Winston H. Hickox
Secretary for Environmental Protection

Los Angeles Region

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Gray Davis
Governor

July 31, 2000

Mr. Brian Gordon
Water Program Director
Environmental Department N4512
Department of the Navy
33000 Nixie Way, Building 50, Suite 326
San Diego, CA 92147-5110

Dear Mr. Gordon:

WASTE DISCHARGE REQUIREMENTS – DEPARTMENT OF THE NAVY (DISCHARGE OF TREATED DOMESTIC WASTEWATER FROM SAN CLEMENTE ISLAND WASTEWATER TREATMENT PLANT) (NPDES PERMIT NO. CA0110175, CI 6432)

Our letter dated May 30, 2000, transmitted tentative requirements for your discharge of treated domestic wastewater to the waters of the United States.

Pursuant to Division 7 of the California Water Code, this Regional Board, at a public hearing held on June 29, 2000, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. 00-090 (copy[1] attached) relative to the waste discharge. This Order serves as permit under the National Pollutant Discharge Elimination System (NPDES) and expires on July 10, 2005. Section 13376 of the California Water Code requires that an application for a new permit must be filed at least 180 days before the expiration date.

You are required to implement the *Monitoring and Reporting Program (M&RP)* on the effective date of Order No. 00-090. The due dates for submittal of the monitoring and annual reports are provided in the *M&RP*. These due dates are the dates that reports must be received at the Regional Board office. Your first monitoring report under this Order is due by August 15, 2000. Submit all monitoring reports and annual reports to this Regional Board, Attn: Information Technology Unit. When submitting monitoring, technical reports, or any correspondence regarding the discharge under Order No. 00-090 to this Regional Board, please include a reference to *Compliance File No. CI 6432* to assure that the reports are directed to the appropriate staff and file. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

[1] The Standard Provisions (Attachment N) and the State Board General Permit for Discharges of Storm Water Associated with Industrial Activities have been routinely sent to all persons on the mailing list. To save printing and postage cost, these documents are now sent only to the addressee; however, anyone may obtain copies by contacting the Board staff listed below.

If you have any questions, please contact Arman Toumari at (213) 576-6758.

Sincerely,

WINNIE D. JESENA, P.E.
Chief, Los Angeles Coastal
Watershed Unit

Enclosures

cc: Environmental Protection Agency, Region 9, Permit Section (WTR-5)
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Services, Division of Ecological Services
NOAA, National Marine Fisheries Service
Mr. Jorge Leon, Office of Chief Counsel, State Water Resources Control Board
Mr. John Youngerman, Division of Water Quality, State Water Resources Control Board
California Coastal Commission
California Department of Fish and Game, Marine Resources, Region 5
California Department of Health Services, Environmental Branch
South Coast Air Quality Management District
Los Angeles County, Department of Public Works, Waste Management Division
Los Angeles County, Department of Health Services
City of Los Angeles, Stormwater Management Division
City of Los Angeles, Department of Public Works, Bureau of Sanitation,
Industrial Waste Management
Dr. Mark Gold, Heal the Bay
Mr. Steve Fleischli, Santa Monica BayKeeper
Mr. David Beckman, Natural Resources Defense Council
Mr. Terry Tamminen, Environment Now

CI - 6432

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-090
NPDES NO. CA0110175

WASTE DISCHARGE REQUIREMENTS FOR UNITED STATES NAVY NAVAL AUXILIARY LANDING FIELD, SAN CLEMENTE ISLAND (Waste Water Treatment Plant)

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

1. The United States Navy (Navy) discharges treated domestic wastewater from a "package type" wastewater treatment plant, located at the Naval Auxiliary Landing Field (NALF), San Clemente Island, Los Angeles County, under waste discharge requirements contained in Order No. 79-119 (NPDES Permit No. CA0110175) adopted by this Board on July 23, 1979. This Order serves as a National Pollutant Discharge Elimination System (NPDES) permit.

2. The Navy has filed a report of waste discharge and has applied for renewal of the NPDES permit.

3. The treatment plant is located at approximately 1500 feet east of Wilson Cove and discharges an average of 0.025 mgd of treated wastewater to the Pacific Ocean, a water of the United States. The outfall is located 250 feet east of the plant and 1,000 feet south of Wilson Cove (Latitude 32° 59' 50"; Longitude 118° 32' 45"), near the northeast end of the island. The effluent is discharged through an 8-inch diameter pipe, above the ocean surface at the rocky shoreline.

4. The waters surrounding San Clemente Island to a distance of one nautical mile offshore or to the 300-foot isobath, whichever is the greater distance, were designated by the State Water Resources Control Board (State Board) as an Area of Special Biological Significance (ASBS) on March 21, 1974 (Resolution No. 74-28; revised in August 1998).

