

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TENTATIVE ORDER NO. R9-2015-0012

Item 6 Supporting Document No. 1 February 11, 2015
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**WASTE DISCHARGE REQUIREMENTS FOR UNITED STATES NAVY, REMOTE
TRAINING SITE WARNER SPRINGS ONSITE WASTEWATER TREATMENT
SYSTEM, SAN DIEGO COUNTY**

The Discharger, as described in the following table is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	United States Navy
Name of Facility	Remote Training Site Warner Springs Wastewater Treatment System
Facility Address	34567 State Highway 79
	Warner Springs, CA 92086
	San Diego County
Facility Contact, Title, and Phone	Ms. June Wheaton, 619-532-1672
Mailing Address	Environmental Division Naval Base Coronado PWO Building 3, PO Box 357088, San Diego, CA 92135
Type of Facility	Naval Training Facility with Onsite Wastewater Treatment System/Advanced Treatment Unit
Facility Design Flow	10,000 gallons per day

The discharge by the United States Navy from the discharge point identified in Table 2 below is subject to waste discharge requirements as set forth in this Order. Administrative information is contained in Table 3 below.

Table 2. Discharge Location

Discharge Point	Effluent Description	Facility Latitude	Facility Longitude	Hydrologic Subarea (HSA) of Discharge
DP 001 (Subsurface Disposal Field)	Secondary treated domestic wastewater	33° 20' 38" N	-116° 42' 43"W	Warner HSA (903.31)

Table 3. Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, San Diego Region and is effective on:	February 11, 2015
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I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on February 11, 2015.

TENTATIVE

Executive Officer **David W. Gibson**

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I. FINDINGS

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board), finds:

- A. **Legal Authorities.** This Order is issued pursuant to section 13263 and 13523.1 of the Water Code. This Order serves as Waste Discharge Requirements (WDRs) issued pursuant to article 4, chapter 4, division 7 of the Water Code.

- B. **Background.** The United States Navy submitted a Report of Waste Discharge (ROWD), dated February 26, 2013 to the San Diego Water Board, and applied for WDRs for discharge of secondary treated wastewater from a replacement Onsite Wastewater Treatment System/Advanced Treatment Unit (OWTS/ATU) that will serve the Remote Training Site, Warner Springs. The San Diego Water Board developed the requirements in this Order based on information submitted as part of the ROWD, through monitoring and reporting programs, and other available information. An Information Sheet (Attachment C) was prepared for this Order, which contains background information and rationale for Order requirements. The Information Sheet is hereby incorporated into and constitutes Findings for this Order.

- C. **Standard and Special Provisions.** Standard Provisions apply to all WDRs. The standard provisions contain language the San Diego Water Board finds necessary to ensure the Order is enforced, the facility is designed and operated for the protection of human health, records are maintained, and changes are reported. The Special Provisions in this Order ensure that the onsite treatment and disposal system are properly designed, operated, monitored, and maintained.

- D. **Notification of Interested Persons.** The San Diego Water Board has notified the Discharger and interested parties and persons of its intent to prescribe WDRs for the proposed discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of the notification are provided in the Information Sheet for this Order (Attachment C).

- E. **Consideration of Public Comment.** The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

- F. **California Environmental Quality Act.** This project involves repair and replacement of existing wastewater treatment facilities at the RTS. The replacement OWTS/ATU will have a smaller treatment capacity and design flow than the old wastewater treatment plant. As such, this project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) as provided by section 15301, and in compliance with section 15300.2, of California Code of Regulations title 14.

THEREFORE, IT IS HEREBY ORDERED, that this Order supersedes Order No. 93-011 except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the

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February 11, 2015

Discharger shall comply with the following requirements in this Order. This action in no way prevents the San Diego Water Board from taking enforcement action for past violations of the previous Order.

II. DISCHARGE PROHIBITIONS

- A. Discharges of waste, or sewage sludge or solids to lands which have not been specifically described in the ROWD or this Order, and for which valid waste discharge requirements are not in force are prohibited.
- B. Discharges of treated or untreated solid or liquid waste to a navigable water or tributary of a navigable water are prohibited unless as authorized by a National Pollutant Discharge Elimination System permit issued by the San Diego Water Board.
- C. Discharges of treated or untreated solid or liquid waste directly or indirectly to any surface waters of the State (including ephemeral streams and vernal pools) are prohibited.
- D. The treatment, storage, or disposal of waste in a manner that creates pollution, contamination, or nuisance, as defined by Water Code section 13050, is prohibited.
- E. The discharge of wastewater shall not cause a violation of the waste discharge prohibitions contained in the Water Quality Control Plan for the San Diego Basin (Basin Plan).
- F. Discharges of waste other than domestic wastewater to the OWTS/ATU are prohibited.
- G. The discharge of materials in concentrations that are deleterious and inhibiting to OWTS/ATU operations is prohibited. Deleterious and inhibiting materials include biocides, and all products and matters defined in chapter 41, division 4.5, title 22 of the California Code of Regulations.
- H. The discharge of regenerating saline backwash from water softeners to the OWTS/ATU is prohibited.

III. DISCHARGE SPECIFICATIONS

- A. The annual average effluent flow rate from the OWTS/ATU shall not exceed 5,000 gallons per day (gpd), while the daily effluent flowrate from the OWTS/ATU shall not exceed 10,000 gpd.
- B. The discharge of an effluent containing pollutants in excess of the following discharge specifications is prohibited:

Table 4. Discharge Specifications

Constituent	UNITS (milligrams per Liter (mg/L) or as noted)	Monthly Average ¹	Daily Maximum ²	Annual Average ³
Biological Oxygen Demand (BOD, 5 day @ 20 degrees celsius)	mg/L	30	45	-
Total Suspended Solids (TSS)	mg/L	30	45	-
Total Dissolved Solids (TDS)	mg/L	-	-	1,400
pH	pH units	within the limits of 6.0-9.0 at all times		-

¹The monthly average discharge specification shall apply to the arithmetic mean of the results of all samples collected during each calendar month.

²The daily maximum discharge specification shall apply to the results of a single composite or grab sample representing non-overlapping 24-hour periods.

