

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 99-015

NPDES NO. CA0059188

WASTE DISCHARGE REQUIREMENTS
for
CALIFORNIA DEPARTMENT OF WATER RESOURCES
(William E. Warne Power Plant)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. California Department of Water Resources (hereinafter DWR or Discharger), discharges wastes under waste discharge requirements contained in Order No. 94-044 (NPDES Permit No. CA0059188), adopted by this Board on June 13, 1994.
2. DWR has filed a report of waste discharge and has applied for renewal of its waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) permit.
3. DWR operates William E. Warne Power Plant, a hydroelectric generating facility, located at Pyramid Lake Road, about 1 mile south of Hungry Valley Road, Pyramid Lake, Los Angeles County, California. The facility discharges up to 1,752,000 gallons per day (gpd) of wastewater to the power plant afterbay through two separate discharge pipes (Discharge Serial Nos. 001 & 002 - Latitude: 34°42'10", Longitude: 118°48'00"). The wastewater then flows to Pyramid Lake, a tributary to Santa Clara River via Piru Creek and Lake Piru.

The wastewater consists of 1,750,000 gpd of generator, turbine, air, upper guide bearing, and lower guide bearing cooling water and 2,000 gpd of drainage sump water. The cooling water is a "once through" system with no introduction of chemical additives. The wastes collected into the sump are compressor cooling water and after cooling water, turbine shut off valve raw water, treatment plant backwash, and groundwater seepage.

4. Approximately 1,000 gpd of domestic sewage is disposed of by means of an underground disposal system. This discharge is regulated by waste discharge requirements prescribed by this Board under a separate Order.
5. Polychlorinated biphenyl compounds (PCBs) are not used and/or stored at the facility. All electrical equipments which contained PCBs such as transformers were either replaced or retrofilled with non-PCB insulating oil.

6. The Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994. The Basin Plan contains water quality objectives for the Santa Clara River Watershed. Due to the nature of the discharge, certain priority pollutants are not expected to be present in the discharge; therefore, no numerical effluent limitations for these constituents are needed to protect the receiving waters and the beneficial uses. Whole effluent toxicity limitations and narrative limitations to comply with all water quality objectives are provided in lieu of such numerical limitations.
7. The beneficial uses of the receiving waters are: (i) Pyramid Lake - municipal and domestic water supply, industrial service and process supplies, agricultural supply, groundwater recharge, freshwater replenishment (potential), hydropower generation, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, and preservation of rare and endangered species; (ii) Lake Piru - municipal and domestic water supply (potential), industrial service and process supplies, agricultural supply, groundwater recharge, freshwater replenishment (potential), hydropower generation (potential), contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, preservation of rare and endangered species, and spawning, reproduction, and/or early development; (iii) Piru Creek - municipal and domestic water supply (potential), industrial service and process supplies, agricultural supply, groundwater recharge, freshwater replenishment (potential), hydropower generation, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, preservation of rare and endangered species, and spawning, reproduction, and/or early development; and (iv) Santa Clara River - municipal and domestic water supply (potential), industrial service and process supplies, agricultural supply, groundwater recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, preservation of rare and endangered species, and wetland habitat.
8. The requirements contained in this Order are based on the Basin Plan, the existing permit, the doctrine of anti-backsliding, and best engineering judgements; and, as they are met, will be in conformance with the goals of the Basin Plan and will protect and maintain existing beneficial uses of the receiving waters.
9. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public hearing heard and considered all comments pertaining to the discharge and to the tentative requirements.

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 take effect at the end of ten days from the date of its adoption, provided the Regional Administrator of the Environmental Protection Agency, EPA, has no objections.