   This designation required that the natural water quality conditions shall not be altered, generally by prohibiting discharges to the ASBS – no new discharge shall be allowed, and in case of existing discharges, they shall be phased out as promptly as possible.

5. The designation of the waters surrounding San Clemente Island would have required the Navy to phase out the existing discharge of waste to the ASBS. However, on February 17, 1977, in Resolution No. 77-11, the State Board approved the Navy's request to continue discharging treated wastewater provided the following conditions are met:

a. Wastes are treated to secondary treatment standards;

b. Compliance with the water quality objectives and the effluent quality requirements for waste discharges contained in the "Water Quality Control Plan for Ocean Waters of California" (Ocean Plan) is demonstrated;

c. Specific effluent limits, which are based upon existing average daily flow rather than upon treatment plant design capacity, including a daily maximum for five-day biochemical oxygen demand (BOD_5) not to exceed 19 lbs/day are met, and;

d. Demonstrate by the monitoring program that :

(1) the waste does not alter natural water quality (that is, the discharge is not detectable beyond a radius of 1,000 feet from the end of the outfall), and;

(2) compliance with the Ocean Plan is achieved.

6. The Navy completed a secondary wastewater treatment plant in May 1979. This "package type" treatment plant has a design capacity of 0.060 mgd and consists of communition, equalization, aeration, clarification, chlorination and dechlorination. The Navy has also been in compliance with all other conditions of State Board's Resolution No. 77-11.

7. To minimize fluctuations in the treatment plant performance, thus reducing the variability in the waste discharge characteristics, the Navy is upgrading the treatment plant. The upgrades will be completed by December 31, 2000. These upgrades include, but are not limited to, construction of a load equalization tank, widening the chlorination chamber and dechlorination tunnel, and installation of a new grease interceptor at the waste discharge line of the island's new kitchen/dining hall.

8. This Order authorizes the Navy to discharge a daily average of 25,000 gallons per day of secondary treated wastewater from its wastewater treatment plant.

9. On July 23, 1997, the State Board adopted a revised Ocean Plan. The revised plan contains water quality objectives for the coastal waters of California. This Order includes effluent and receiving water limitations, prohibitions, and provisions, which implement the objectives of the Ocean Plan.

Item B, Chapter VI - General Provision of the Ocean Plan allows the Regional Board to establish more stringent water quality objectives and effluent quality requirements than those set forth in the plan as necessary for the protection of the beneficial uses of the ocean waters.

10. The Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994. The Basin Plan incorporates by reference the State Board's water quality control plans for

ocean waters and control of temperature and antidegradation policy. The Basin Plan also contains the designated beneficial uses and water quality objectives for the Pacific Ocean.

11. The beneficial uses of the receiving waters are: wildlife habitat, navigation, water contact recreation, non-contact water recreation, ocean commercial and sport fishing, preservation of rare and endangered species, marine habitat, fish spawning, shellfish harvesting, and Area of Special Biological Significance (ASBS).

12. Effluent limitations and guidelines, water quality standards and implementation plans, test procedure guidelines, ocean discharge criteria and compliance dates established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 316, and 405 of the Clean Water Act and amendments thereto are applicable to the discharge.

13. The requirements contained in this Order are based on federal and state effluent guidelines and limitations, current plant performance, and best engineering judgment. Effluent limitations in this Order were developed based on the "Water Quality Objectives" and "Calculation of Effluent Limitations" guidelines of the Ocean Plan.

14. For other pollutants for which monitoring data has consistently shown non-detectable levels, or which have been occasionally detected at levels less than the Practical Quantitation Levels (PQL), and have been determined not to have reasonable potential to cause or contribute to exceedance of water quality objectives, no limits are prescribed. However, these pollutants will be monitored at appropriate frequencies.

15. Since 1994, the Regional Board has implemented the Water Quality Task Force recommendation on the use of performance goals rather than performance-based limits, when appropriate [*Working Together for an Affordable Clean Water Environment, A final report presented to the California Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task force, September 30, 1993*]. The performance goals require the Discharger to maintain its treatment efficiency while recognizing normal variations in treatment plant operations, influent quality, and sampling and analytical techniques. However, this approach does not address substantial changes in operations that may occur in the future and could affect the quality of the treated effluent. As such, this Order provides that performance goals may be modified by the Executive Officer, if warranted. The listed effluent performance goals are not enforceable limitations or standards.

16. The performance goals in this Order are prescribed for pollutants that have been routinely detected in the effluent. The performance goals are statistically set at the 95th percentile of the January 1995 through December 1999 performance data. Therefore, it is expected that one sample in twenty may exceed the goal in the long-term. For constituents with performance levels which are orders-of-magnitude lower than calculated limits based on Ocean Plan objectives, and which have a very low probability of causing or contributing to excursions in water quality standards, no numerical limits are prescribed; instead narrative limits to comply with all Ocean Plan objectives are provided. For constituents for which no data is available, limits based on the Ocean Plan objectives are prescribed. Since the

receiving water is considered an ASBS, no dilution factor was allowed in calculation of the effluent limits.

