#### **INFORMATION SHEET**

## TENTATIVE ADDENDUM NO.1 TO ORDER NO. R9-2009-0021

#### AN ADDENDUM MODIFYING ORDER NO. R9-2009-0021, MASTER RECLAMATION PERMIT FOR THE UNITED STATES MARINES CORPS BASE CAMP PENDLETON, SOUTHERN REGIONAL TERTIARY TREATMENT PLANT, CAMP PENDLETON, SAN DIEGO COUNTY

This Information Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of Tentative Addendum No.1 to Order No. R9-2009-0021 (Tentative Order).

#### I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

WDID	9 000001182					
Discharger	United States Marines Corps Base, Camp Pendleton					
Name of Facility	Southern Regional Tertiary Treatment Plant					
	Box 555008					
Facility Address	Camp Pendleton, San Diego, CA 92055					
	San Diego County					
Facility Contact, Title and Phone	Mr. Mark Bonsavage, Environmental Engineering Branch Head, 760-725-9753					
Mailing Address	Box 555008, Camp Pendleton, San Diego, CA 92055					
Billing Address	Mr. Mark Bonsavage, Box 555008, Camp Pendleton, San Diego, CA 92055					
Type of Facility	Water Reclamation Facility					
Threat to Water Quality	2					
Complexity	В					
<b>Reclamation Requirements</b>	Producer					
Facility Permitted Flow	7.5 million gallons per day (mgd)					
Average Annual Daily Flow	7.5 mgd					
Receiving Water	Ysidora Hydrologic Area (HA 902.10), the Mission Hydrologic Area (HSA 903.11), the Stuart HSA (901.53), and the Las Pulgas HSA (901.52)					
Receiving Water Type	Groundwater					

#### Table 1. Facility Information

A. The United States Marines Corps (hereinafter USMC or Discharger) submitted a Report of Waste Discharge, dated October 8, 2013, and applied for an amendment to the Master Reclamation Permit (MRP) for the discharge of disinfected tertiary treated wastewater from the Southern Regional Tertiary Treatment Plant (SRTTP). Addendum No. 1 to Order No. R9-2009-0021 (Addendum No. 1) makes the following modifications to Order No. R9-2009-0021:

- 1. Allows the USMC to use recycled water at new reuse sites and for uses not identified in Order No. R9-2009-0021.
- 2. Eliminates daily average discharge specifications for several chemical constituents and replaces them with 12-month average discharge specifications.
- 3. Modifies requirements for reporting spills or releases of recycled water, and plant overflow events.
- 4. Adds reporting requirements for adding new reuse sites, and
- 5. Allows the use of recycled water at new dual plumbed sites.

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.

B. The discharge of tertiary treated wastewater from the SRTTP will occur in the Ysidora Hydrologic Area (HA 902.10), the Mission Hydrologic Area (HSA 903.11), the Stuart HSA (901.53), and the Las Pulgas HSA (901.52).

# **II. FACILITY DESCRIPTION**

- A. Description of Southern Regional Tertiary Treatment Plant. The SRTTP provides secondary and tertiary treatment of domestic wastewater generated on the southern portion of the base. The primary treatment processes at the SRTTP consist of mechanically cleaned coarse screens, fine rotary drum screens, and grit collectors. Secondary treatment consists of seven sequencing batch reactor basins. The tertiary treatment process consists of a flow equalization basin, four concrete filter basins (each containing 12 disks), and disinfection contact basins. Sodium hypochlorite will be generated on site and used for disinfection. Solids handling facilities will consist of aerobic digesters, a gravity belt thickener, and a centrifuge. The capacity of the SRTTP is being expanded from a daily average flow of 5.0 to 7.5mgd.
- B. Increased Recycled Water Use. The USMC plans to add new landscape irrigation use sites and distribute recycled water from the SRTTP to dual plumbed use sites on the base, in which recycled water will be used for toilet and urinal flushing. The USMC has constructed a permanent recycled water fill station which will serve trucks that will transport recycled water for use at construction sites on the base (construction type uses include dust suppression, soil compaction, or concrete mixing). Lastly, treated tertiary recycled water will be used for in-plant uses such as cleaning of equipment and hydrostatic testing of treatment plant components.

# **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. California Environmental Quality Act. Adoption of Addendum No. 1 by the San Diego Water Board is exempted from the California Environmental Quality Act (CEQA) because it involves expansion of an existing facility. The USMC, as a federal facility is subject to the National Environmental Policy Act (NEPA). The USMC prepared an Environmental Impact Statement (EIS) prior to the San Diego Water Board adopting Order No. R9-2009-0021. The EIS satisfies the CEQA requirements and thereby serves as the Environmental Impact Report (EIR) in accordance with California Code of Regulations (CCR), Title 14, Article 14, section 15221. The USMC circulated the EIS for public review as broadly as CEQA requires pursuant to CCR, Title 14, section 15087(a). The San Diego Water Board circulated a notice stating that the EIS meets the requirements of CEQA and stating that it intends to rely on the EIS in place of an EIR pursuant to CCR, Title 14, section 15087. A public notice was published in the San Diego Union Tribune on July 26, 2008, posted on the San Diego Water Board web site on August 11, 2008, and attached to letters or emails sent to selected federal, state and local agencies on August 13, 2008.
- B. 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. The beneficial uses of groundwater designated for the Ysidora HA 902.10, the Mission Hydrologic Area (HSA 903.11), the Stuart HSA (901.53), and the Las Pulgas HSA (901.52) are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply. The water quality objectives for the Ysidora, Mission, and San Onofre HAs (the Stuart and Las Pulgas HSAs are within the San Onofre HA) are shown in the Table 3.