³The annual average discharge specification shall apply to the arithmetic mean of the results of all samples collected during any calendar year.

C. The OWTS/ATU must achieve a 50 percent reduction in total nitrogen when comparing total nitrogen concentrations of influent and effluent samples collected on the same day.

IV. PROVISIONS

A. Standard Provisions

The Discharger shall comply with all following Standard Provisions:

1. The San Diego Water Board may initiate an enforcement action against the Discharger, which may result in the termination of the discharge, if any person uses, transports, or stores such waste in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code section 13050.
2. The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised WDRs.
3. The Discharger shall allow the San Diego Water Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:

- a. Enter at reasonable times upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Order; and
 - d. Sample or monitor, at reasonable times for the purposes of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at any location.
4. The Discharger shall report any noncompliance that may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Any discharge of treated or untreated wastewater resulting from sewer line breaks or pump failures must be reported to the San Diego Water Board within 24 hours.
 5. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
 6. Upon reduction, loss, or failure of the treatment facility, the Discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility has failed, is reduced, or is lost.
 7. A copy of this Order shall be maintained at the facility and shall be available to operating personnel at all times.
 8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order,

and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the San Diego Water Board.

9. The Discharger shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the San Diego Water Board, upon request, copies of records required to be kept by this Order.
10. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of this Order.
 - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for the modification, revocation, reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

11. The Discharger shall file a new Report of Waste Discharge (ROWD) at least 120 days prior to the following:
 - a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
 - b. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).
 - c. Change in the disposal area from that described in the findings of this Order.
 - d. Increase in flow rate beyond that specified in this Order.
 - e. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
 - f. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

12. This Order is not transferable to any person except after notice to the San Diego Water Board. The Discharger shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current Discharger and the new discharger. This agreement shall include an acknowledgement that the existing Discharger is liable for violations up to the transfer date and that the new discharger is liable after the transfer date. The San Diego Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Water Code.
13. Where the Discharger becomes aware that he or she failed to submit any relevant facts in a ROWD or submitted incorrect information in a ROWD or in any report to the San Diego Water Board, the Discharger shall promptly submit such facts or information.
14. All applications (including ROWDs), reports, or information submitted to the San Diego Water Board shall be signed as follows:
 - a. Applications (including ROWDs) shall be signed by the Commanding Officer or a legally responsible representative of the Discharger.
 - b. All other reports required by this Order and other information required by the San Diego Water Board shall be signed by the Commanding Officer or a duly authorized representative of the Discharger. An individual is a duly authorized representative only if all of the following are true:
 - i. The authorization is made in writing by the Commanding Officer.
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility.
 - iii. The written authorization is submitted to the San Diego Water Board.
- b. Any person signing a document under this section shall make the following certification:

"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."

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the requirements of Monitoring and Reporting Program No. R9-2015-0012 and future revisions thereto. Monitoring results shall be reported to the San Diego Water Board at the frequency specified in Monitoring and Reporting Program No. R9-2015-0012.

C. Special Provisions

1. Design and Operation Specifications

- a. The Discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.
- b. The OWTS/ATU shall be equipped with a visual or audible alarm as well as a two way telemetric alarm that alerts the Discharger and service provider in the event of system malfunction. This requirement for equipping the OWTS/ATU with a telemetric alarm shall only be waived if the Discharger demonstrates to the satisfaction of the San Diego Water Board that a telemetric alarm is impracticable.
- c. The OWTS/ATU shall be protected against 100-year peak stream flows as defined by the County of San Diego Flood Control Agency.
- d. The OWTS/ATU shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour frequency storm.
- e. No part of the treatment system shall be located within 50 feet of a flowing stream or ephemeral stream drainage, and at least 100 feet from a water supply well. No part of the spray irrigation field shall be located within 100 feet of a flowing stream or ephemeral stream drainage and 150 feet from a water supply well. The Discharger may propose alternative methods of compliance (e.g., installation/maintenance of best management practices, additional monitoring locations, etc.) to ensure that no part of the treatment system and spray irrigation system threaten to create a condition of pollution or nuisance in surface waters.

2. Certification Report

The Discharger shall submit a certification report either within 180 days of adoption of the Order, or within 180 days of completion of construction of the OWTS/ATU. In the event that the construction of the OWTS/ATU has not been completed within

180 days of adoption of the Order, the report shall certify that the treatment and disposal facilities have adequate capacity for the full design flow. The report must also certify the adequacy of each component of the treatment, storage, and disposal facilities. The certification report shall contain a requirement-by- requirement analysis based on acceptable engineering practices, of how the process and physical designs of the facilities will ensure compliance with the Order. The design engineer or the design engineer's designee shall observe the entire installation and shall affix their signature and engineering license number to the certification report.

3. Operation and Maintenance Manual

A copy of the facility operation and maintenance (O & M) manual shall be maintained at the site and shall be available to operation personnel and San Diego Water Board staff at all times. The O & M manual shall include, at a minimum:

- a. The name, address, telephone number, and business and professional license number of the OWTS/ATU designer.
- b. The name, address, telephone number, and business and professional license number, where applicable, of the OWTS/ATU installer.
- c. The name, address, and telephone number of the service provider/qualified Navy staff to maintain the OWTS/ATU.
- d. Instructions for proper operation and maintenance and a protocol for assessing performance of the OWTS/ATU.
- e. The design flow and performance requirements for the OWTS/ATU.
- f. A list of types of substances that could inhibit performance if discharged to the OWTS/ATU.
- g. A list of substances that could cause a condition of pollution or nuisance if discharged to the OWTS/ATU, including but not limited to pharmaceutical drugs and water softener regeneration brines.