17. The requirements contained in this Order as they are met will be in conformance with the foregoing statutes and water quality control plans.

18. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3, (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

19. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the Sate Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, 901 P Street, Sacramento 95812, within 30 days of adoption.

The Regional Board has notified the Discharger, and interested agencies and persons of its intent to renew waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board, in a public hearing, heard and considered all comments pertaining to the discharge. All orders referred to above and records of hearings and testimony therein are included herein by reference.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from the date of adoption provided the Regional Administrator of the U.S Environmental Protection Agency (USEPA), Region 9, has no objections.

IT IS HEREBY ORDERED that United States Navy, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE LIMITATIONS

1. Wastes discharged shall be limited to secondary treated domestic wastewater, as proposed.

2. Discharge in excess of an average flow of 0.025 million gallons per day is prohibited. All other discharges of waste to the ocean from San Clemente Island are prohibited.

3. The discharge of effluent in excess of the following limits is prohibited:

a. Major Wastewater Constituents

		DISCHARGE LIMITATIONS		Performance Goals [1]	
Constituent	Units	Monthly Average	Weekly Average	Daily Maximum	Monthly Average
BOD_5 20°C	mg/L	30	45	—	—
	lbs/day[2]	6.3	9.4	19	
Suspended solids	mg/L	30	45	—	8
	lbs/day[2]	6.3	9.4	19	
Oil and grease	mg/L	25	40	75	2
	lbs/day[2]	5.2	8.3	15	
Settleable solids	ml/L	1.0	1.5	3.0	—
Turbidity[3]	NTU	—	—	—	3
Acute toxicity	TUa	1.5	2.0	2.5	—
Total coliform[4]	MPN/100 ml	—	—	—	—
Total residual chlorine	mg/L	—	—	0.1	—

b. Toxic Materials - Marine Aquatic Life Toxicant

DISCHARGE LIMITATIONS[1],[2]

Constituent	Units	Monthly Average	Daily Maximum	Instantaneous Maximum
Arsenic	µg/L	8	32	80
	lb/day	1.7	6.7	17
Cadmium	µg/L	1	4	10
	lb/day	0.21	0.83	2.1
Chromium (VI)	µg/L	2	8	20
	lb/day	0.42	1.7	4.2
Copper	µg/L	3	12	30
	lb/day	0.63	2.5	6.3
Lead	µg/L	2	8	20
	lb/day	0.42	1.7	4.2
Mercury	µg/L	0.04	0.16	0.4
	lb/day	0.0083	0.033	0.083
Nickel	µg/L	5	20	50
	lb/day	1.0	4.2	10
Selenium	µg/L	15	60	150
	lb/day	3.1	13	31
Silver	µg/L	0.7	2.8	7
	lb/day	0.15	0.58	1.5
Zinc	µg/L	20	80	200
	lbs/day	0.0042	0.017	0.042
Ammonia (as N)	mg/L	0.6	2.4	6
	lbs/day	0.13	0.50	1.3

Footnotes for Effluent Limitations

[1] The performance goals are based upon the actual performance of the treatment plant and are specified only as an indication of the treatment efficiency of the facility. They are not considered as limitations or standards for the regulation of the treatment facility. The Navy shall make best efforts to maintain effluent quality performance goals. The Executive Officer may modify any of the performance goals if the Navy requests and has demonstrated that the change is warranted. Numerical Effluent Quality Performance Goals were derived statistically using data in Discharge Monitoring Reports for the period January 1995 to December 1999. The discharge performance goal was set at the 95th percentile (Upper Confidence Limit) using the formula,

$$\text{Limit} = X + [t(1,\alpha\ 0.05),v] \cdot Sx$$

where,

X is the sample mean,

$[t(1,\alpha 0.05),v]$ is the one tailed t-value for 95% confidence, at v degrees of freedom, and

Sx is the standard deviation of the sample

[2] The daily mass emission calculations are based on the average daily flow rate of 0.025 million gallons per day.

[3] See "Receiving Water Monitoring" section.

[4] In all waters where shellfish can be harvested for human consumption, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 ml, nor shall more than ten percent of the samples collected during any 30-day period exceed 230/100 ml for a five-tube decimal dilution test or 330/100 ml when a three-tube decimal dilution test is used.

4. The arithmetic mean of BOD_5 20°C and suspended solids values by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of BOD_5 20°C and suspended solids values, by weight, respectively, for influent samples collected at approximately the same time during the same period.

5. Radioactivity in the effluent shall not exceed limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269, of the California Code of Regulations or subsequent revisions.

