

WPLC

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 94-006

WASTE DISCHARGE REQUIREMENTS
FOR
DEPARTMENT OF THE NAVY
U. S. NAVAL AIR WEAPONS STATION
(San Nicolas Island Wastewater Treatment Plant)
(File No. 71-012)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. The Department of the Navy, U. S. Naval Air Weapons Station, Point Mugu (Discharger) operates the San Nicolas Island Wastewater Treatment Plant (Figure 1). Treated domestic wastewater is discharged under Waste Discharge Requirements contained in Order No. 76-181, adopted by this Regional Board on November 22, 1976.
2. The California Water Code Section 13263(e) provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. A review of the current requirements, followed by a site inspection, was conducted by Regional Board staff, and no violations of requirements were observed.
3. The wastewater treatment process consists of a series of three aerated stabilization ponds and a chlorination facility.
4. The treatment plant has a design capacity of 40,000 gallons per day (gpd). The average daily inflow to the treatment plant, during 1993, was approximately 14,000 gpd. Due to the large capacity of the stabilization ponds (2.9 million gallons), the warm climate, and the relatively small population served by the facility, evaporation is the primary method of wastewater disposal. Land disposal is used as a secondary method of wastewater disposal only when the holding capacity of the ponds is exceeded, or due to heavy rains. On a monthly average, up to 3,600 gpd of treated wastewater is discharged via spray nozzles, and is applied to a six-acre parcel of land located adjacent to the treatment plant. The disposal area is restricted, and off-limits to personnel. Waste sludge is hauled to an approved disposal site.

An automatic gas chlorination system and an influent flow meter to the treatment plant headworks are scheduled to be installed, and will be completed by mid-1994.

5. The discharger also discharges brine wastes produced from operation of a desalination plant on San Nicolas Island, under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0058700, adopted by this Regional Board on October 24, 1983, but the discharge does not affect these Waste Discharge Requirements.
6. Domestic water for San Nicolas Island is obtained from a combination of sources, including; local groundwater produced from on-site wells, springs, a desalination (reverse osmosis) plant, and imported water barged to the island and used only in case of emergency.
7. Groundwater supplies on San Nicolas Island are limited. The principal sources of groundwater are located on the northwestern portion of the island and encompass the Zitnic, Upper Tule Creek, and Vizcaino Basins, located approximately 2.5 miles from the wastewater treatment plant. Groundwater underlies the wastewater treatment plant and irrigation areas at a depth of approximately 400 feet below land surface. The designated beneficial use of groundwater is municipal supply, and it can also potentially be used for industrial supply.
8. The Regional Board adopted a revised Water Quality Control Plan (Plan) for the Santa Clara River Basin on October 22, 1990. The Plan does not contain water quality objectives for groundwater of San Nicolas Island. Effluent limitations to protect groundwater quality for total dissolved solids, chloride, and sulfate were determined from water quality data provided from production and monitoring wells which characterize the existing groundwater quality of San Nicolas Island. The requirements contained in this Order, as they are met, will be in conformance with the goals and objectives of the Water Quality Control Plan.
9. This project involves an existing facility, and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15301.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Order No. 90-006

File No. 71-012

The Regional Board has notified the Discharger and interested agencies and persons of its intent to revise Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the updated requirements.

IT IS HEREBY ORDERED that the Department of the Navy, U. S. Naval Air Weapons Station, San Nicolas Island Wastewater Treatment Plant, shall comply with the following:

A. EFFLUENT LIMITATIONS

1. Wastes discharged shall be limited to treated domestic wastewater only.
2. The pH of wastewater discharged shall at all times be within the range 6.5 to 8.5 pH units.
3. Radioactivity shall not exceed the limits specified in the current version of Title 22, California Code of Regulations, Chapter 15, Article 5, Sections 64441 and 64443, or subsequent revisions.
4. Wastes discharged shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Maximum Effluent Limitation</u>
Total dissolved solids	mg/L	1100
Sulfate	mg/L	150
Chloride	mg/L	350
Nitrate-N plus nitrite-N plus ammonia-N	mg/L	10

B. SPECIFICATIONS FOR DISPOSAL OF WASTEWATER

1. Wastewater disposed of by irrigation shall be at all times an adequately disinfected wastewater.

The wastewater shall be considered adequately disinfected if the 7-day median number of coliform organisms in the

effluent does not exceed 23 per 100 milliliters, and the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

2. Wastewater discharged by irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow, except as provided for in a National Pollutant Discharge Elimination System (NPDES) Permit.

For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order.