4. Operation of the Treatment System

The OWTS/ATU must be supervised and operated by persons possessing a wastewater treatment operator certificate of the appropriate grade.¹ In addition, the Discharger may obtain and maintain a contract with a service provider² or

¹ Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 26

² "Service provider" means a person capable of operating, monitoring, and maintaining an OWTS/ATU consistent with the requirements and responsibilities of this Order and the O&M manual.

demonstrate to the San Diego Water Board that they have appropriately qualified/trained Navy staff at the facility. Proper operation and maintenance includes effective performance, adequate funding, adequate training of service providers, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

5. Sewage Solids and Sludge Specifications

- a. Solids and sludge storage shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination or pollution. All collected sludge and other solids pumped from the OWTS/ATU must be disposed of in a municipal solid waste landfill or disposed of in a sludge-only landfill in accordance with Code of Federal Regulations (CFR) title 40 parts 503 and 258, and California Code of Regulations title 27.
- b. Septic tanks shall be pumped when the combined thickness of sludge and scum exceeds one third of the septic tank depth as measured from the water line to the bottom of the tank.

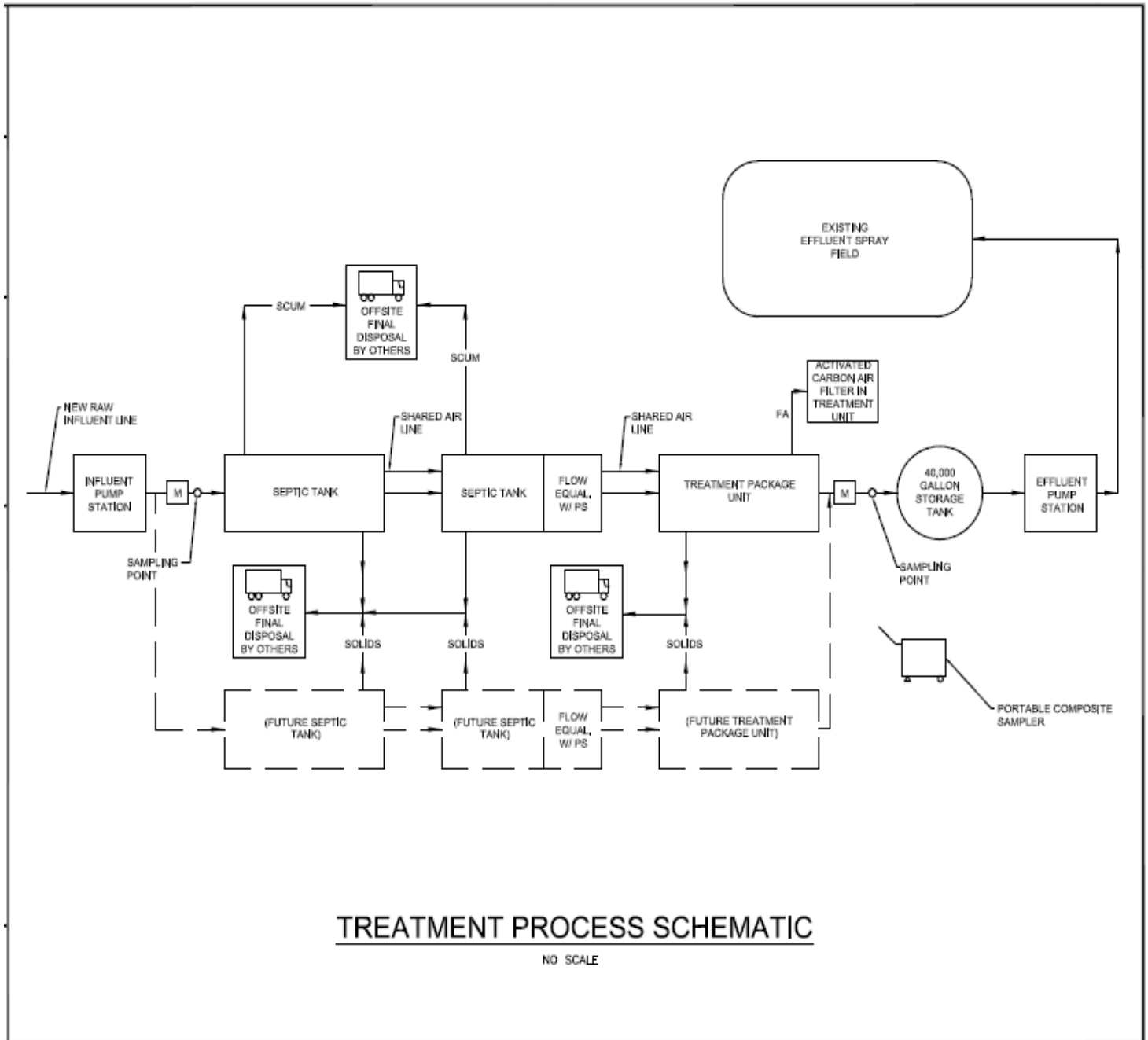
6. Notifications

- a. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, State, or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- b. These requirements have not been officially reviewed by the U.S. Environmental Protection Agency and are not issued pursuant to Clean Water Act section 402.
- c. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- d. This Order becomes effective on the date of adoption by the San Diego Water Board.

ATTACHMENT A- LOCATION MAP



ATTACHMENT B – TREATMENT PROCESS SCHEMATIC



ATTACHMENT C- INFORMATION SHEET

TENTATIVE ORDER NO. R9-2015-0012, WASTE DISCHARGE REQUIREMENTS FOR UNITED STATES NAVY REMOTE TRAINING SITE ONSITE WASTEWATER TREATMENT SYSTEM, WARNER SPRINGS, SAN DIEGO COUNTY

This Information Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of Order No. R9-2015-0012.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	9 000000235
Discharger	United States Navy
Name of Facility	Remote Training Site Warner Springs Wastewater Treatment System
Facility Address	34567 State Highway 79
	Warner Springs, CA 92086
	San Diego County
Facility Contact, Title and Phone	Ms. June Wheaton, 619-532-1672
Mailing Address	Environmental Division Naval Base Coronado PWO Building 3, PO Box 357088, San Diego, CA 92135
Billing Address	Environmental Division Naval Base Coronado PWO Building 3, PO Box 357088, San Diego, CA 92135
Type of Facility	Onsite Wastewater Treatment System/Advanced Treatment Unit (serving Naval Training Facility)
Threat to Water Quality	3
Complexity	B
Permitted Daily Flow	10,000 gallons per day
Permitted Annual Average Flow	5,000 gallons per day
Receiving Water	Warner Springs (HSA 903.31)
Receiving Water Type	Groundwater

A. The United States Navy (hereinafter Discharger) is the owner and operator of the Remote Training Site in Warner Springs (RTSWS), San Diego County. Order No. R9-2015-0012 establishes Waste Discharge Requirements (WDRs) for the discharge of secondary treated domestic wastewater from the replacement Onsite Wastewater Treatment System /Advanced Treatment Unit (OWTS/ATU) at the RTSWS.