6. If the effluent consistently exceeds (three consecutive tests) an acute or chronic toxicity limitation, a Toxicity Identification evaluation/Toxicity Reduction evaluation (TIE/TRE) shall be conducted by the Discharger. The TIE/TRE shall include all reasonable steps to identify the source(s) of toxicity. Once the source of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level The TRE shall be conducted in accordance with USEPA's most current TRE and TIE test methods.

7. The pH of the effluent discharged shall at all times be within the range of 6.0 - 9.0.

8. The temperature of wastes discharged shall not exceed 37.8°C (100°F).

B. RECEIVING WATER LIMITATIONS

1. The waste discharge shall not be detectable beyond a radius of 1,000 ft from the end of the outfall.

2. Where natural turbidity of the receiving water is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity of the receiving water is greater than 50 NTU, increases shall not exceed 10%.

3. Floating particulate and oil and grease shall not be visible as a result of wastes discharged.

4. Wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the ocean surface.

5. The transmittance of natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of wastes discharged.

6. The rate of deposition and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded as a result of wastes discharged.

7. The wastes discharged shall not depress the dissolved oxygen concentration outside the zone of initial dilution at any time more than 10 percent from that which occurs naturally, excluding effects of naturally induced upwelling.

8. The wastes discharged shall not change the pH of the receiving waters at any time more than 0.2 units from that which occurs naturally outside the zone of initial dilution.

9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions as a result of wastes discharged.

10. The concentration in marine sediments of substances listed in Effluent Limitations Table b of the Ocean Plan shall not be increased to levels which would degrade indigenous biota as a result of wastes discharged.

11. The concentration of organic materials in marine sediments shall not be increased above that which would degrade marine life as result of wastes discharged.

12. The waste discharged shall not cause objectionable aquatic growths or degrade indigenous biota.

13. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of wastes discharged.

14. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health as a result of wastes discharged.

15. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered as a result of wastes discharged.

16. The wastes discharged shall not cause objectionable odors to emanate from the receiving waters.

17. Wastes discharged shall not cause receiving waters to contain any substance in concentrations toxic to human, animal, plant, or fish life.

18. No physical evidence of wastes discharged shall be visible at any time in the water or on beaches, shores, rocks, or structures.

19. The salinity of the receiving waters shall not be changed by the wastes discharged to an extent such as to be harmful to marine biota.

20. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports as determined by the Board, but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column:

    (a) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml) provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

    (b) The fecal coliform density, based on a minimum of not less than five samples for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

21. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

    The median total coliform concentration for any 6-month period shall not exceed 70 per 100 ml, and not more than 10 percent of the samples during any 60-day period exceed 230 per 100 ml.

22. If a shore station consistently exceeds a total or fecal coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the discharger shall conduct a sanitary survey to determine if the discharge is the source of the contamination.

23. The wastes discharged shall not contain an individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses.

C. SLUDGE REQUIREMENTS

For biosolids management, the discharger must comply with all requirements of 40 CFR Parts 257, 258, 501, and 503, including all monitoring, record-keeping, and reporting requirements.

Since the State of California, hence the Regional Board, has not been delegated the authority to implement the sludge program, enforcement of the sludge requirements contained in this Order and permit shall be the sole responsibility of the United States Environmental Protection Agency (USEPA).

D. REQUIREMENTS AND PROVISIONS

1. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements" ("Standard Provisions"). If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail.

2. This Order includes the attached "Monitoring and Reporting Program". If there is any conflict between provisions stated in the "Monitoring and Reporting Program" and said "Standard Provisions", those provisions stated in the "Monitoring and Reporting Program" prevail.

3. The bypassing of untreated waste to the ocean is prohibited.

4. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.

5. The discharge of sludge digester supernatant and centrate directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.

6. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act or amendments thereto, the Regional Board will revise and modify this Order and permit in accordance with such more stringent standards.

7. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic and pretreatment effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 405 of the Federal Clean Water Act and amendments thereto.

8. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. Compliance will be determined using appropriate statistical methods to evaluate multiple samples, calculated effluent limits, statistically derived reasonable potential factors, and the State Board adopted Minimum Levels (ML) for volatile substances, semi-volatile substances, inorganics, pesticides and PCBs (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California).

9. The Board and USEPA Regional Administrator shall be notified immediately by telephone of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of wastes discharge; written confirmation shall follow as soon as possible but not later than five working days after the Discharger's knowledge of the incident.

10. Standby or emergency power facilities and/or storage capacity or other means shall be provided so that in the event of plant upset or outage due to power failure or other causes, discharge of raw or inadequately treated sewage does not occur.

11. The Discharger shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practices and with the technical standards in Section 405 (d) of the Federal Clean Water Act when promulgated.

12. This Order includes the "Requirements for Sludge Reporting". The Discharger must submit all required information and comply with the monitoring, reporting, and record-keeping programs as specified in these requirements.

