CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 8734
FOR
UNITED STATES NAVY
NAVAL AUXILIARY LANDING FIELD, SAN CLEMENTE ISLAND
(Wastewater Treatment Plant)
(Title 22 Recycled Water)
(File No. 04-035)

The United States Navy (hereinafter Producer) shall implement this monitoring and reporting program on the effective date of this Order.

I. SUBMITTAL OF MONITORING AND ANNUAL REPORTS

A. Monitoring reports shall be submitted quarterly and received at the Regional Board by the 15th day of the second month following the end of the quarterly monitoring period. The first monitoring report under this program shall be received at the Regional Board by August 15, 2004, covering the monitoring period from April 1 to June 30, 2004. Subsequent monitoring reports shall be received at the Regional Board according to the table below:

Reporting Period	Report Due
January – March	May 15th
April – June	August 15th
July – September	November 15th
October – December	February 15th

B. By March 1st of each year, the Producer shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. The first annual report under this Program shall be received at the Regional Board by March 1, 2005, and will cover the monitoring period of calendar year 2004. The Regional Board may request electronic submittal of data at any time.

C. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

D. All monitoring and annual summary reports must be addressed to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-8734 to facilitate routing to the appropriate staff and file.

E. Database Management System: The Regional Board and State Water Resources Control Board are developing a compliance monitoring database management

system that may require the Producer to submit the monitoring and annual summary reports electronically in a standard format when it becomes fully operational.

II. MONITORING AND REPORTING REQUIREMENTS

A. Whenever possible, quarterly monitoring shall be performed during the months of February, May, August, and November; and annual monitoring shall be conducted during the third quarter of each calendar year. However, if the discharge of recycled water does not occur during that monitoring period, the Producer shall collect a sample during the next discharge event. Results of daily, monthly, quarterly, and annual analyses shall be reported in the following quarterly monitoring report. If there is no discharge of recycled water during the reporting period, the report shall so state. Monitoring reports shall continue to be submitted to the Regional Board, regardless of whether or not there was a discharge of recycled water.

B. All chemical and bacteriological analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer. A copy of the laboratory certification shall be submitted with the annual summary report.

Currently, the laboratory on the San Clemente Island is not certified by ELAP. When the treated effluent is used for recycled water, the required daily coliform sample will be sent out by airplane to a certified laboratory in San Diego for analysis. The Navy will be pursuing certification for the Island laboratory for the coliform test.

C. Recycled water samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All QA/QC analyses must be run on the same dates when samples were actually analyzed. The Producer shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the quarterly report.

D. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), the Minimum Level (ML) and the reported Minimum Level (RML) for each chemical constituent. The MLs are those published by the State Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California,* March 2, 2000, Appendix 4, and are attached and made part of this Monitoring and Reporting Program. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. MLs also represent the lowest standard concentration in the calibration curve for a specific analytical technique after the application of appropriate method-specific factors. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or

concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported Minimum Level.

E. For the purpose of reporting compliance with numerical limitations, analytical data shall be reported using the following reporting protocols:

1. Sample results greater than or equal to the RML must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample); or

2. Sample results less than the RML, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to Est. Conc.); or

3. Sample results less than the laboratory's MDL must be reported as "Not-Detected", or ND.

F. The MLs employed for effluent analyses shall be lower than the permit limits prescribed in this Order, unless the Producer can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer.

G. The annual report shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the recycled water into full compliance with water recycling requirements.

The annual report shall also include a list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures. The report shall restate, for the record, the laboratories used by the Producer to monitor compliance with this Order, their status of certification, and provide a summary of performance.

The annual report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall also include the date of the facility' s Operation and Maintenance Management Plan, the date the plan was last reviewed, and whether the plan is complete and valid for the current facility.

A summary of recycled water training activities including a list of personnel that receive training during the previous calendar year shall also be provided in the annual report.

III. RECYCLED WATER MONITORING

The sampling station shall be established where representative samples of recycled water can be obtained. For this recycling project, recycled water samples shall be obtained from the effluent channel downstream of the chlorine contact basin. Should there be any change

in the sampling station, the proposed station shall be approved by the Executive Officer prior to its use.

A. Monitoring Program for Recycled Water

Constituent	Units	Type of Sample [1]	Minimum Frequency of Analysis
Total recycled water flow	MGD	---	continuous
Chlorine residual [2]	mg/L	---	continuous
Coliform [3]	MPN/100ml	grab	daily [4]
Turbidity	NTU	grab	monthly
pH	pH units	grab	monthly
Suspended solids	mg/L	24-hr composite	monthly
$BOD_5 20^oC$	mg/L	24-hr composite	monthly
Oil and grease	mg/L	grab	quarterly
Total dissolved solids	mg/L	24-hr composite	quarterly
Chloride	mg/L	24-hr composite	quarterly
Boron	mg/L	24-hr composite	quarterly
Sulfate	mg/L	24-hr composite	quarterly
Nitrate nitrogen	mg/L	24-hr composite	quarterly
Nitrite nitrogen	mg/L	24-hr composite	quarterly
Ammonia nitrogen	mg/L	24-hr composite	quarterly
Total organic carbon	mg/L	24-hr composite	annually
MTBE	µg/L	24-hr composite	annually
Perchlorate	µg/L	grab	annually
1,4-Dioxane	µg/L	grab	annually
1,2,3-Trichloropropane	µg/L	grab	annually
N-Nitrosodimethyl amine (NDMA)	ng/L	grab	annually
Priority pollutants [5]	µg/L	grab, 24-hr composite	annually
Radioactivity	pCi/L	24-hr composite	annually

1. Grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks.

   When an automatic composite sampler is not used, composite sampling shall be done as follows: If the duration of the discharge is equal to or less than 24 hours but greater than eight (8) hours, at least eight (8) flow-weighted samples shall be obtained during the discharge period and composited. For discharge duration of less than eight (8) hours, individual 'grab' sample may be substituted.