For the purposes of this Order, references to the “discharger” in applicable State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

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- B. The discharge of secondary treated domestic wastewater from the OWTS/ATU will occur in the Warner Hydrologic Subarea (903.31) of Warner Valley Hydrologic Area (903.30).
- C. The Discharger filed a Report of Waste Discharge and submitted an application for WDRs dated February 26, 2013.

II. FACILITY DESCRIPTION

The RTSWS is a naval facility used for conducting survival, evasion, resistance and escape (SERE) training. The RTSWS (formerly referred to as the US Navy SERE Camp) is located in a remote area of Cleveland National Forest in the community of Warner Springs in northeast San Diego County. The RTSWS includes a headquarters area with an administrative building, several staff barracks buildings, a wastewater treatment plant, and a training compound. West coast Navy/Marine Corps personnel who risk capture during wartime (e.g. aviators) undergo SERE training at the facility. The RTSWS covers over 6,300 acres, and has access to several additional thousand acres of training area. Over 1,500 Navy/Marine Corps personnel annually visit the RTSWS to receive training in skills necessary to survive in a hostile environment.

The wastewater treatment plant at the RTSWS is about 40 years old, and is being replaced with a modern OWTS/ATU. Other upgrades to the wastewater collection and treatment facilities at the RTSWS consist of the following.

- Replacing and repairing wastewater collection pipes.
- Replacing the existing influent pump station.
- Replacing the existing concrete effluent holding pond with a new 40,000 gallon holding tank.
- Replacing the existing effluent pump station.

The old wastewater treatment plant had a treatment capacity of 20,000 gallons per day (gpd), far exceeding the needs of the facility based on the limited on-site population. The daily average discharge of sewage to the old plant for 2013 was about 656 gpd. As a result, the new OWTS/ATU has a reduced treatment capacity of 10,000 gpd, which is sufficient to handle flows that will be generated at the RTSWS.

Discharge from the old wastewater treatment plant at the RTSWS was regulated under Order No. 93-11, *US Navy, Survival, Evasion, Resistance and Escape (SERE Camp), Warner Springs, San Diego County*. Order No. R9-2015-0012 will supersede and rescind Order No. 93-11.

- A. **Description of Wastewater Treatment Processes.** The old wastewater treatment plant at the RTSWS is being replaced with an OWTS/ATU. The OWTS/ATU consists of

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an influent pump station, septic tanks, Advantex AX-Max textile filter units, a 40,000 gallon effluent storage tank, and an effluent pump station. Sewage solids collected and generated within the primary and secondary treatment processes will be periodically collected and hauled off site to an approved wastewater solids disposal site.

- B. Discharge Points and Receiving Waters.** The RTSWS and existing spray disposal field are located in the Warner Hydrologic Subarea (903.31) of the Warner Valley Hydrologic Area (903.30). Secondary treated effluent from the OWTS/ATU will be discharged to an existing one-acre effluent spray field. A portion of the effluent will be taken up by vegetation in the spray field and the rest will percolate to groundwater.
- C. Expected Effluent Quality.** The Advantex AX-Max secondary treatment unit is designed to treat influent with a biological oxygen demand (BOD) concentration of about 200 milligrams per liter (mg/L) at an average daily flow of 5,000 gpd and a peak daily flow of 10,000 gpd. Based on the typical loading rate, effluent quality is expected to be below a daily average effluent concentration of 30 mg/L and a daily average total suspended solids (TSS) concentration of 30 mg/L. Historic effluent monitoring data reported to the San Diego Water Board for the discharge from the old RTSWS wastewater treatment plant from 2007 to 2011 is summarized in Table 2 below.

Table 2. Historic Effluent Quality

Date of Sample	Effluent Concentration (mg/L)				
	BOD	Total Dissolved Solids (TDS)	Chloride	Sulfate	Nitrate (as N)
3/06/2007	11.2	805	149	166	32.8
9/11/2007	<0.2	880	151	182	42.8
3/06/2008	6.3	1,100	152	161	53.2
9/09/2008	15.3	1,270	295	218	16.0
3/16/2009	8.2	840	154	175	24.2
9/25/2009	<2.0	952	170	190	42.0
3/22/2010	5.95	1,150	228	176	60.4
9/20/2010	<2.0	1,340	219	192	77.8
3/14/2011	<2.0	1,050	162	180	32.0
9/12/2011	<2.0	1,020	211	196	52.4
10/18/2011	-	1,070	-	-	-
3/12/2012	2.6	910	176	180	43.6
Maximum	15.3	1,340	295	218	77.8
Average	<5.0	1,032	188	183	43.4

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III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

- A. **Legal Authorities.** This Order is issued pursuant to section 13263 of the Water Code. This Order serves as waste discharge requirements pursuant to article 4, chapter 4, division 7 of the Water Code.
- B. **California Environmental Quality Act.** This project involves repair and replacement of existing wastewater treatment facilities at the RTSWS. The replacement OWTS/ATU will have a smaller treatment capacity and design flow than the old wastewater treatment plant. As such, this project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) as provided by section 15301, and in compliance with sections 15301 and 15300.2, of California Code of Regulations title 14.
- C. **Water Quality Control Plans.** The Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses of groundwater that are designated for the Warner Hydrologic Subarea (HSA 903.31) include municipal and domestic supply, agricultural supply, industrial service supply, and freshwater replenishment.
- D. **Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. Discharge Specifications

The Order establishes technology based discharge specifications for the discharge of secondary treated domestic wastewater from the OWTS/ATU for BOD, TSS, pH, and total nitrogen (see Table 3). The discharge specifications for BOD, TSS, and pH are based on design criteria for removal of these constituents by secondary wastewater treatment technology. Typically water quality-based discharge specifications for constituents, such as TDS and nitrate, are set at values at or below the water quality objectives for groundwater in the discharge area (shown in Table 4). This Order,

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however, specifies an annual average discharge specification for TDS of 1,400 mg/L, which exceeds the TDS water quality objective of 500 mg/L for the Warner Valley HA, because information contained in the ROWD demonstrates that the rainfall recharge on the property is sufficient to prevent the discharge from causing the TDS concentration in groundwater to exceed 500 mg/L downgradient or beneath the site.