13. If an applicable "acceptable" management practice or numerical limitation for pollutants in sewage sludge promulgated under Section 405 (d) (2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, this permit may be reopened to include requirements promulgated under Section 405 (d) (2). Regardless of whether or not the permit is modified, the Discharger shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405 (d) (2) (D) of the Clean Water Act.

E. EXPIRATION DATE

This Order expires on July 10, 2005.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the expiration date as application for issuance of new waste discharge requirements.

F. RESCISSION

Order No. 79-119 adopted by this Board on July 23, 1979 is hereby rescinded except for enforcement purposes.

I, Dennis A. Dickerson, 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 June 29, 2000.

Dennis A. Dickerson
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-6432
FOR
UNITED STATES DEPARTMENT OF THE NAVY
NAVAL AUXILIARY LANDING FIELD, SAN CLEMENTE ISLAND
(Wastewater Treatment Plant)
ORDER No. 00-090
(NPDES No. CA0110175)

I. MONITORING AND REPORTING REQUIREMENTS

1. The Navy (Discharger) shall implement this monitoring program on the effective date of this Order. Monthly monitoring reports must be submitted to this Regional Board by the 15th day following the end of the month. The first monitoring report, for July 2000, must be received by August 15, 2000.

   All monitoring reports shall be submitted to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-6432 to facilitate routing to the appropriate staff and file. If no discharge occurs during a monitoring period, the report shall so state. Annual summary reports are due by March 1st of each year.

2. The Discharger shall submit an annual summary report to this Regional Board by March 1st of each year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The data shall be submitted to the Regional Board on hard copy and on 3 1/2" computer diskette. Submitted data must be IBM compatible, preferably using Lotus 123, dBase, Quattro Pro, or Microsoft Excel software. In addition, the Discharger shall discuss 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.

3. The Regional Board has developed a database management system that may require the Discharger to submit the Monitoring and Annual Summary Reports electronically when it becomes fully operational.

4. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual effluent analyses shall be performed during the months of May and November. Annual effluent analyses shall be performed during the month of May. Results of quarterly, semiannual, and annual analyses shall be reported in the appropriate monthly monitoring report following analysis. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Board, state the reason the monitoring could not be conducted, and obtain approval for an alternate schedule.

5. Any violations of the limitations shall be reported to the Regional Board by telephone within 24 hours from the time the Discharger becomes aware of the violation. A written report shall also be submitted within 5 working days from the time the Discharger becomes aware of the violation. The written report shall contain a description of the noncompliance and its cause(s); the period of noncompliance, including exact dates and times; the volume of discharge during the period of noncompliance; corrective measures implemented; and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to prevent recurrence of the noncompliance.

6. The Discharger shall develop and maintain a record of all spills or bypass of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Board upon request.

   a. For spills/bypass of 500 gallons or more that flowed to a receiving water or entered a shallow ground water aquifer or has public exposure, the Discharger shall report such spills to the Regional Board and the local health officer within 24 hours of knowledge of the incident. The following information shall be included in the report: location; date and time of spill; volume and nature of the spill; cause(s) of the spill; mitigation measures implemented; and corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

   b. For spills that reach receiving waters, the discharger shall obtain and analyze grab samples for total and fecal coliforms, upstream and downstream of the point of entry of the spill.

   c. Regional Board notification shall be followed by a written report five working days after the notification.

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

8. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All QA/QC items must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board Staff. Proper chain-of custody procedures shall be followed and a copy shall be submitted with the report.

9. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL) and the Minimum Level (ML[1]) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as the case may be:

    1. An actual numerical value for sample results greater than or equal to the ML; or

    2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than or equal to the ML; or

    3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

10. The ML employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. At least once a year, the discharger shall submit a list of the analytical methods employed for each test and associated laboratory quality assurance/quality control procedures.

11. The Discharger shall inform the Regional Board well in advance of any proposed construction activity or maintenance or modification to the treatment plant that could potentially affect compliance with requirements in this Order.

12. The Discharger shall file a technical report with this Regional Board 30 days after the completion of the plant's upgrade, but no later than January 31, 2001 relative to the operation and maintenance program of this waste treatment and disposal facility. The information to be contained in that report shall include as a minimum, the name and address of the person or company responsible for operation and maintenance of the facility and the type of and schedule of maintenance. In addition, the Discharger shall submit quarterly update reports to the Regional Board relative to the status of the treatment plant's upgrade.