3. Wastewater discharged by irrigation shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to prevent clogging of spray nozzles, to prevent overwatering, and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leakage.
4. Wastewater shall not be used for irrigation within 150 feet of any water well or mineral spring.
5. At locations within the facility, along the perimeter, at points of access to the area where wastewater is used, signs shall be posted with the following warning: "ATTENTION: WASTEWATER-AVOID CONTACT - DO NOT DRINK".
6. No industrial wastes shall be discharged at this site.
7. Public access to the wastewater treatment, storage, and disposal facilities shall be restricted at all times.

C. GENERAL REQUIREMENTS

1. The discharge or use of raw or inadequately treated sewage at any time is prohibited.
2. Wastewater shall not be used for irrigation during periods of extreme rainfall and/or runoff.
3. Standby or emergency power facilities and/or sufficient capacity shall be provided for wastewater storage during rainfall, or in the event of plant upsets or power outages, and at times when irrigation cannot be practiced.

4. Wastewater discharge or disposal shall not result in earth movement in geologically unstable areas.
5. Adequate facilities shall be provided to protect the sewage treatment facilities from damage by storm flows and runoff.
6. Adequate freeboard shall be maintained in the stabilization ponds to ensure that direct rainfall will not cause overtopping.
7. Neither treatment of waste, nor any wastewater disposal, shall cause pollution or nuisance.
8. Wastewater treatment and disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
9. Wastewater disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving groundwater.
10. Wastewater disposal, which could affect receiving groundwaters, shall not contain any substance in concentrations toxic to human, animal, or plant life.
11. Regeneration brine wastewaters from water softeners or from the desalination plant shall not be discharged to the treatment plant.
12. At a minimum, a certified Grade III Wastewater Treatment Plant Operator shall inspect the treatment plant, on a monthly basis, to ensure that the treatment processes are working properly, and that the plant effluent wastewaters are in compliance with this Order.

D. PROVISIONS

1. A copy of these requirements shall be maintained at the treatment facility so as to be available at all times to operating personnel.
2. In the event of any change in name, ownership, or control of this waste treatment and disposal facility, the Discharger shall notify this Regional Board of such change and shall notify the succeeding owner or operator of the

existence of this Order by letter, a copy of which shall be forwarded to the Regional Board.

3. The Discharger shall file with the Regional Board technical reports on self monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Program, as directed by the Executive Officer.

The results of any monitoring done more frequently than required at the locations and/or times specified in the Monitoring and Reporting Program shall be reported to the Regional Board.

4. The Discharger shall notify this Regional Board, by telephone within 24 hours, of any violations of effluent limitations or any adverse conditions as a result of the discharge of wastewater from this facility; written confirmation shall follow within one week.
5. The Discharger shall notify Regional Board staff, immediately, by telephone, of any confirmed coliform counts that could cause a violation of the effluent limitations, including the date(s) thereof. This information shall be confirmed in the next monitoring report; in addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high coliform results, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.
6. These requirements do not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable: they do not legalize this wastewater treatment or disposal facility, and they leave unaffected any further constraint on the use of wastewater at this site which may be contained in other statutes or required by other agencies.
7. This Order does not alleviate the responsibility of the Discharger to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of this facility from its current capacity shall be contingent

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Order No. 90-006

File No. 71-012

upon issuance of all necessary permits, including a Conditional Use Permit.

8. Supervisors and operators of this Publicly Owned Treatment Works (POTW) shall possess a certificate of appropriate grade as specified in Title 23, California Code of Regulations, Section 3680 or subsequent revisions.
9. The Discharger shall submit to the Regional Board, within 60 days of the adoption of this Order, procedures that will be (or have been) taken to ensure that discharge of untreated sewage from the treatment facility, in the event of equipment failure, will not occur.
10. Raw sewage or partially dried waste sludge shall not be sprayed on the ground surface.
11. Any offsite disposal of sewage sludge shall be made only to a legal point of disposal, and in accordance with provisions of Division 7.5 of the California Water Code. For the purpose of these requirements, a legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.
12. Any discharge of wastewater at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.
13. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - (a) Violation of any term or condition contained in this Order;
 - (b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Order No. 90-006

File No. 71-012

14. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
15. The Discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
16. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the Discharger for bypass unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);
 - (b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and
 - (c) The Discharger submitted a notice at least ten days in advance of the need for a bypass to the Regional Board.

The Discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable.