Table 3. Summary of Discharge Specifications¹

Constituent	Units	Monthly Average ²	Daily Maximum ³	Annual Average ⁴
Biological Oxygen Demand (BOD, 5 day @ 20 degrees celsius)	mg/L	30	45	-
Total Suspended Solids (TSS)	mg/L	30	45	-
Total Dissolved Solids (TDS)	mg/L	-	-	1,400
pH	pH units	within the limits of 6.0-9.0 at all times		-

Table 4. Basin Plan Groundwater Water Quality Objectives

Hydrologic Area	TDS (mg/L)	Cl (mg/L)	SO ₄ (mg/L)	%Na	NO ₃ (mg/L)	Fe (mg/L)	Mn (mg/L)	MBAS (mg/L)	B (mg/L)	ODOR	TURB (NTU)	COLOR (color units)	F (mg/L)
Warner Valley HA 903.30	500	250	250	60%	5	0.3	0.05	0.5	0.75	None	5	15	1.0

Notes: TDS = Total Dissolved Solids; Cl = Chloride; SO₄ = Sulfate; %Na = Percent Sodium; NO₃ = Nitrate; Fe = Iron; Mn = Manganese; MBAS = Methylene Blue Activated Substances; B = Boron; Turb = Turbidity (NTU = Nephelometric Turbidity Units); F = Fluoride.

The following mass balance equation was used to determine the expected concentration of TDS in the combined recharge to groundwater within the RTSWS training area:

$$C_{gwr} = \frac{(Q_{precip} \times C_{precip}) + (Q_{effluent} \times C_{effluent}) \times R\%}{(Q_{precip} + Q_{effluent} \times L_{fraction})}$$

¹ The Order also specifies that the OWTS/ATU must achieve 50 percent total nitrogen reduction when comparing total nitrogen concentrations of influent and effluent samples collected on the same day.

² The monthly average discharge specification shall apply to the arithmetic mean of the results of all samples collected during each calendar month.

³ The daily maximum discharge specification shall apply to the results of a single composite or grab sample representing non-overlapping 24-hour periods.

⁴ The annual average discharge specification shall apply to the arithmetic mean of the results of all samples collected during any calendar year.

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C_{gwr} , TDS concentration of combined recharge to groundwater from the OWTS/ATU effluent and from precipitation⁵ = 420 mg/L

C_{precip} , TDS concentration of the natural (precipitation plus stream infiltration) groundwater recharge within the RTSWS training area = 400 mg/L

$C_{effluent}$, TDS concentration of the RTSWS effluent⁶ = 1,400 mg/L

Q_{precip} , annual average natural groundwater recharge (precipitation plus precipitation-related stream infiltration) within the 6,000-acre RTSWS training area⁷ = 360 acre feet per year (afy)

$Q_{effluent}$, annual average flow limit specified in Tentative Order No. R9-2015-0012 = 5,000 gpd (5.6 afy)

$L_{fraction}$, fraction of irrigated water that recharges groundwater = 0.2

As shown from the mass balance equation above, assuming an annual effluent flow of 5,000 gpd and a maximum effluent TDS concentration of 1,400 mg/L, the estimated concentration of TDS in combined recharge to groundwater will be 400 mg/L. As a result, it is expected that the discharge should not cause the concentration of groundwater downgradient or beneath the site to exceed the TDS groundwater quality objective of 500 mg/L.

The Order establishes a 50 percent nitrogen removal discharge specification for total nitrogen based on expected nitrogen removal that can be achieved by the Advantex AX-Max textile filter unit.⁸ In addition, the ROWD includes an assimilative capacity analysis for nitrate demonstrating that the discharge from the OWTS/ATU is not expected to cause the concentration of nitrate downgradient or beneath the site to exceed the nitrate groundwater quality objective of 5 mg/L as nitrate (or 1.1 mg/L as N). The mass balance equation below was used to determine the concentration of nitrate in combined recharge to groundwater from the OWTS/ATU discharge and from precipitation. The mass balance shows that assuming an annual effluent flow of 5,000 gpd and a maximum effluent nitrate concentration of 43 mg/L as N, the concentration of nitrate in combined recharge to groundwater will be 0.95 mg/L as N.

⁵ Computed TDS concentration in the combined groundwater recharge in the RTS training area. Computed using mass balance equation above, assuming that all applied TDS recharges groundwater (R% = 100%).

⁶ 1,400 mg/L is the annual average TDS discharge specification requested by the discharger.

⁷ Based on 18 inches per year annual average precipitation, 6,000 acre RTSWS area, and 4 percent of net annual precipitation recharging groundwater.

⁸ The manufacturer's web site indicates that the Advantex AX-Max textile filter units can achieve up to 60 to 70 percent nitrogen reduction without use of supplemental treatment components.

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Mass balance calculations for nitrate:

$$C_{gwr} = \frac{(Q_{precip} \times C_{precip}) + (Q_{effluent} \times C_{effluent}) \times R\%}{(Q_{precip} + Q_{effluent} \times L_{fraction})}$$

C_{gwr} , nitrate concentration of combined recharge to groundwater from the OWTS/ATU effluent and from precipitation = 0.8 mg/L as N

C_{precip} , nitrate concentration of precipitation recharge to groundwater within the RTSWS training area = 0.3 mg/L as N

$C_{effluent}$, nitrate concentration of the RTSWS effluent⁹ = 43 mg/L as N

Q_{precip} , annual average precipitation recharge to groundwater¹⁰ = 360 acre feet per year (afy)

$Q_{effluent}$, annual average flow limit specified in Tentative Order No. R9-2015-0012 = 5,000 gpd (5.6 afy)

R, percent of applied nitrogen that recharges groundwater (percent not taken up by vegetation) = 75%¹¹

$L_{fraction}$, fraction of irrigated water that recharges groundwater = 0.2

The Order also reduces the maximum permitted flow from 20,000 gpd to 5,000 gpd to be consistent with the treatment capacity of the OWTS/ATU. Tables 4 and 5 below show the reduction in concentrations of TDS and nitrate in the combined recharge to groundwater when using a maximum effluent of 5,000 gpd as opposed to a maximum effluent flow of 20,000 gpd.