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[1] The minimum levels are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters; Enclosed Bays, and Estuaries of California, March 2, 2000.*

II. MONITORING PROGRAM

A. Effluent Monitoring

Sampling stations shall be established at each point of discharge and shall be located where representative samples of the effluent can be obtained. The following shall constitute the effluent monitoring program:

1. Major Wastewater Constituents/Parameters

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Total waste flow[1]	gal/day	—	continuous
Temperature	°F or °C	—	monthly
pH	pH units	—	monthly
Oil and grease	mg/L	24-hr composite	monthly
$BOD_5$20°C	mg/L	24-hr composite	monthly
Suspended solids	mg/L	24-hr composite	monthly
Settleable solids	ml/L	grab	monthly
Total dissolved solids	mg/L	24-hr composite	monthly
Total residual chlorine	mg/L	grab	monthly
Turbidity	NTU	24-hr composite	monthly
Ammonia nitrogen	mg/L	24-hr composite	quarterly[6]
Nitrate nitrogen	mg/L	24-hr composite	quarterly[6]
Cyanide	mg/L	grab	annually
Radioactivity[2]	pC_i/ml	24-hr composite	annually
Toxicity, acute[3],[4]	TU_a	24-hr composite	annually[16]
Toxicity, chronic[5]	TU_c	24-hr composite	semi-annually[16]
Tributyltin	mg/L	grab	annually[6]
Fecal coliform	MPN/100ml	grab	monthly[17]
Total coliform	MPN/l00ml	grab	monthly[17]
Enterococcus	CFU/100ml	grab	monthly[17]

2. Metals

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Antimony	mg/L	24-hr composite	annually
Arsenic	µg/L	24-hr composite	annually
Beryllium	µg/L	24-hr composite	annually
Chromium (III)	µg/L	24-hr composite	annually
Hexavalent chromium	µg/L	24-hr composite	annually
Cadmium	µg/L	24-hr composite	annually
Copper	µg/L	24-hr composite	annually
Lead	µg/L	24-hr composite	annually
Mercury	µg/L	24-hr composite	annually
Nickel	µg/L	24-hr composite	annually
Selenium	µg/L	24-hr composite	annually
Silver	µg/L	24-hr composite	annually
Thallium	mg/L	24-hr composite	annually
Zinc	µg/L	24-hr composite	annually

3. Volatile Organics[6]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Acrolein	mg/L	grab	annually
Acrylonitrile	µg/L	grab	annually
Benzene	µg/L	grab	annually
Carbon tetrachloride	µg/L	grab	annually
Chlorobenzene	mg/L	grab	annually
Chloroform	µg/L	grab	annually
1,1-Dichloroethylene	mg/L	grab	annually
1,2-Dichloroethane	µg/L	grab	annually
Dichloromethane	µg/L	grab	annually
1,3-Dichloropropene	µg/L	grab	annually
Ethylbenzene	mg/L	grab	annually
Halomethanes[7]	µg/L	grab	annually
Toluene	mg/L	grab	annually
1,1,2,2-Tetra-chloroethane	mg/L	grab	annually
1,1,1-Trichloroethane	mg/L	grab	annually
1,1,2-Trichloroethane	mg/L	grab	annually
Tetrachloroethylene	µg/L	grab	annually
Trichloroethylene	µg/L	grab	annually
Vinyl chloride	µg/L	grab	annually
Tributyltin	mg/L	grab	annually

4. Acid Extractibles[5]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
4,6-Dinitro-2-methyl-phenol	mg/L	24-hr composite	annually
2,4-Dinitrophenol	mg/L	24-hr composite	annually
2,4,6-Trichlorophenol	µg/L	24-hr composite	annually
Phenolic compounds (non-chlorinated)	mg/L	24-hr composite	annually
Phenolic compounds (chlorinated)	µg/L	24-hr composite	annually

5. Base / Neutral Extractibles[6]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Benzidine	µg/L	24-hr composite	annually
Bis(2-chloro-ethoxy) methane	mg/L	24-hr composite	annually
Bis(2-chloro-isopropyl)ether	mg/L	24-hr composite	annually
Bis(2-Chloro-ethyl)ether	µg/L	24-hr composite	annually
Bis(2-Ethylhexyl) phthalate	µg/L	24-hr composite	annually
Di-N-Butyl-phthalate	mg/L	24-hr composite	annually
Dichlorobenzene[8]	mg/L	24-hr composite	annually
1,4-Dichloro-benzene	µg/L	24-hr composite	annually
3,3-Dichloro-benzidine	µg/L	24-hr composite	annually
Diethyl phthalate	mg/L	24-hr composite	annually
Dimethyl phthalate	mg/L	24-hr composite	annually
2,4-Dinitrotoluene	µg/L	24-hr composite	annually
Fluoranthene	mg/L	24-hr composite	annually
1,2-diphenylhydrazine	µg/L	24-hr composite	annually
Isophorone	mg/L	24-hr composite	annually
Nitrobenzene	mg/L	24-hr composite	annually
N-nitrosodimethylamine	µg/L	24-hr composite	annually
N-nitrosodiphenylamine	µg/L	24-hr composite	annually
TCDD equivalents[9]	µg/L	24-hr composite	annually
Hexachlorobenzene	µg/L	24-hr composite	annually
Hexachlorobutadiene	µg/L	24-hr composite	annually
Hexachloroethane	µg/L	24-hr composite	annually
Hexachlorocyclo-pentadiene	mg/L	24-hr composite	annually
PAHs [10]	µg/L	24-hr composite	annually