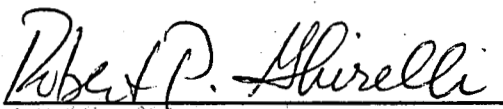
Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Order No. 90-006

File No. 71-012

17. This Order includes "Standard Provisions Applicable to Waste Discharge Requirements". If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

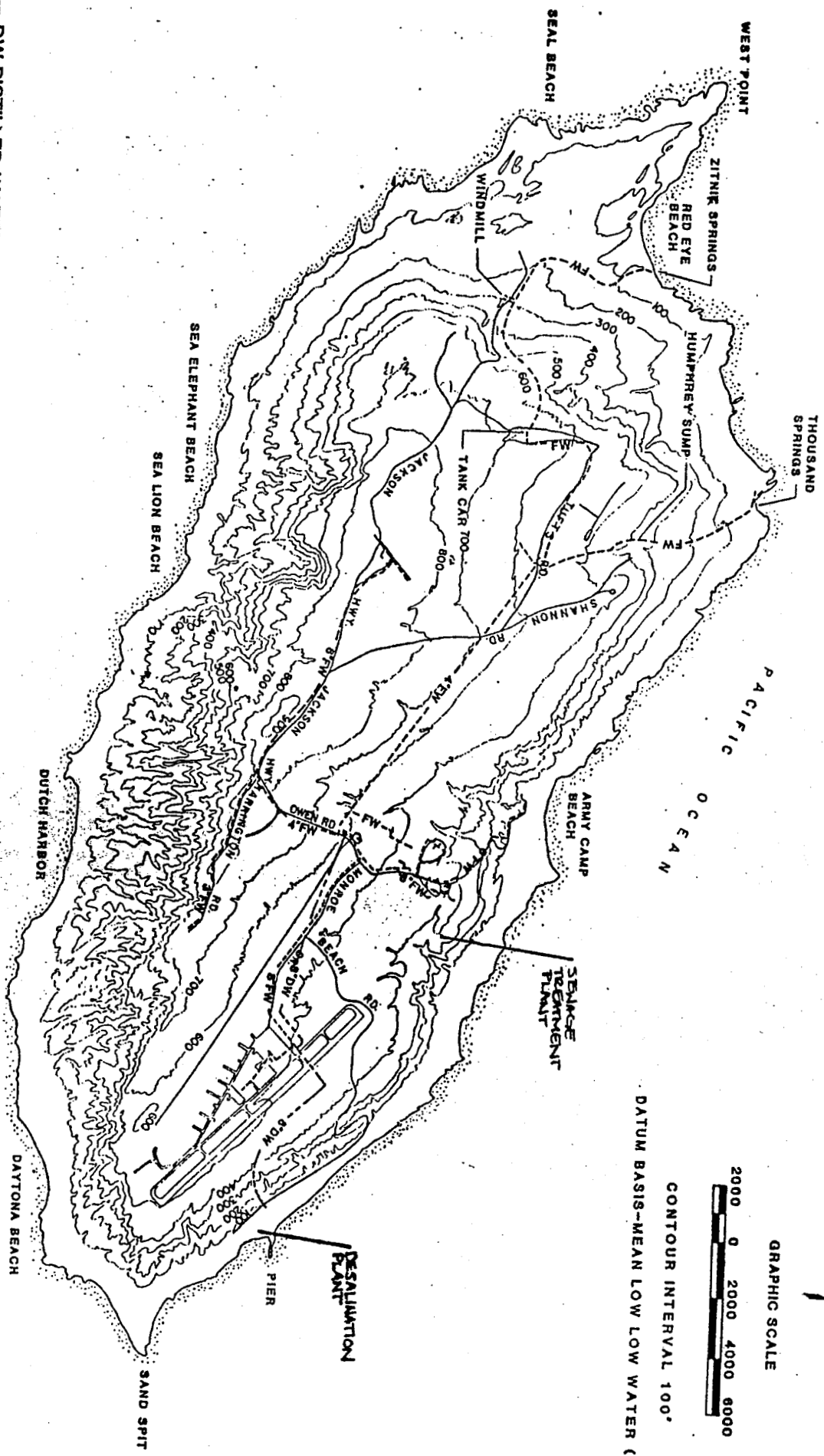
18. Order No. 76-181, adopted by this Regional Board on November 22, 1976, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on January 31, 1994.

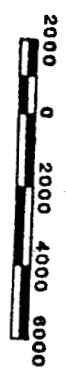


ROBERT P. GHIRELLI, D.Env.
Executive Officer

— DW DISTILLED WATER
 - - - FW FRESH WATER



DATUM BASIS—MEAN LOW LOW WATER (MLLW)
 CONTOUR INTERVAL 100'



GRAPHIC SCALE

FIGURE 1 - SAN NICOLAS ISLAND

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 5786
FOR
DEPARTMENT OF THE NAVY
U. S. NAVAL AIR WEAPONS STATION
(San Nicolas Island Wastewater Treatment Plant)
(Order No. 94-006)
(File No. 71-012)

The Department of the Navy, U. S. Naval Air Weapons Station, San Nicolas Island Wastewater Treatment Plant, shall implement this monitoring program within 60 days of the effective date of this Order.

Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 30
April - June	July 30
July - September	October 30
October - December	January 30

The first monitoring report under this program shall be submitted by April 30, 1994.