⁹ 43 mg/L as N is the assumed average nitrate concentration in the OWTS/ATU effluent.

¹⁰ Based on 18 inches per year annual average precipitation, 6,000 acre RTSWS training area, and 4 percent of net annual precipitation recharging groundwater.

¹¹ Mass balance calculations in the Report of Waste Discharge use R values of 50 percent and 25 percent for computing the nitrate concentration in combined recharge to groundwater. A more conservative R value of 75 percent is used in this information sheet. As a result, it is assumed 75 percent of nitrogen applied on the spray field will infiltrate to groundwater and will not be taken up by vegetation.

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Table 4. Comparison of TDS Concentrations of Combined Recharge to Groundwater

Variables	New OWTS/ATU	Existing OWTS
Q_{precip}	360 afy	360 afy
C_{precip}	400 mg/L	400 mg/L
Q_{effluent}	5.6 afy (5,000 gpd)	22.4 afy (20,000 gpd) ¹²
C_{effluent}	1,400 mg/L	1,400 mg/L
R	100%	100%
L_{fraction}	0.2	0.2
C_{gwr}, TDS concentration of combined recharge to groundwater	420 mg/L	481 mg/L

Table 5. Comparison of Nitrate Concentrations of Combined Recharge to Groundwater

Variables	New OWTS/ATU	Existing OWTS
Q_{precip}	360 afy	360 afy
C_{precip}	0.3 mg/L	0.3 mg/L
Q_{effluent}	5.6 afy (5,000 gpd)	22.4 afy (20,000 gpd)
C_{effluent}	43 mg/L	43 mg/L
R	75%	75%
L_{fraction}	0.2	0.2
C_{gwr}, nitrate concentration of combined recharge to groundwater	0.80 mg/L as N	2.3 mg/L as N

Tables 4 shows that the concentrations of TDS in the combined recharge to groundwater will be 420 mg/L, which is below the groundwater quality objective for TDS of 500 mg/L. Table 5 shows that the concentration of nitrate in combined recharge to groundwater will be 0.80 mg/L as N which is below the groundwater quality objective for nitrate of 1.1 mg/L as N.

V. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Water Code section 13267 authorizes the San Diego Water Board to require technical and monitoring program reports. Monitoring and Reporting Program (MRP) No. R9-2015-0012 requires that the effluent samples be analyzed for BOD, TSS, pH, and total nitrogen; and the influent samples be analyzed for total nitrogen to verify compliance of the discharge with the discharge specifications. The Monitoring and Reporting Program also requires that the effluent be analyzed for TDS, to verify that this constituent is not present in the discharge at a level that will adversely affect water quality. The use of laboratories certified for federally standardized test methods, and quality assurance and control procedures ensures the reliability and validity of the data as well as consistency and comparability with regulations.

¹² 20,000 gpd is the average monthly effluent flow limit specified in Order No. 93-11.

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Implementing the Monitoring and Reporting Program ensures that the discharge from the OWTS/ATU will not adversely affect water quality. This is important because in this remote area, groundwater is the only source of drinking water. Therefore, water quality suitable for municipal and domestic use must be maintained in the groundwater for present and future uses. The cost to implement the Monitoring and Reporting Program is reasonable in relationship to the need for the reports and the benefits to be obtained from the reports.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

The standard provisions contain language that allows the San Diego Water Board to enforce Order No. R9-2015-0012. Provisions include the need for inspection, spill and emergency reporting, records maintenance, and reporting of changes. Standard provisions apply to all WDRs and are consistent with San Diego Water Board findings.

B. Monitoring and Reporting Program Requirements

The MRP is a requirement of the Order. The rationale for the MRP is provided in section V of the Information Sheet above.

C. Special Provisions

- 1. Design and Operation Specifications.** The Order includes design and operation specifications to ensure proper operation, monitoring, and maintenance of the OWTS/ATU. The Specifications here, which continually apply, include the need for maintaining alarms, ensuring the OWTS/ATU is certified to achieve nitrogen removal, and best management practices for the protection of human health.
- 2. Certification Report.** The Discharger is required to submit a certification report signed by a professional civil engineer which certifies that the installed onsite treatment and disposal systems complies with the design plan. The certification report also serves as an acknowledgment by the Discharger that the onsite treatment and disposal systems have been designed and installed to meet the requirements of the Order.
- 3. Operation and Maintenance Manual.** The Order requires the Discharger to maintain an onsite operation and maintenance (O&M) manual which will provide guidance to operation personnel on proper operation and monitoring of components of the OWTS/ATU in accordance with manufacturers standards.
- 4. Operation of the Treatment System.** Pursuant to California Code of Regulations, Title 23, Division 23, Chapter 6, the OWTS/ATU must be supervised and operated by persons possessing a wastewater treatment operator certificate of the

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appropriate grade.¹³ This is to ensure proper operation, maintenance, and monitoring of the OWTS/ATU. In addition, the Discharger may maintain a contract with a service provider¹⁴ or demonstrate to the San Diego Water Board that they have appropriately qualified/trained Navy staff at the facility, to ensure that the OWTS/ATU is adequately operated, maintained, and monitored by a qualified individual in a manner consistent with the requirements of the Order.

5. **Sewage Solids and Sludge Specifications.** These specifications are included in the Order to ensure that septic tanks are properly operated and maintained, and sewage solids generated from septic tanks are disposed of in a manner that does not pose a threat to public health or the environment.
6. **Notifications.** The notifications inform the Discharger of administrative issues regarding this Order.

