CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER NO. 83-91
NPDES NO. CA0104205

WASTE DISCHARGE REQUIREMENTS
FOR
CITY OF NEEDLES
San Bernardino County

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

1. City of Needles, (hereinafter also referred to as the discharger), P. O. Box 887, Needles, California 92363, submitted an updated NPDES Application for Permit to Discharge, dated July 25, 1983. Said application is assigned Application No. CA0104205.

2. The discharger presently discharges a peak month average daily flow of 0.96 mgd and a peak week average daily flow of 1.02 mgd of wastewater from a trickling filter treatment plant, which is designed for an average daily flow of 1.8 mgd. Said wastewater is discharged into the Colorado River at the shoreline near the center of Section 33, T9N, R23E, SBB&M.

3. The Water Quality Control Plan for the East Colorado River Basin was adopted on April 10, 1975. The Basin Plan contains water quality objectives for the Piute Hydrologic Unit.

4. The State Water Resources Control Board has adopted a "Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California", (Thermal Plan) which prohibits discharges of elevated temperature wastes into cold interstate waters, which includes the reach of Colorado River northward from the Needles-Topock Highway Bridge.

5. The temperature of the waste discharge of the City of Needles may exceed the temperature of Colorado River water at the location of discharge by as much as 20°C.

6. The City of Needles, in correspondence dated January 29, 1974, requested that it be provided with an exception to said Thermal Plan. Said exception was granted by the State Water Resources Control Board on April 18, 1974, in Resolution No. 74-33, and received EPA concurrence by letter dated May 21, 1974.

7. On November 16, 1977, the Regional Board approved for guidance a "Policy for Implementation of the Colorado River Salinity Standards through the NPDES Permit Program."

replaced by 88-110

8. The beneficial uses of Colorado River water are:

   a. Municipal supply
   b. Industrial supply
   c. Agricultural supply
   d. Domestic supply
   e. Recreation - water contact and non-water contact
   f. Freshwater habitat
   g. Replenishment of fresh surface waters
   h. Hydroelectric power generation
   i. Wildlife habitat
   j. Ground water recharge

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. 79-15 (NPDES No. CA0104205) which allows discharge to Colorado River.

11. The Board has issued Cease and Desist Order No. 78-72, which contains a time schedule for compliance with coliform limitations identical to those set forth in Effluent Limitations A.6. of this Order. Addendum No. 1 to Cease and Desist Order No. 78-72 was adopted by the Board on January 17, 1979, establishing a revised time schedule. Construction is presently underway on a project which would enable the discharger to meet all requirements.

12. The Board has notified the discharger and interested agencies and persons of its intent to update requirements for the existing discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

13. The Board in a public meeting heard and considered all comments pertaining to the discharge.

14. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Federal Clean Water Act, and amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator has no objections.

IT IS HEREBY ORDERED, the City of Needles, 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. Representative samples of wastewater discharged to the Colorado River shall not contain constituents in excess of the following limits:

Constituents	Unit	30-Day Arithmetic Mean Discharge Rate	7-Day Arithmetic Mean Discharge Rate
20°C BOD_5	lbs/day	450	675
	mg/l	30	45
Suspended Solids	lbs/day	450	675
	mg/l	30	45
Settleable Matter	ml/l	0.3	0.5

2. The arithmetic mean of the values for effluent samples collected for 20°C BOD_5 and for suspended solids in any 30-day period shall not be greater than 15 percent of the arithmetic mean of the values for influent samples collected during the same 30-day period (85 percent removal).

3. The peak month average daily flow shall not exceed 1.8 mgd.

4. The effluent values for pH shall remain within the limits of 6.0 to 9.0.

5. The daily maximum total residual chlorine shall not exceed 0.02 mg/l.[1]

6. The discharged wastewater shall be adequately disinfected. Said wastewater shall be considered to be adequately disinfected if at some point in the treatment process the Median Most Probable Number of Coliform Organisms, as determined from the bacteriological results of the last seven (7) days for which analyses have been completed, does not exceed the limit prescribed below for the described discharge condition:

   a. Effluent piped into the main part of the channel - coliform organisms not to exceed 23 per one hundred (100) milliliters; or

   b. Where recreationists can come into direct contact with effluent before full mixing is accomplished, wastewater shall be at all times adequately disinfected, oxidized, coagulated, clarified and filtered. The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. Final turbidity, as determined by an

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1. Total residual chlorine levels below the limit of detection by either amperometric or reverse iodometric titration shall satisfy this requirement.

approved laboratory method, shall not exceed an average operating turbidity of 2 turbidity units and shall not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

Samples for determining coliforms in 6.a. and 6.b. (above) shall be taken at least daily and at a time when wastewater flow and characteristics are most demanding on the treatment facilities and disinfection procedures.

