

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER NO. 77-14

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, submitted a Report of Waste Discharge dated November 29, 1976.
  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 700,000 gallons-per-day of domestic sewage from the Main Camp area and the Marine Palms Housing Unit. The current base population is 8,500. 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 the oxidation basins.
    - b. The Ocotillo Heights oxidation basin, located in the NE $\frac{1}{4}$  of Section 19, T2N, R9E, SBB&M, provides sewage treatment for Ocotillo Heights Housing and Golf Course facilities. An average of 105,000 gallons-per-day is discharged into this 6.67 acre basin.
- The treated effluent from the oxidation basins at the main facility is pumped to the Ocotillo Heights oxidation basin. Here the wastewater is reclaimed for irrigation of the Ocotillo Heights Golf Course. Treated wastewater from the main basins is also used to irrigate lawns and trees in Main Camp.
3. The Water Quality Control Plan for the West Colorado River Basin was adopted by the Board on April 10, 1975, and this Order implements the objectives stated in the Plan.
  4. The beneficial uses of the groundwaters of the Dale Hydrologic Unit are:
    - a. Municipal supply
    - b. Industrial supply
    - c. Agricultural supply

*Superseded  
by 84-85,  
9/19/84*

5. The discharges from said facilities have been subject to waste discharge requirements adopted in Resolution No. 68-24.
6. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge.
7. The Board in a public meeting heard and considered all comments pertaining to the proposed discharge.

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.
2. No wastewater other than domestic sewage shall be discharged at this location.
3. Treated or untreated sludge, or similar solid waste materials, should be disposed of in a manner which will not cause a threat to the 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 waste discharge and reclaimed wastewater re-use shall be confined to lands owned or controlled by the Base, and 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 stranding or exposure of sewage solids.
7. The discharge shall not adversely affect the quality of receiving waters that are usable for domestic purposes.

8. Reclaimed wastewater used for irrigation of golf courses and lawns should be at all times adequately disinfected and oxidized. The wastewater is considered adequately disinfected if at some point in the treatment process the median most probable number of coliform organisms does not exceed twenty-three (23) per one hundred (100) milliliters of sample. The median value is determined from the bacteriological results of the last seven (7) days for which analysis is completed.
9. There shall be no surface flow of sewage away from the designated disposal areas.
10. A freeboard depth of at least two feet shall be maintained in the infiltration 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-operating-day.
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 supply to the Base should 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.

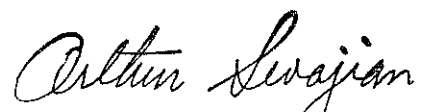
<u>Constituent</u>	<u>Increment (mg/l)</u>
Chloride	50
Total Dissolved Solids	300
Sulfate	30
Fluoride	0.3

#### 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. In the event of any change in operation, or in ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:
  - a. Notify this Board of such change; and
  - b. Notify the succeeding owner or operator by letter of the existence of this Order, a copy of which shall be filed with this Board.
3. 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 thereon to the Board.
4. This Order supersedes Board Resolution No. 68-24.
5. The discharger shall comply with "Monitoring and Reporting Program No. 77-14" and "General Provisions for Monitoring and Reporting", and future revisions thereto, as specified by the Executive Officer.

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 March 16, 1977.



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Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM NO. 77-14  
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 Basin: NE¼ of Section 19,  
T2N, R9E, SBB&M

EFFLUENT MONITORING

I. Effluent Used for Parks, Green Belts and Golf Courses:

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

II. Wastewater Contained in Oxidation Basins:

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

III. Effluent Discharged to Oxidation Basins:

Flow	MGD	Average Daily	Daily
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IV. 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.

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.