D. Antidegradation Analysis

State Water Board Resolution 68-16, the *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (hereafter the Antidegradation Policy) requires that disposal of waste into the waters of the State be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the State. The quality of some waters is higher than established by adopted policies and that higher quality water shall be maintained to the maximum extent possible consistent with the Antidegradation Policy. The Antidegradation Policy requires the following:

1. Higher quality water will be maintained until it has been demonstrated to the State that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of the water, and will not result in water quality less than that prescribed in the policies.
2. Any activity that produces a waste and discharges to existing high quality waters will be required to meet WDRs that will result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit to the people of the state will be maintained.

TDS concentrations in groundwater samples collected from the two drinking water wells on the RTSWS between 2007 and 2012 ranged from 510 to 895 mg/L, which exceeds the TDS groundwater quality objective of 500 mg/L. Nitrate concentrations in groundwater samples collected from the RTSWS drinking water wells between 2007 and 2012 ranged from 0.22 to 0.58 mg/L as N, which is below the nitrate

¹³ Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 26

¹⁴ "Service provider" means a person capable of operating, monitoring, and maintaining an OWTS/ATU consistent with the requirements and responsibilities of this Order and the O&M manual.

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groundwater quality objective of 1.1 mg/L as N. The assimilative capacity analysis above shows that the TDS concentration of the combined recharge to groundwater from effluent and from precipitation is 420 mg/L, while the nitrate concentration of the combined recharge to groundwater from effluent and from precipitation is 0.80 mg/L as N.

Limited degradation of groundwater by some waste constituents associated with domestic wastewater effluent, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. There is no community sewage collection system or municipal wastewater treatment plant within reasonable proximity to the RTSWS, or in the community of Warner Springs. As a result, residences and commercial establishments in Warner Springs rely primarily on OWTS for treatment and dispersal of domestic wastewater. The continued development of the Warner Springs area is of maximum benefit to the people of the State and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order provided the terms of the applicable Basin Plan, and other applicable State Water Board and Regional Water Board policies are consistently met. Adoption of the Order will allow for continued use of the RTSWS by Navy personnel. Continued use of the RTSWS is in the maximum interest of the people of the state because Navy personnel receive training at the RTSWS in skills necessary to survive in a hostile environment. Consequently, continued use of the RTSWS by Navy personal contributes to the U.S. Navy's mission to protect and defend the United States of America.

VII. PUBLIC PARTICIPATION

As a step in the WDR adoption process, the San Diego Water Board staff developed tentative WDRs. The San Diego Water Board has taken the following steps to encourage public participation in the WDR adoption process.

A. Notification of Interested Parties

The San Diego Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the San Diego Water Board website and board meeting agenda publication.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the San Diego Water Board Office at the address above on the cover page of this Order.

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To be fully responded to by staff and considered by the San Diego Water Board, written comments must be received at the San Diego Water Board offices by 5:00 p.m. on December 29, 2014.

C. Public Hearing

The San Diego Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **February 11, 2015**
Time: **9:00 am**
Location: **City of Mission Viejo
Council Chambers
200 Civic Center
Mission Viejo, California**

Interested persons are invited to attend. At the public hearing, the San Diego Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/sandiego/board_info/agendas/ where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the San Diego Water Board regarding the final WDRs. The petition must be submitted within 30 days of the San Diego Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge, related documents, tentative discharge specifications and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (619) 519-1990.

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F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the Order should contact the San Diego Water Board, reference this facility, and provide a name, address, phone number, and email address.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Mr. Fisayo Osibodu at 619-521-8036 or via email at Olufisayo.Osibodu@waterboards.ca.gov.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

TENTATIVE MONITORING AND REPORTING PROGRAM NO. R9-2015-0012

**UNITED STATES NAVY REMOTE TRAINING SITE WARNER SPRINGS ONSITE
WASTEWATER TREATMENT SYSTEM, SAN DIEGO COUNTY**

This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267. The Water Code authorizes the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to ensure that the Discharger complies with Order No. R9-2015-0012.

I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this MRP and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notifying, and receiving approval from the San Diego Water Board for the proposed monitoring location change.
- B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.
- C. Monitoring must be conducted according to U. S. Environmental Protection Agency (USEPA) test procedures approved under 40, Code of Federal Regulations (CFR), part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this MRP.
- D. Unless otherwise permitted by the San Diego Water Board, all analyses shall be conducted at a laboratory certified to perform such analyses by the State Water Board Division of Drinking Water. The Discharger must use a laboratory capable of producing and providing quality assurance/quality control (QA/QC) records for San Diego Water Board review. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports submitted to the San Diego Water Board.

- E. Any report presenting new analytical data is required to include the complete laboratory analytical report(s). The laboratory analytical report must be signed by the laboratory director and contain:
1. A complete sample analytical report;
 2. A complete laboratory quality assurance/quality control (QA/QC) report.
 3. A discussion of the QA/QC data.
 4. A transmittal letter indicating whether or not all the analytical work was supervised by the director of the laboratory, and containing the following statement, "All analyses were conducted at a laboratory certified for such analyses by the State Water Board Division of Drinking Water in accordance with current USEPA procedures."
- F. Specific methods of analysis must be identified in the Discharger's monitoring reports. If the Discharger proposes to use methods or test procedures other than those included in the most current version of 40 CFR part 136, "*Guidelines Establishing Test Procedures for the Analysis of Pollutants; Procedures for Detection and Quantification*," the exact methodology must be submitted for review and must be approved by the San Diego Water Board prior to use.
- G. If the Discharger monitors any pollutants more frequently than required by this MRP, using test procedures approved under 40 CFR part 136, or as specified in this MRP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- H. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this MRP, and records of all data used to complete the application for this MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when required by the San Diego Water Board. Records of monitoring information shall include the following:
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 analyses.