7. The temperature of the City of Needles wastewater discharged to Colorado River shall not exceed the temperature of the receiving waters by more than 20°F at any time.

8. The incremental increase of Total Dissolved Solids concentration in the discharged wastewater, shall not exceed 400 mg/l above the flow weighted average of that concentration contained in the water supply of the City of Needles.

B. Receiving Water Limitations

1. Wastewater discharged to Colorado River shall not:

   a. Depress the dissolved oxygen content of the receiving water below 5.0 mg/l.

   b. Cause presence of oil, grease, scum, sludge, or solids.

   c. Contain heavy metals or associated chemicals or pesticides in concentrations toxic to fish and other aquatic life.

   d. Cause a detectable temperature increase in the receiving water at any point outside of the initial thirty foot dilution zone.

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.

C. Provisions

1. Neither the treatment nor the discharge of wastes shall cause a pollution or a nuisance, as defined in Division 7 of the California Water Code.

2. 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.

3. This Order supersedes this Board's Order No. 79-15.

4. This Order includes the attached "Monitoring and Reporting Program No. 83-91", and future revisions thereto, as specified by the Executive Officer.

5. 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.

6. Facilities shall be available to keep the plant in operation in the event of commercial power failure.

7. The discharger's wastewater treatment plant shall be supervised and operated by persons possessing certification of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23, California Administrative Code.

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.

Arthur Swajian
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 83-91
FOR
CITY OF NEEDLES
San Bernardino County

Location of Discharge: Near the center of Section 33, T9N, R23E, SBB&M

MONITORING

WASTEWATER DISCHARGE

Wastewater discharged to the Colorado River shall be monitored for the following constituents. A sampling station shall be established where representative samples of the effluent can be obtained.

Constituent	Unit	Type of Sample	Sampling Frequency
Flow (Total)	MGD	Average Daily	Daily[1]
Temperature	°F	Grab at Peak Flow	Daily[2]
Settleable Matter	ml/l	Grab at Peak Flow	Weekly
Suspended Solids	mg/l	24-Hr. Composite	Weekly
20°C BOD_5	mg/l	24-Hr. Composite	Weekly
pH	pH Units	Grab at Peak Flow	Daily[2]
Coliform[3]	MPN/100 ml	Grab at Peak Flow	Daily[2]
Chlorine Residual	mg/l	Grab at Peak Flow	Daily[2]
Total Dissolved Solids	mg/l	24-Hr. Composite	Monthly
Sulfate (SO_4)	mg/l	24-Hr. Composite	Annually
Chloride (Cl)	mg/l	24-Hr. Composite	Annually
Ammonia (N)	mg/l	24-Hr. Composite	Annually
Organic Nitrogen (N)	mg/l	24-Hr. Composite	Annually
Nitrate (N)	mg/l	24-Hr. Composite	Annually
Turbidity[4]	NTU	Grab at Peak Flow	Daily[2]
Dissolved Oxygen	mg/l	Grab at Peak Flow	Daily[2]

1. For each day with average monthly flow calculated.
2. Once per weekday
3. The discharger shall submit the results of each coliform analysis and, also, submit 7-day medians.
4. Turbidity monitored only if the City of Needles discharges in accordance with Effluent Limitations No. 6.b.

INFLUENT MONITORING

The wastewater influent to the treatment facilities shall be monitored for 20°C BOD_5 and for suspended solids, monthly, 24-hour composite sample.

Water Supply to City of Needles

The City of Needles shall submit an analysis of the following constituents, based on a weighted average of all sources of its municipal water supply:

Constituent	Unit	Type of Sample	Sampling Frequency
Total Dissolved Solids	mg/l	24-Hr. Composite	Monthly
Chloride (Cl)	mg/l	24-Hr. Composite	Annually
Sulfate (SO_4)	mg/l	24-Hr. Composite	Annually

Sewage Sludge

The discharger shall report quarterly on the quantity, method, and location of sewage sludge discharged.

REPORTING

Monitoring data shall be submitted to the Regional Board as follows:

Annual reports - by January 15 of the following year.

Quarterly reports - January 15, April 15, July 15, and October 15 of each year.

Daily, Weekly and Monthly reports - Reported monthly 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 No. 83-91.