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

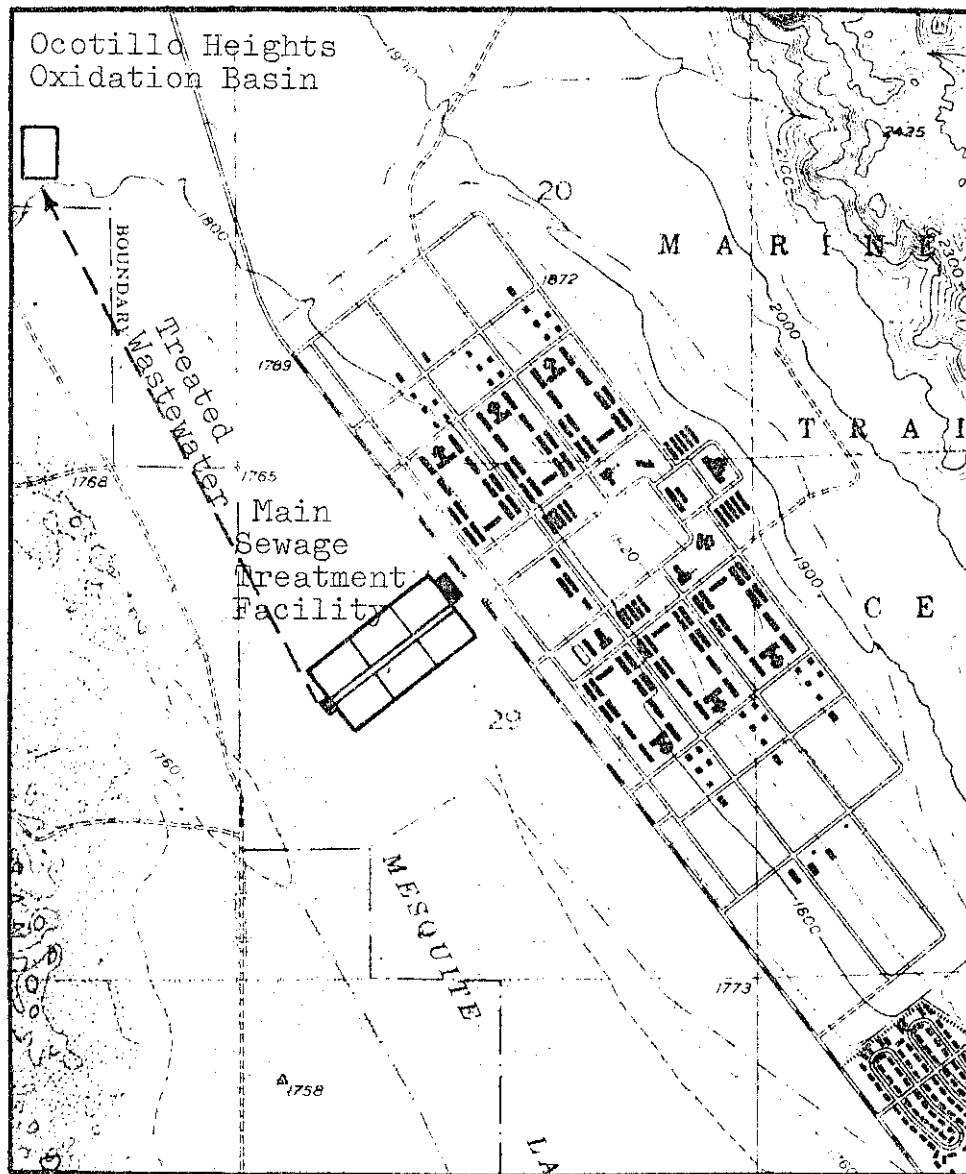
ORDERED BY

*Arthur Levajian*  
Executive Officer

March 16, 1977

Date

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - 7



SITE MAP  
FOR  
U.S. MARINE CORPS BASE  
Twentynine Palms, San Bernardino County  
NW¼ of Section 29, and SE¼, NE¼ of  
Section 19, T2N, R9E, SBB&M  
U.S.G.S. Twentynine Palms 7.5 min. Topographic Map

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