NE 1/4 of Section 32, T15S, R14E, SBB&M
USGS El Centro 7.5 min. Topographic Map