By January 30 of each year, beginning in 1995, the Discharger 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 year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken, or planned, which may be needed to bring the discharge into full compliance with the Requirements.

Effluent Monitoring

A sampling station shall be established where representative samples of treated wastewater can be obtained. Discharge water samples may be obtained at a single station, provided that station is representative of the quality at all discharge points. Each sampling station shall be identified and approved by the Executive Officer prior to its use. The following shall constitute the wastewater Monitoring Program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow	gal/day	-----	daily
pH	pH units	grab	weekly
Coliform ¹	MPN/100 ml	grab	weekly
Suspended solids	mg/L	grab	monthly
BOD ₅ 20°C	mg/L	grab	monthly
Oil & grease	mg/L	grab	monthly
Total dissolved solids	mg/L	grab	quarterly
Chloride	mg/L	grab	quarterly
Boron	mg/L	grab	quarterly
Sulfate	mg/L	grab	quarterly
Nitrate-N	mg/L	grab	quarterly
Nitrite-N	mg/L	grab	quarterly
Ammonia nitrogen-N	mg/L	grab	quarterly
Total organic carbon	mg/L	grab	quarterly
Radioactivity	pCi/L	grab	one time analysis ³
Priority pollutants scan ²	µg/L	grab	one time analysis ³

1 Samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facility and disinfection procedures. The location(s) of the sampling points and any changes thereto must be approved by the Executive Officer, and proposed changes shall not be made until such approval has been granted.

2 Priority pollutants are listed on page T-7

3 Analyses for priority pollutants, listed on page T-7, and radioactivity shall be completed during 1994, and submitted with your annual report due by January 30, 1995.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Monitoring & Reporting Program No. 5786

Order No. 90-006

General Provisions for Sampling and Analysis

All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency (EPA), and the laboratory must meet EPA Quality Assurance/Quality Control criteria. All analytical data must be presented on the enclosed Laboratory Report Forms.

General Provisions for Reporting

For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken, or proposed, which will bring the discharge into full compliance with requirements at the earliest time, and submit a timetable for correction.

The Discharger shall maintain all sampling and analytical results, including strip charts; date; exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Board.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.

Please submit all analytical data on 3 1/2" or 5 1/4" computer diskette. Submitted data must be IBM compatible, preferably using Lotus123 or dBase software, or in ASCII format.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Monitoring & Reporting Program No. 5786

Order No. 90-006

If no wastewater was discharged during the quarter, the report shall so state.

Each quarterly monitoring report shall include the estimated average population served during the quarter and the approximate acreage irrigated by wastewater.

Monitoring reports shall be signed and certified as follows:

- a. In the a case of corporation, by a principal Executive Officer of at least the level of vice-president;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of municipal, state, federal, or other public agency, by either a principal Executive Officer or ranking elected official.

A duly authorized representative of a person designated above may sign documents if:

- a. The authorization is made in writing by a person described above;
- b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
- c. The written authorization is submitted to the Executive Officer of this Regional Board.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Monitoring & Reporting Program No. 5786

Order No. 90-006

Each 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 and that, based on my inquiry of those 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. [California Water Code Sections 13263, 13267, and 13268]

Executed on the ___ day of _____ at _____.

Signature
Title"

Hauling Report

In the event that wastes are hauled to a disposal site, the name and address of the hauler of the waste shall be reported in each quarterly monitoring report, along with quantities hauled during the quarter, and the location of the final point of disposal. If no wastes are hauled during the reporting period, a statement to that effect shall be submitted in the quarterly monitoring report.

Operation and Maintenance Report

The Discharger shall file a technical report with this Board, not later than 30 days after receipt of these Waste Discharge Requirements, relative to the operation and maintenance program for this treatment facility. The information to be contained in that report shall include, as a minimum, the following:

- a. The name and address of the person or company responsible for operation and maintenance of the facility.
- b. Type of maintenance (preventive or corrective).
- c. Frequency of maintenance, if preventive.

Department of the Navy
U. S. Naval Air Weapons Station
San Nicolas Island Wastewater
Treatment Plant
Monitoring & Reporting Program No. 5786

Order No. 90-006

These records and reports are public documents and shall be made available for inspection during business hours at the offices of the California Regional Water Quality Control Board, Los Angeles Region.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: January 31, 1994

PRIORITY POLLUTANTS

Metals

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

Miscellaneous

Cyanide
Asbestos (only if specifically required)

Pesticides

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 Extractibles

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
M-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 Extractibles

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-Transdichloroethylene
1,2-Dichloropropane
1,2-Dichloropropylene
Ethylbenzene
Methylene chloride
Methyl chloride
Methyl bromide
Bromoform
Bromodichloromethane
Dibromochloromethane
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl chloride
2-Chloroethyl vinyl ether

October 15, 1993