

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

ORDER NO. 84-85

**WASTE DISCHARGE REQUIREMENTS
FOR
UNITED STATES MARINE CORPS BASE
Twentynine Palms - San Bernardino County**

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

1. The Marine Corps Base (hereinafter also referred to as the discharger), Twentynine Palms, California, 92278, verified the below updated information on the discharge of waste on May 11, 1984.
2. The discharger is discharging in two locations:
 - a. The main sanitary treatment facility, located in the NW $\frac{1}{4}$ of Section 29, T2N, R9E, SBB&M, treats an average flow of 1.3 mgd of domestic sewage from the Main Camp area and the Marine Palms Housing Unit. The current base population is 12,835. The designed capacity flow for this facility is 2.5 mgd. The treatment process consists of primary sedimentation of the effluent before it flows into oxidation basins.
 - b. The Ocotillo Heights oxidation basins located in the NW $\frac{1}{4}$ of Section 19, T2N, R9E, SBB&M, provides sewage treatment for Ocotillo Heights housing and golf course facilities. An average of 170,000 gallons-per-day is discharged into two basins covering about 7 acres.

Some of the treated effluent from the oxidation basins at the main facility is pumped to the Ocotillo Heights oxidation basins, where the wastewater is reclaimed for irrigation of the Ocotillo Heights Golf Course. Treated wastewater from the main basins is also used to irrigate the main parade field, athletic fields and trees in the main camp.

3. The Water Quality Control Plan for the Colorado River Basin Region of California was adopted by the Regional Board on May 16, 1984. The Basin Plan contains water quality objectives for the Dale Hydrologic Unit.
4. The beneficial uses of the ground water of the Dale Hydrologic Unit are:
 - a. Municipal supply
 - b. Industrial supply
 - c. Agricultural supply

*Rescinded
1/27/88
by order #
88-10*

5. The discharges from said facilities have been subject to waste discharge requirements adopted in Board Order No. 77-14.
6. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.
7. The Board in a public meeting heard and considered all comments pertaining to the discharge.
8. This sewage disposal facility constitutes an ongoing project in accordance with provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et. seq.) and the State guidelines because the governmental approvals on or after April 5, 1973, do not involve a greater degree of responsibility or control over such activity than the governmental approvals received prior to that date.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Discharge Specifications

1. Neither the treatment nor the discharge of wastewater shall cause a pollution or a nuisance as defined in Division 7 of the California Water Code.
2. No wastewater other than domestic sewage shall be discharged at this location.
3. Treated or untreated sludge, or similar solid waste materials, shall be disposed of in a manner which will not cause a threat to public health.
4. Adequate measures shall be taken to assure that unauthorized persons and animal pets are effectively excluded from contact with the discharge.
5. The discharge of reclaimed wastewater shall be confined to lands which have been designated for disposal by the discharger.
6. Treatment and disposal by ponding should be conducted in such manner that there shall be no stranded or exposed sewage solids.
7. Reclaimed water used for the irrigation of golf courses and trees, where the public does not have direct contact with said wastewater, shall be at all times an adequately disinfected, oxidized wastewater. The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have completed, and the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

8. Reclaimed water used for the irrigation of parks, playgrounds, and other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability. The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.
9. There shall be no surface flow of sewage away from the designated disposal areas.
10. A minimum freeboard depth of at least two feet shall be maintained in each of the basins.
11. Facilities shall be available to keep the plant in operation in the event of commercial power failure.
12. Infiltration and holding facilities shall be maintained and operated so as to maximize infiltration and minimize the increase in salinity of the wastewater discharge.
13. The maximum daily flow shall not exceed 2.5 million gallons-per-day from the main camp sewage treatment plant.
14. Sewage and sewage sludge shall not be discharged to any natural or artificial channel.
15. Increase of chemical constituents in the treated wastewater over that contained in the water supply to the Base shall not exceed that which may normally be expected to result from a single domestic use. The following tabulation of key constituents, and other data, will be used as a guide in determining compliance with this requirement.

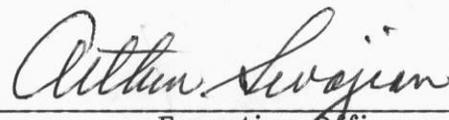
<u>Constituent</u>	<u>Increment (mg/l)</u>
Chloride	50
Total Dissolved Solids	300
Sulfate	30
Fluoride	0.3

B. Provisions

1. 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.

2. Prior to any modifications in this facility which could result in material change in the quality or quantity of wastewater discharged, or any material change in the location of the discharge, the discharger shall report in writing to the Regional Board.
3. This Order supersedes Board Order No. 77-14.
4. The discharger shall comply with "Monitoring and Reporting Program No. 84-85", and future revisions thereto, as specified by the Executive Officer.
5. 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 September 19, 1984 .



Executive Officer

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

MONITORING AND REPORTING PROGRAM NO. 84-85
FOR
UNITED STATES MARINE CORPS BASE
Twentynine Palms - San Bernardino County

Location of Discharges:

Main Treatment Facility: NW¼, Section 29, T2N, R9E, SBB&M

Ocotillo Heights Oxidation Basins: NW¼ of Section 19, T2N, R9E, SBB&M

EFFLUENT MONITORING

1. Effluent Used for Irrigation of Parade Fields, Playgrounds and Golf Courses:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Coliform Organisms	MPN/100ml	Grab*	Daily

2. Wastewater Contained in Each Oxidation Basin:

Total Dissolved Solids	mg/l	Grab	Quarterly
Chloride	mg/l	Grab	Quarterly
Sulfate	mg/l	Grab	Quarterly
Fluoride	mg/l	Grab	Quarterly

3. Effluent Discharged to Oxidation Basins:

Flow	MGD	Daily	Reported Monthly **
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4. Supply Waters:

Total Dissolved Solids	mg/l	Grab	Annually
Chloride	mg/l	Grab	Annually
Sulfate	mg/l	Grab	Annually
Fluoride	mg/l	Grab	Annually

*Samples of the Most Probable Number (MPN) of coliform organisms shall be collected at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

** Reported for each day with average monthly flow calculated.

REPORTING

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

Annual reports - by January 15 of the following year.