2. Chlorine residual concentration shall be continuously monitored and recorded at a point after the final chlorine contact basins. Both the minimum and maximum values shall be reported daily.

3. Samples shall be obtained subsequent to the chlorination process.

4. The daily total coliform bacteria samples shall be analyzed by a certified laboratory. The daily total coliform test is not required when the effluent is not used for recycled water on that day.

5. Priority pollutants are listed on page T-7. Grab samples shall be used for analyses of volatile organics and cyanide; composite samples shall be used for others.

IV. RECYCLED WATER USE MONITORING

The Producer shall include the following in the quarterly report:

A. The list of users serviced during the quarter;
B. The estimated amount of recycled water delivered to each user; and
C. The use of the recycled water.

A summary of these data shall be included in the annual report.

V. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. The Producer shall summarize and arrange the monitoring data in tabular form to demonstrate compliance with requirements.

B. For every item where the requirements are not met, the Producer shall submit a statement of the actions undertaken or proposed which will bring the recycled water into full compliance with requirements at the earliest possible time, and submit a timetable for implementation of the corrective measures.

C. Monitoring reports shall be signed by either the principal Executive Officer or ranking elected official. A duly authorized representative of the aforementioned signatories may sign documents if:

1. The authorization is made in writing by the signatory;
2. The authorization specifies the representative as either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Executive Officer of this Regional Board.

D. The monitoring report shall contain the following completed declaration:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments thereto; and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are

significant penalties for submitting false information, including the possibility of fine and imprisonment."

Executed on the ___ day of _____ at _____

_____ Signature

_____ Title

E. The Producer shall retain records of all monitoring information, including all calibration and maintenance, monitoring instrumentation, and copies of all reports required by this Order, for a period of at least three (3) years from the date of sampling measurement, or report. This period may be extended by request of the Regional Board or DOHS at any time and shall be extended during the course of any unresolved litigation regarding the regulated activity.

F. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analysis;
5. The analytical techniques or methods used; and
6. The results of such analyses.

G. The Producer shall submit to the Regional Board, together with the first monitoring report required by this Order, a list of all chemicals and proprietary additives which could affect the quality of the recycled water, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

An annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used in the treatment process shall be included in the annual report.

Ordered by:

Dennis A. Dickerson
Executive Officer

Date: April 1, 2004

PRIORITY POLLUTANTS

Metals

Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

Miscellaneous

Cyanide
Asbestos (only if specifically required)

Pesticides & PCBs

Aldrin
Chlordane
Dieldrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC
Toxaphene
PCB 1016
PCB 1221
PCB 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260

Base/Neutral Extractables

Acenaphthene
Benzidine
1,2,4-trichlorobenzene
Hexachlorobenzene
Hexachloroethane
Bis(2-chloroethyl)ether
2-chloronaphthalene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
3,3'-dichlorobenzidine
2,4-dinitrotoluene
2,6-dinitrotoluene
1,2-diphenylhydrazine
Fluoranthene
4-chlorophenyl phenyl ether
4-bromophenyl phenyl ether
Bis(2-chloroisopropyl)ether
Bis(2-chloroethoxy) methane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
N-nitrosodimethylamine
N-nitrosodi-n-propylamine
N-nitrosodiphenylamine
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate
Benzo(a) anthracene
Benzo(a) pyrene
Benzo(b) fluoranthene
Benzo(k) fluoranthene
Chrysene
Acenaphthylene
Anthracene
1,12-benzoperylene
Fluorene
Phenanthrene
1,2,5,6-dibenzanthracene
Indeno(1,2,3-cd) pyrene
Pyrene
TCDD

Acid Extractables

2,4,6-trichlorophenol
P-chloro-m-cresol
2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2-nitrophenol
4-nitrophenol
2,4-dinitrophenol
4,6-dinitro-o-cresol
Pentachlorophenol
Phenol

Volatile Organics

Acrolein
Acrylonitrile
Benzene
Carbon tetrachloride
Chlorobenzene
1,2-dichloroethane
1,1,1-trichloroethane
1,1-dichloroethane
1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Chloroethane
Chloroform
1,1-dichloroethylene
1,2-trans-dichloroethylene
1,2-dichloropropane
1,3-dichloropropylene
Ethylbenzene
Methylene chloride
Methyl chloride
Methyl bromide
Bromoform
Dichlorobromomethane
Chlorodibromomethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride
2-chloroethyl vinyl ether
Xylene