6. Pesticides[6]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Aldrin	µg/L	24-hr composite	annually
Chlordane[11]	µg/L	24-hr composite	annually
DDT[12]	µg/L	24-hr composite	annually
Dieldrin	µg/L	24-hr composite	annually
Endosulfan	µg/L	24-hr composite	annually
Endrin	µg/L	24-hr composite	annually
HCH[13]	µg/L	24-hr composite	annually
Heptachlor[14]	µg/L	24-hr composite	annually
PCBs[15]	µg/L	24-hr composite	annually
Toxaphene	µg/L	24-hr composite	annually

Footnotes for Effluent Monitoring:

[1] Total daily flow shall be included in the report.

[2] Radioactivity determinations of gross and net beta activity, in picocuries per liter, shall be made within 48 hours following preparation of composite samples. The overall efficiency of the counting system, size of sample and counting time shall be such that radioactivity can be determined to a sensitivity of ten picocuries per liter with a 95% confidence limit not to exceed 50 percent.

[3] By methods specified in "Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms" (September 1991, EPA/600/4-90/027). Submission of bioassay results should include the information noted on pages 45 through 49 of the "Methods" where appropriate. The fathead minnow (Pimephales promelas) shall be used as the test species.

[4] Ammonia shall not be removed from bioassay samples without notification to and authorization from the Executive Officer. The wastewater used for the toxicity test shall be analyzed for ammonia, and the result, along with an interpretation shall be submitted with the toxicity data. If the test result is greater than the permit limit, parallel tests on 100% effluent without ammonia removed, and 100% effluent with ammonia removed shall be conducted. A sample of wastewater used for the toxicity test shall also be analyzed for total dissolved solids.

[5] Initial screening shall be conducted using a minimum of three test species with approved test protocols listed in the California Ocean Plan (State Water Resources Control Board, 1990) to determine the most sensitive test organism for chronic toxicity testing (other test species may be added to the Ocean Plan list when approved by the State Board). The initial screening process shall be conducted for a minimum of three months, but not to exceed five months, to account for potential variability of the effluent. If possible, the test species used during the screening process should include a fish, an invertebrate and an aquatic plant.

After the initial screening period, chronic toxicity testing may be limited to the most sensitive test species. However, the initial screening process shall be repeated annually, with a minimum of three test species with approved test protocols, to ensure use of the most sensitive species for chronic toxicity testing.

Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution water may be used if the above source exhibits toxicity greater than 1.0 TU_C. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each batch of bioassay tests and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units, where:

$$TU_C = 100/NOEC$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed on Pages 22-23 of the Ocean Plan.

In the event of an exceedance of the chronic toxicity effluent limitation, the sampling frequency shall be increased to monthly until compliance has been demonstrated for three consecutive months. If the discharge consistently exceeds the chronic toxicity effluent limitation, a toxicity identification evaluation (TIE) is required. The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity (TRE) to the required level.

[6] During the first 12 months after the effective date of this Order, the frequency of analysis shall be on a monthly basis. Chlorinated hydrocarbons, phenol, and PCBs are excluded.

[7] Sum of bromoform, bromomethane (methylbromide), chloromethane (methyl chloride), chlorodibromomethane and dichlorobromo-methane.

[8] Sum of 1,2- and 1,3-dichlorobenzene.

[9] Sum of the concentration of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below:

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-pentra CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8-tetra CDF	0.1
1,2,3,7,8-penta CDF	0.05
2,3,7,8-penta	0.5
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

[10] Sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

[11] Sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma and oxychlordane.

[12] Sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD.

[13] Sum of alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

[14] Sum of heptachlor and heptachlor epoxide

[15] Sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

[16] During the first 12 months after the effective date of this Order, the frequency of analysis shall be on a quarterly basis.

[17] During the first 6 months after the effective date of this Order, the frequency of analysis shall be on a biweekly basis.

B. Influent Monitoring

A sampling station shall be established for each point of sewage inflow to the wastewater treatment plant and shall be located upstream of any in-plant return flows and where representative samples of influent can be obtained. Influent samples shall be obtained on the same day effluent samples are obtained. The following shall constitute the influent monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Flow	gal/day	—	continuous
BOD_5 20°C	mg/L	24-hr composite	monthly
Suspended solids	mg/L	24-hr composite	monthly
pH	pH units	24-hr composite	monthly
Oil and grease	mg/L	24-hr composite	monthly
Total organic carbon	mg/L	24-hr composite	monthly

C. Regional Receiving Water Monitoring Program

Regional Monitoring Program

1. Pursuant to the Code of Federal Regulation [40 CFR §122.41(j) and §122.48(b)], the monitoring program for a Discharger receiving a National Pollutant Elimination System (NPDES) permit must determine compliance with NPDES

permit terms and conditions, and demonstrate that State water quality standards are met.