IT IS HEREBY ORDERED that Department of Water Resources, 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:

I. Effluent Limitations

1. Wastes discharged shall be limited to those described hereinabove only, as proposed.
2. The discharge of an effluent from Discharge Serial Nos. 001 and 002 in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>
Settleable solids	ml/L	0.1	0.3
Suspended solids	mg/L	50	150
Turbidity	NTU	5	25
Oil and grease	mg/L	10	15
BOD ₅ 20°C	mg/L	—	10

3. Pass-through or uncontrollable discharges of polychlorinated biphenyls (PCBs) shall not exceed daily average concentrations of 14 ng/L.
4. Toxicity Limitations:

The acute toxicity of the effluent shall be such that the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

If the effluent consistently exceeds acute toxicity limitation, a toxicity identification evaluation (TIE) is required. The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

II. Receiving Water Limitations

1. The waste discharged shall not cause the following to be present in the receiving waters:
 - a. The temperature at any time or place to be altered by more than 5°F above the natural temperature; but at no time be raised above 70°F as a result of waste discharged;
 - b. The pH to be depressed below 6.5 or raised above 8.5, and the ambient pH levels to be changed more than 0.5 units from natural conditions as a result of waste discharged;
 - c. The dissolved oxygen to be depressed below 7 mg/L as a result of waste discharged;
 - d. Toxic pollutants at concentrations that will bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health;
 - e. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;
 - f. Chemical substances in amounts that adversely affect any designated beneficial uses;
 - g. Visible floating materials, including solids, liquids, foams, and scum;
 - h. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving waters or on objects in the water;
 - i. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;

- j. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;
 - k. Turbidity increases to the extent that such increases cause nuisance or adversely affects beneficial uses;
 - l. Substances that result in increase of BOD₅20°C that adversely affect beneficial uses; and,
 - m. Concentrations of toxic substances that are toxic to, or cause detrimental physiological response in human, animal, or aquatic life.
2. The waste discharged shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.
 3. The waste discharged shall not degrade surface water communities and populations including vertebrate, invertebrate, and plant species.
 4. The waste discharged shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities, nor overload their design capacity.
 5. The waste discharged shall not cause problems associated with breeding of mosquitos, gnats, black flies, midges, or other pests.

III. Requirements and Provisions

1. Discharge of wastes to any point other than those specifically described in this Order is prohibited and constitutes a violation thereof.
2. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements". If there is any conflict between provisions stated hereinbefore and attached "Standard Provisions", those provisions stated hereinbefore prevail.
3. This Order includes the attached Monitoring and Reporting Program. If there is conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.

- 4 This Order may be modified, revoked and reissued, or terminated in accordance with the provisions of 40 CFR Part 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64.

IV. Expiration Date

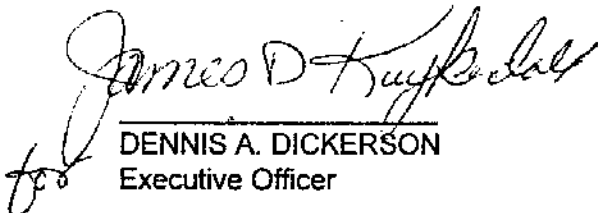
This Order expires on April 10, 2004.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

V. Rescission

Order No. 94-044, adopted by this Board on June 13, 1994, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 22, 1999.


DENNIS A. DICKERSON
Executive Officer

/hdn

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6610
for
CALIFORNIA DEPARTMENT OF WATER RESOURCES
(William E. Warne Power Plant)
(CA0059188)

I. REPORTING REQUIREMENTS

The Discharger shall implement this monitoring program on the effective date of this Order. The first monitoring report under this program is due by July 15, 1999.

Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15
Annual Report	March 1

If there is no discharge, the report shall so state.

II. EFFLUENT MONITORING REQUIREMENTS

1. A sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained.
2. This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.
3. Quarterly effluent analyses shall be performed during the months of January, April, July, and October. Annual effluent analyses shall be performed during the month of January. Results of quarterly and annual analyses shall be reported in the appropriate quarterly monitoring report.

February 17, 1999

4. **Effluent Monitoring Program**

The following shall constitute the effluent monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow	gpd	----	monthly
Temperature	°F	grab	monthly
pH	pH units	grab	quarterly
Settleable solids	ml/L	grab	quarterly
Suspended solids	mg/L	grab	quarterly
Turbidity	NTU	grab	quarterly
Oil and grease	mg/L	grab	quarterly
BOD ₅ 20°C	mg/L	grab	quarterly
Specific conductance	µmhos/cm	grab	quarterly
Polychlorinated biphenyls ^{1/}	ng/L	grab	quarterly
Acute toxicity ^{2/}	% survival	grab	annually ^{3/}

1/ A statement that no PCBs were used or stored at the facility may be submitted in lieu of the analyses.

