

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

TIME SCHEDULE ORDER NO. 99-011
ISSUED TO
UNITED STATES MARINE CORPS BASE
WASTEWATER TREATMENT PLANT
Twentynine Palms - San Bernardino County

The California Regional Water Quality Control Board, Colorado River Basin Region, (hereinafter referred to as the Regional Board) finds that:

1. United States Marine Corps, Marine Corps Air Ground Combat Center (MCGCC) P.O. Box 788100 Twentynine Palms, CA, 92278-8100 (hereinafter referred to as the discharger) owns and operates the Wastewater Treatment Plant located at the main camp at MCGCC, in Twentynine Palms, CA, 92278-8100. The facility is designed to treat 6.9 million gallons-per-day of domestic sewage and serves the current population of 15,000.
2. The treatment system at this facility consists of one aerated grit chamber, three primary clarifiers, three oxidation ponds, and six infiltration ponds.
3. A Tertiary Treatment system was installed in 1997 to reduce effluent turbidity in order to allow the reclaimed water produced to meet the quality standards established by the Regional Board under CRWQCB waste discharge No. 93-032. The effluent is conveyed to a chlorine contact chamber where chlorine and poly-aluminium chlorine (PAC) are added to control algae and improve flocculation, respectively. First, the reclaimed water is pumped to the clarifiers where polymer is added for solids "binding" purposes. The reclaimed water flows by gravity to the filtration system where chlorine is added for initial disinfection. The water is then pumped into a one-million-gallon storage tank.
4. The treated wastewater is used to irrigate vegetation on the base, the parade field, athletic fields, and the golf course.
5. On May 19, 1993, the Regional Board adopted Order No. 93-032 which allows for discharge of treated wastewater at the aforementioned locations. Board Order No. 93-032 specifies effluent limitations, prohibitions, specifications, and provisions necessary to protect the beneficial uses of the surface and ground waters in this region.
6. The beneficial uses of waters in the Dale Hydrological Units are:
 - a. Municipal supply (MUN)
 - b. Industrial supply (IND)
 - c. Agricultural supply (AGR)
7. The discharger is in violation of Prohibition No. 21 a. of Board Order No. 93-032 which states that:

"The wastewater shall be considered adequately disinfected if the median number of fecal 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 maximum number of fecal coliform organism does not exceed 23 per 100 milliliters in any sample".

8. The discharger is in violation of Prohibition No. 21 b. of Board Order No. 93-032 which states that:

"Filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth. The wastewater shall be considered adequately filtered if the turbidity, as determined by an approved laboratory method, does not exceed 5 Nephelometric Turbidity Units (NTU) units more than 5 percent of the time during any 24-hour period".
9. Currently, the tertiary filter system has been unable to consistently meet these turbidity effluent standards. The primary cause of the erratic filter system performance appears to be an algae load far in excess of that anticipated during design. The unstable filtration sequence is the result of a combination of mechanical and natural characteristics affecting the algae removal process.
10. Table 1 (29 Palms Violation List), incorporated herein and made part of this order was prepared based on the Monthly reports that the Board receives from MCGCC. Table 1, illustrates the non-compliance with the above provisions from March 1995 through November 1998. Regional Board staff has been working with MCGCC to rectify the non-compliance issue since the time the problem started through several formal and informal discussions with MCGCC staff.
11. Regional Board staff conducted a compliance inspection on November 5, 1998. Wastewater effluent samples were collected from the pond and analyzed for total coliform and turbidity. The results were reported as 7 Most Probable Number Per 100 milliliters (MPN/100ml) and 60 NTU, respectively. The permit limits are <2.2 MPN for coliform and 5 NTU for turbidity. A sample was collected from the golf course and analyzed for total coliform. Results indicated 34 MPN/100ml.
12. After the inspection on November 5, 1998, a meeting was held with MCGCC's Environmental Division representatives to discuss ways to improve the system operation in order to lower the turbidity and coliform counts and comply with the permit requirement.
13. In a letter dated November 13, 1998, a compliance schedule was proposed by the MCGCC to correct the existing deficiencies of the treatment system and to comply with Regional Board requirements.
14. Section 13300 of the California Water Code states in part:

"Whenever a Regional Board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the Regional Board, or the State Board, the Board may require the discharger to submit for approval of the Board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."
15. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Article 19, Division 3, Title 14, California Code of Regulations.

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

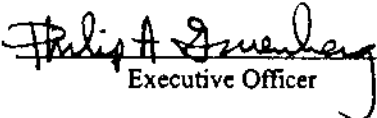
1. The discharger shall take specific actions as indicated in the following time schedule, in order to achieve compliance with all the requirements of its existing or future waste discharge requirements:

Task	Completion Date	Task Description
1	August 1, 1999	Completion date for system repair and equipment installation.
2	November 1, 1999	New system is fully functional.

2. The discharger shall submit monthly reports on the status of the tasks described above. These progress reports shall be due by the 15th of every month.

If in the opinion of the Regional Board's Executive Officer, the discharger fails to comply with this Time Schedule Order, the Regional Board's Executive Officer may take further enforcement actions against the discharger in accordance with the California Water Code.

I, Philip A. Gruenberg, 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 1-28-99.


Executive Officer

1-28-99
Date

TABLE 1

VIOLATION LIST
U.S. Marine Corps Base
Wastewater Treatment Plant
29 Palms, San Bernardino County

DATE OF VIOLATION	CONSTITUENT	CONSTITUENT
	COLIFORM	TURBIDITY
	permit limit <2.2 MPN/100 ml	permit limit 5 NTU
11/98	NR	NR
10/98	NR	NR
9/98	23	17.1
8/98	17.71	48.8
7/98	3.75	25.8
6/98	18	40.1
5/98	C	19.3
4/98	C	35.1
3/98	C	43.1
2/98	C	C
1/98	16	30.1
12/97	C	C
11/97	C	C
9/97	C	C
8/97	C	C
7/97	C	C
6/97	C	15
5/97	C	C
4/97	C	25
3/97	C	27
2/97	3	16
1/97	C	8
12/96	C	25
11/96	C	24
10/96	C	36
9/96	7.8	53
8/96	11.7	42
7/96	2.37	43
6/96	2.9	45
5/96	C	46
4/96	5.6	61
3/96	C	33
2/96	C	25
1/96	C	26

12/95	C	33
11/95	C	64
10/95	C	C
9/95	>23	30
8/95	>23	49
7/95	>8.13	58
6/95	C	58.7
5/95	C	41
4/95	C	25
3/95	C	46

Note:

C Constituent met the permit limit
NR No Report was submitted to the agency
NTU Nephelometric Turbidity Units
MNP/100ml Most Probable Collected Number Per 100 milliliters