2. Since compliance monitoring focuses on the effects of a point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., nonpoint source runoff, aerial fallout) nor to evaluate the current status of important ecological resources on a regional basis.

3. Several efforts are underway to develop and implement a comprehensive regional monitoring program for the Southern California Bight. These efforts have the support and participation from regulatory agencies, dischargers and environmental groups. The goal is to establish a regional program to address public health concerns, monitor trends in natural resources and nearshore habitats, and assess regional impacts from all contaminant sources. In general, the goal is a more efficient monitoring program that can be used for both compliance and regional bight-wide assessments.

4. Two pilot regional monitoring programs for the Southern California Bight were conducted, one in 1994, and another in 1998. The pilot monitoring allowed the USEPA and the Regional Board to test an alternative sampling design that incorporates aspects of regional monitoring into current compliance programs. These pilot programs were designed by USEPA, the State Water Resources Control Board, and three Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego) in conjunction with the Southern California Coastal Water Research Project and participating discharger agencies.

   The pilot regional monitoring programs included the following components: microbiology; water quality; sediment chemistry; sediment toxicity testing; benthic infauna; demersal fish; and bioaccumulation.

5. The two pilot regional monitoring programs were funded, in large part, by resource exchanges with the participating discharger agencies. During the year when pilot regional monitoring was scheduled, USEPA and this Regional Board eliminated portions of the routine compliance monitoring programs for that year, while retaining certain critical compliance monitoring elements. A certain percentage of the traditional sampling sites were also retained to maintain continuity of the historical record and to allow comparison of different sampling designs. The exchanged resources were redirected to complete sampling within the regional monitoring program design. Thus, the dischargers' overall level of effort for the 1994 and 1998 pilot programs remained approximately the same as the compliance monitoring programs.

Future regional monitoring programs may be funded in a similar manner. Thus, revisions to the routine compliance monitoring program will be made under the direction of the USEPA and this Regional Board as necessary to accomplish the goal; and may include a reduction or increase in the number of parameters monitored, the frequency of monitoring, or the number, type, size and location of samples collected.

6. The results of the pilot programs are being evaluated and will be used to design future pilot monitoring programs and to develop a comprehensive regional monitoring program for the Southern California Bight. At the same time, the monitoring programs conducted by other dischargers and agencies will be integrated into this regional program. If predictable relationships among the biological, water quality, and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the existing compliance monitoring program.

Receiving Water Monitoring Program

1. Receiving water sampling stations shall on a half-circle arc at a distance of 1,000 feet from the point of discharge at the locations designated and described as follows:

Station No.	Location,
RW-1	Northwesterly along the shoreline at a point as near to the shoreline as can be negotiated safely by boat.
RW-2	At a point on a bearing 30° to the northward from the alignment of the outfall.
RW-3	At a point on a bearing 30° to the southward from the alignment of the outfall.
RW-4	Southward along the shoreline at a point as near to the shoreline as can be negotiated safely by boat.

2. Samples shall be collected within 1 meter of the water surface at stations RW-1, RW-2, RW-3, and RW-4. Samples shall be analyzed for the following constituents:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Total coliform	MPN/100ml	grab	Quarterly
Fecal coliform	MPN/100ml	grab	Quarterly
Enterococcus	CFU/100ml	grab	Quarterly
Dissolved oxygen	mg/L	grab	Quarterly
pH	pH units	grab	Quarterly
Temperature	°C or °F	grab	Quarterly

3. Receiving water observations shall be made quarterly at approximately the same time as receiving water sampling is performed, and the following shall be noted and reported:

   a. Time and date of observation.
   b. Weather observations.
   c. Color of the receiving water and extent of any visual turbidity or color patches due to the discharge.
   d. Appearance and locations of floating solids, oil, grease, scum or foam due to the discharge.
   e. Description of the odor of the receiving water.
   f. Sludge banks or deposits.

4. Within three months from the effective date of this permit, a work plan shall be submitted which will detail further receiving water monitoring which will delineate the spatial extent of the effluent plume and its effects on biota and certify that the effects of the effluent do not reach beyond the 1,000 ft limit. Variables, which it may be useful to monitor within the 1,000 ft zone, may include:

   a. Salinity
   b. Temperature
   c. Dissolved oxygen
   d. Benthic infauna, abundance and diversity
   e. Fish assemblages
   f. Algae, abundance and diversity
   g. Presence or absence of surfgrass

5. Receiving water monitoring and observation reports shall be submitted with their corresponding effluent monitoring reports for each month.

Ordered By:

Dennis A. Dickerson
Executive Officer

Date: June 29, 2000