2/ By the method specified in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms"- September 1991 (EPA/600/4-90/027). Submission of bioassay results should include the information noted on pages 45-49 of the "Methods". The fathead minnow (Pimephales promelas) shall be used as the test species.

3/ If the annual toxicity test yields a result in non-compliance with the limitations, then the frequency of analysis shall increase to monthly until at least three consecutive test results have been obtained and full compliance with Effluent Limitations 1 - 3 have been demonstrated, after which the frequency of analysis shall revert to annually. Results of toxicity tests shall be included in the first monitoring report following sampling.

Ordered by:

James D. Hays
DENNIS A. DICKERSON
Executive Officer

hdn

Date: April 22, 1999

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 94-044

NPDES NO. CA0059188

WASTE DISCHARGE REQUIREMENTS
for
CALIFORNIA DEPARTMENT OF WATER RESOURCES
(William E. Warne Power Plant)

6610

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. California Department of Water Resources discharges wastes under waste discharge requirements contained in Order No. 88-103 adopted by this Board on October 24, 1988.
2. California Department of Water Resources has filed a report of waste discharge and has applied for renewal of its waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit.
3. California Department of Water Resources operates William E. Warne Power Plant, a hydroelectric generating station, located about 10 miles south of Gorman, Los Angeles County, California, and discharges up to 1,752,000 gallons per day (gpd) of wastewaters to the powerplant Afterbay. The wastewaters flow to Pyramid Lake through two separate pipes at latitude 34°41'06", longitude 118°47'12". Pyramid Lake is tributary to Santa Clara River, a water of the United States, via Piru Creek and Lake Piru, above the tidal prism.

The wastes consist of 1,750,000 gpd of generator, turbine, air, upper guide bearing, and lower guide bearing cooling waters and 2,000 gpd of drainage sump water. The wastes collected into the sump are compressor cooling water and after cooling water, turbine shut off valve raw water, treatment plant backwash, and groundwater seepage.
4. Approximately 1,000 gpd of domestic sewage is disposed of by means of an underground disposal system. This discharge is regulated by requirements prescribed by this Board under a separate Order.
5. The Board adopted a revised Water Quality Control Plan for Santa Clara River Basin on October 22, 1990. The Plan contains water quality objectives for Santa Clara River, and tributaries thereto.

March 30, 1994

2. The discharge of an effluent with constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Discharge Limitations</u>	
		<u>Monthly Ave.</u>	<u>Maximum</u>
Suspended solids	mg/l	50	150
	lbs/day*	730	2192
Settleable solids	ml/l	0.1	0.3
Turbidity	NTU	5	25
Oil and grease	mg/l	10	15
	lbs/day*	146	219
BOD ₅ , 20°C	mg/l	---	10

* Based on a maximum discharge of 1,752,000 gallons per day.

B. Narrative Water Quality Limitations

1. The wastes discharged shall not cause the pH of the receiving water to be less than 6.5 nor more than 8.5. The waste discharge shall not change the normal ambient pH levels of the receiving waters by more than 0.5 units within any given 24-hour period in receiving waters with designated cold or warm freshwater habitat beneficial uses.
2. The wastes discharged shall not increase the receiving water temperature at any time or place by more than 5°F above ambient receiving water temperature; except when ambient receiving water is less than 60°F, then the wastes discharged shall not increase the receiving water temperature above 70°F. The wastes discharged shall not increase the temperature of the receiving waters at any time or place by more than 5°F within any given 24-hour period.
3. The wastes discharged shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 5.0 mg/l; except when natural conditions cause lesser concentrations, in which case the wastes discharged shall not cause any further reduction in the dissolved oxygen concentration of the receiving waters.

D. Expiration Date

This Order expires on May 10, 1999.

The discharger must file a report of waste discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

E. Rescission

Order No. 88-103, adopted by this Board on October 24, 1988, is hereby rescinded.

I, Robert P. Ghirelli Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on June 13, 1994.


ROBERT P. GHIRELLI, D.Env.
Executive Officer

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