

11300/4
NREAD
16 Jul 86

From: Director, Natural Resources and Environmental Affairs
Division, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff, Facilities, Marine Corps Base,
Camp Lejeune

Subj: DISSOLVED OXYGEN PROBLEM AT CAMP GEIGER WASTEWATER
TREATMENT PLANT

Encl: (1) Dissolved Oxygen at Camp Geiger STP

1. The enclosure is submitted per request of Environmental Engineer. In an effort to bring Camp Geiger Wastewater Treatment Plant in line with the proposed requirements of its new NPDES permit, it was decided to take dissolved oxygen readings in the outfall line for Camp Geiger. The sampling was done by the Utilities personnel. The analysis was done by both Utilities personnel and laboratory personnel. The enclosure provides the results.

2. The effluent dissolved oxygen sampling point was moved. A review of the dissolved oxygen data from 1 April 1986 to 30 June 1986 shows that Camp Geiger met the minimum monthly limit of 5.0 mg/l all three months. Out of the 15 weeks, it met the minimum weekly limit of 5.0 mg/l 13 times. The weeks 8-14 June 1986 and 29-30 June 1986, the weekly average was 4.6 and 4.4 respectively.

3. Point of contact is Ms. Elizabeth Betz, x5977.

D. D. SHARPE
Acting

Copy to:
BMO (Util Dir)

from various natural resources and environmental studies
Division, Air Force, Camp Detachment
Assistant Chief of Staff, Facilities, Camp Detachment
Camp Detachment

2. The following information was obtained from the
Treatment Plant

1. The following information was obtained from the
Camp Detachment

The analysis is presented in the following table
An effort is being made to determine the
cause of the problem and the process is being
continued. It was determined that the oxygen
in the effluent line to Camp Detachment was
not sufficient to meet the demand. The analysis
indicates that the oxygen is being consumed
by the bacteria in the effluent line.

The effluent line to Camp Detachment was
checked and the oxygen level was found to be
low. A review of the dissolved oxygen data
for the last 100 days shows a general
trend of low oxygen levels. The oxygen
level is low in all three months, but
the lowest level is in the month of
June. The average oxygen level for
the last 100 days is 1.5 mg/l.

2. The following information was obtained from the
Camp Detachment

The following information was obtained from the
Camp Detachment

copy for
the following

DISSOLVED OXYGEN AT CAMP GEIGER STP

	Time	DO
3-11-86		
Plant @ Weir	0900	3.8
Last Manhole	1030	5.5
3-12-86		
Plant @ Weir	0900	1.9
Last Manhole	0930	6.1
3-13-86		
Plant @ Weir	0950	1.8
Last Mahole	0930	6.6
* (Plant into Wet Well	0950	4.0
Plant @ Wet Well	0950	6.5
3-14-86		
Plant @ Weir	1000	2.5
* Plant @ Wet Well	1045	6.6
Last Manhole	0945	7.4, 7.6
3-17-86		
* Plant @ Wet Well	~ 0900	5.1
3-18-86		
* Plant @ Wet Well	~ 0900	4.8
3-19-86		
Plant @ Weir	~ 0900	2.2
3-20-86		
Plant @ Weir	~ 0900	5.8, 4.6
Plant @ Wet Well	~ 0900	8.9

*The last manhole is outside the confines of the plant and on private property. Mr. Farrow and Mr. Futrell, on their own initiative, sampled the wet well, which is located within the confines of the plant. The wet well is a much easier sample point for the operators.

Conclusions:

The effluent dissolved oxygen sample point was moved to the wet well.

ENCLOSURE (11)