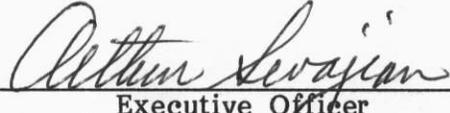
Quarterly reports - by January 15, April 15, July 15, and October 15 of each year.

Daily data - Reported Monthly by the 15th day of the following month.

Forward monitoring reports to:

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

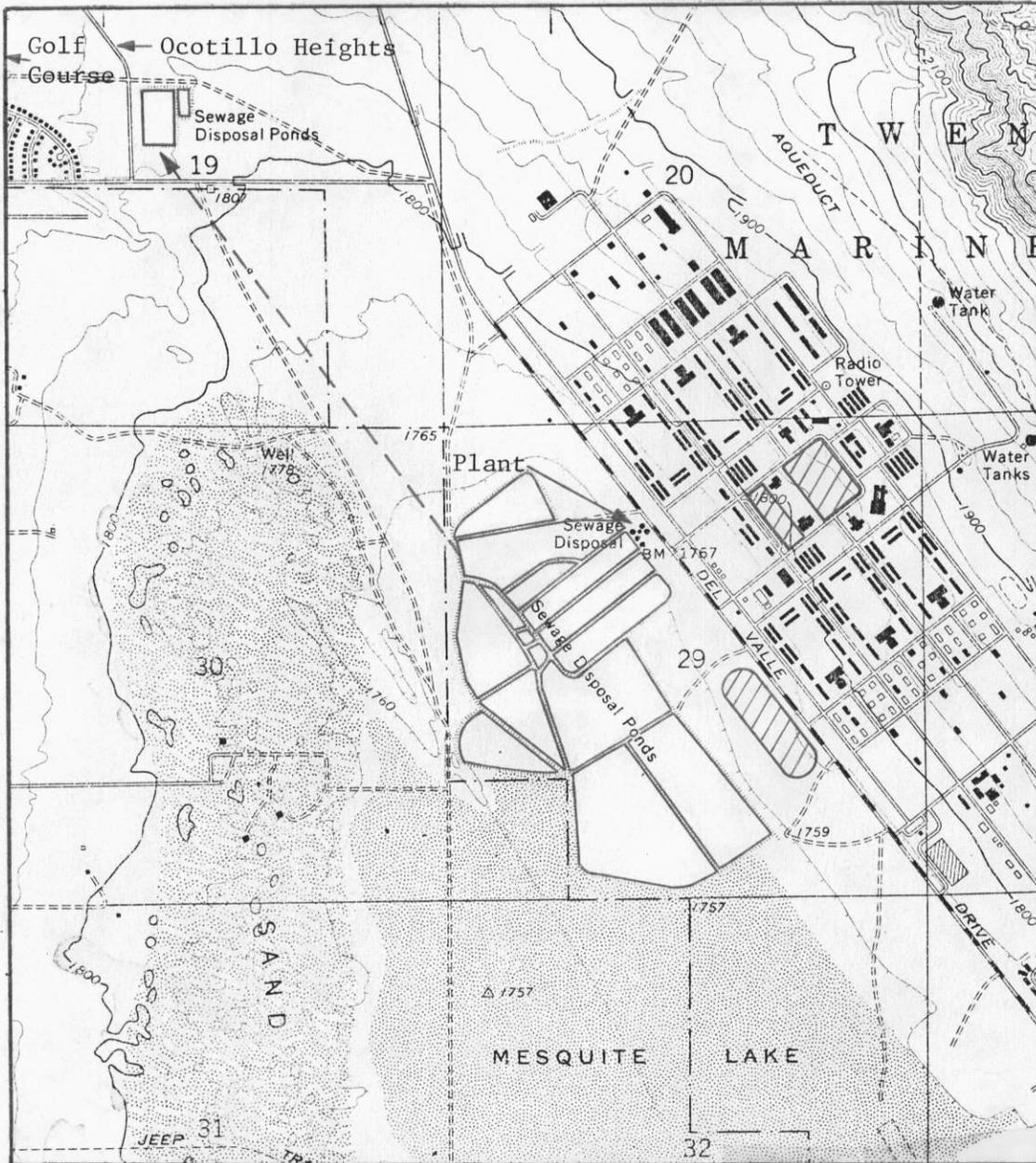
ORDERED BY:


Executive Officer

September 19, 1984

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD -7



Scale:
1"=2,000'

Oxidation Basins
 Sewage Pipeline
 Irrigation Areas

SITE MAP
U.S. MARINE CORPS BASE
 Twentynine Palms - San Bernardino County
 Main Camp: NW $\frac{1}{4}$ of Section 29, T2N, R9E, SBB&M
 Ocotillo Heights: NW $\frac{1}{4}$ of Section 19, T2N, R9E, SBB&M
 USGS Twentynine Palms 7.5 min. Topographic Map