- 5. The analytical techniques or methods used.
- 6. The results of such analyses.
- I. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
- J. The Discharger shall report all instances of noncompliance with Order No. R9-2015-0012 in monitoring reports submitted to the San Diego Water Board.
- K. The monitoring reports shall be signed by an authorized person as required by Section IV.A.16 (Standard Provisions) of Order No. R9-2015-0012.
- L. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
- M. The Discharger shall identify all missing or non-valid monitoring or sampling results in monitoring reports submitted. All instances of missing or non-valid results must be accompanied by an explanation of their root cause and the steps the Discharger has or will take to prevent future instances. Missing or non-valid results may be considered violations of Order No. R9-2015-0012 that could result in enforcement action depending on the frequency of such instances and efforts by the Discharger to prevent such failures.

II. INFLUENT MONITORING

A sample of the influent entering the OWTS/ATU shall be collected and analyzed for total nitrogen in accordance with the criteria specified in Table 1 below:

Table 1. Influent Monitoring¹

Constituent	Units	Sample Type	Sampling Frequency ²	Reporting Frequency ³
Total Nitrogen (as N)	mg/L	Grab	Quarterly	Annually

¹Influent and effluent samples shall be collected on the same day.

²Quarterly is defined as once per three consecutive month period beginning with January, April, July, or October.

³Annually is defined as once per calendar year.

III. EFFLUENT MONITORING

Samples of the final effluent shall be collected from the OWTS/ATU prior to discharge to the disposal system. The Discharger is responsible for monitoring and reporting in accordance with the following criteria.

Table 2. Effluent Monitoring¹

Constituent	Units	Sample Type	Sampling Frequency ²	Reporting Frequency ³
Flow Rate	mgd	Continuous	Continuous	Annually
Biological Oxygen Demand (BOD, 5 day @ 20 degrees celsius)	mg/L	Grab	Quarterly	Annually
Total Suspended Solids (TSS)	mg/L	Grab	Quarterly	Annually
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly	Annually
pH	pH Units	Grab	Quarterly	Annually
Total Nitrogen (as N)	mg/L	Grab	Quarterly	Annually
Chloride	mg/L	Grab	Quarterly	Annually
Sulfate	mg/L	Grab	Quarterly	Annually

¹Influent and effluent samples shall be collected on the same day.

²Quarterly is defined as once per three consecutive month period beginning with January, April, July, or October.

³Annually is defined as once per calendar year.

IV. GROUNDWATER MONITORING

Groundwater samples from the onsite groundwater supply wells shall be collected and analyzed in accordance with criteria specified in Table 3 below:

Table 3. Groundwater Monitoring

Constituent	Units	Sample Type	Sampling Frequency ¹	Reporting Frequency ²
Total Dissolved Solids (TDS)	mg/L	Grab	Quarterly	Annually
Total Nitrogen (as N)	mg/L	Grab	Quarterly	Annually

¹Quarterly is defined as once per three consecutive month period beginning with January, April, July, or October.

²Annually is defined as once per calendar year.

V. MAINTENANCE AND INSPECTION

- A. The Discharger shall inspect septic tanks annually and report the sludge depth and scum thickness (in feet) in each compartment annually.
- B. A record of inspections and maintenance activities shall be maintained by the Discharger for a minimum of five years. Records must include the date of the inspection and/or maintenance, and a summary of all observations or activities.

VI. SEWAGE SOLIDS

A log of the type, quantity, location, and manner of disposal of solids removed in the course of sewage treatment shall be maintained at the facility and a report summarizing the data shall be submitted annually.

VII. REPORTING REQUIREMENTS

- A. The Discharger shall submit an annual monitoring report containing the results of all monitoring specified in Sections II, III, and IV of this MRP. Annual monitoring reports must include the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the annual monitoring report.
- B. Laboratory reporting limits shall be lower than or equal to the discharge specifications. Constituents not detected below the method detection limit shall be reported as non-detect with the applicable value (e.g. ND<0.05 mg/L). Constituents detected between the laboratory reporting limit and method detection limit shall be reported as "estimated concentrations" or noted with appropriate laboratory flags.
- C. The annual monitoring report must be received by the San Diego Water Board no later than **5:00pm on January 30 each year**. The annual monitoring report must include the following:
 - 1. Influent, effluent, and groundwater analysis results arranged in a tabular format. The data shall be summarized to clearly illustrate whether the OWTS/ATU is operating in compliance with discharge specifications.
 - 2. A cover letter to the annual monitoring report. The information contained in the cover letter shall clearly identify violations of the Order; trends in water quality monitoring data, discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

3. A summary of all observations and activities completed for inspection and/or maintenance of the OWTS/ATU.
 4. A log of alarm notifications (specifying the date and time of alarm notifications) sent from the telemetric alarm, and a description of corrections or repairs made in response to alarm notifications.
 5. A log of the type, quantity, location, and manner of disposal of solids removed in the course of sewage treatment pursuant to Section VI of this MRP.
- D. Annual monitoring reports must be submitted to the San Diego Water Board to the address listed below, or as directed by the Executive Officer.

California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108
Attn: Supervisor Land Discharge Unit

In the event the San Diego Water Board changes offices, the new office address can be found on the following web page.

http://www.waterboards.ca.gov/sandiego/about_us/contact_us/

All monitoring reports shall be submitted to the San Diego Water Board by email. This reporting requirement should begin with the first submittal of a regular monitoring report required by this Order and includes information provided in monitoring reports, technical reports, applications, public comments, etc. The email submittal of reporting information must include a signed cover/transmittal letter (with the facility name, facility contact information, and permit number) and be sent via email to sandiego@waterboards.ca.gov.

Information required by this Order shall be emailed to sandiego@waterboards.ca.gov, but it does not replace routine email correspondence that may be sent to individual San Diego Water Board staff members. San Diego Water Board staff may request that specific individual items such as large drawings or maps continue to be provided in paper format. Documents that are 50 megabytes or larger should be transferred to a disk and mailed to the San Diego Water Board. All correspondence and documents submitted to the San Diego Water Board shall include the reference code "<staff name>" in the header or subject line, where "<staff name>" is the first initial and last name of the San Diego Water Board case manager.

- E. Annual monitoring reports must be signed and certified as described in Section IV. A.14 of the Order. Any person signing a document under this section shall make the following certification:

"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."

Ordered by: **TENTATIVE**
David W. Gibson
Executive Officer
DATE: February 11, 2015