Forward monitoring reports to:

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

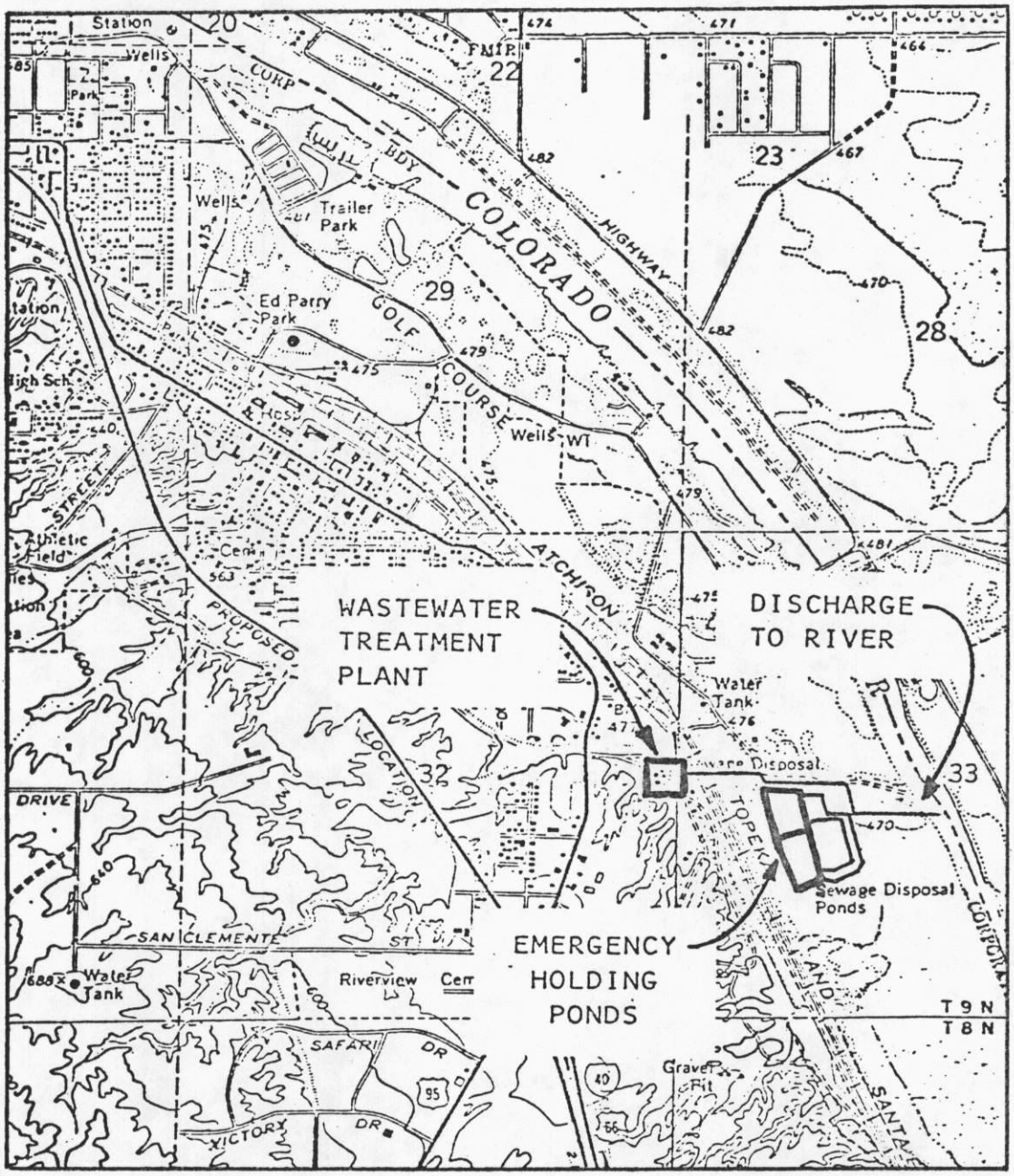
A copy of the Discharge Monitoring Report shall also be sent to:

Regional Administrator
Environmental Protection Agency
Region IX, Attn: 65/MR
215 Fremont Street
San Francisco, CA 94105

ORDERED BY: Arthur Levajian
Executive Officer

December 2, 1983
Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



Scale:
1" = 2,000'

SITE MAP

CITY OF NEEDLES
San Bernardino County
Discharge Location: Near the center of Section 33, T9N, R23E, SBB&M
USGS Needles 7.5 min. Topographic Map

Order No. 83-91