	CONS	TITUE	NT (mg/	L or a	s noted)	)							
HYDROLOGIC	(Concentrations not to be exceeded more than 10% of the time during any one year period)												
AREA	TDS	СІ	SO₄	% Na	NO <sub>3</sub> <sup>-</sup>	Fe	Mn	MBAS	В	ODOR	TURB (NTU)	COLOR (UNITS)	F
Ysidora Hydrologic Area (902.10) <sup>a</sup>	750 <sup>b</sup>	300	300 <sup>b</sup>	60	10 <sup>b</sup>	0.3 <sup>b</sup>	0.05 <sup>b</sup>	0.5	0.75 <sup>b</sup>	none	5	15	1.0
Mission Hydrologic Area (903.12)	1500	500	500	60	45	0.85	0.15	0.5	0.75	none	5	15	1.0
San Onofre HA (901.53)	500	250	250	60	45	0.3	0.05	0.5	0.75	none	5	15	1.0

#### Table 3. Basin Plan Groundwater Water Quality Objectives

Endnote a: The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the Hydrologic Area (Subarea) are as shown.

Endnote b: Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis of existing date, the water the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant water quality objective revisions may be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the San Diego Water Board if such projects do not degrade existing ground water quality to the aquifers affected by the recharge.

- C. **Recycled Water Policy**. The State Water Board established the Recycled Water Policy (Policy) in Resolution No. 2009-0011. The Policy establishes criteria for recycled water projects and permits. The intent of the Policy is to increase recycled water use, streamline permitting for appropriate projects, and manage salt and nutrients on a basin-wide approach. The Policy states that the appropriate way to address salts and nutrients is through development of regional and sub-regional salt and nutrient management plans. The USMC submitted a salt and nutrient management plan for the Lower Santa Margarita groundwater basin on November 8, 2012.
- 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 AMENDMENTS TO ORDER NO. R9-2009-0021

#### A. Modifying Discharge Specifications

1. The daily maximum discharge specifications established for chloride, sulfate, percent sodium, iron, manganese, methylene blue active substance, boron, color,

and fluoride in Section B.4 (Table 4) of Order R9-2009-0021 have been replaced with 12-month average discharge specifications. These changes are appropriate because groundwater quality will not be affected by short-term fluctuations in the quality of irrigation supplies due to effects of groundwater recharge and storage. Twelve month average discharge specifications are appropriate for tracking long-term water quality trends and assessing compliance with waste discharge requirements for recycled water irrigation operations.

Constituent	Units	30-Day	Daily	12-Month
		Average <sup>a</sup>	Maximum <sup>b</sup>	Average <sup>c</sup>
Biochemical	mg/l	30	45	
Oxygen Demand				
(BOD at 20 ℃)				
Total Suspended	mg/l	30	45	
Solids				
рН	pH Units	Within the limits	s of 6.5 to 8.5 at	t all times
Chloride	mg/l	NA	NA	325
Sulfate	mg/l	NA	NA	325
Percent Sodium <sup>d</sup>	%	NA	NA	60
Iron	mg/l	NA	NA	0.3
Manganese	mg/l	NA	NA	0.05
Methylene Blue	mg/l	NA	NA	0.5
Active	-			
Substances				
Boron	mg/l	NA	NA	0.6
Fluoride	mg/l	NA	NA	0.7

#### **Table 4: Discharge Specifications**

Table 4 notes:

<sup>a</sup> The 30-day average discharge specification shall apply to the arithmetic mean of the results of all samples collected during any calendar month.

<sup>b</sup> The daily maximum discharge specification shall apply to the results of a single composite or grab sample.

<sup>c</sup> The 12-month average discharge specification shall apply to the arithmetic mean of the results of all samples collected during a calendar year.

<sup>d</sup> The 12-month average discharge specification for percent sodium shall not be exceeded unless the Discharger demonstrates to the satisfaction of the San Diego Water Board that the exceedance is due solely due to chemical additions needed to meet other discharge specifications, and the Discharger demonstrates that all steps have been taken to optimize chemical additions to minimize exceedances.

2. The 30-day average daily dry weather flow to the SRTTP has been increased from 5.0 to 7.5 mgd to be consistent with the increased treatment capacity of the SRTTP.

#### **B. Modifying Purveyance Requirements**

Section C.5 has been added and requires the USMC to submit a report to the San Diego Water Board, the California Department of Public Health (CDPH), and the County of San Diego Department of Environmental Health (County DEH) prior to providing recycled water to any new reuse sites not identified in Order No. R9-2009-0021. Section C.7 has also been added and requires cross connection testing and inspection for new dual plumbed sites. These requirements are based on reporting and cross connection prevention requirements specified in California Code of Regulations, Title 22, Chapter 3 sections 60314 and 60323.

#### C. Modifying Standard Provisions

Sections E.3.has been modified to make it more consistent with Water Code 13529.2, while Section E-18 has been updated to include the San Diego Water Board's current address.

#### V. 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.

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 May 28, 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:	June 26, 2014
Time:	9:00 am
Location:	2375 Northside Drive, Suite 100
	San Diego, CA 92108

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 <u>http://www.waterboards.ca.gov/sandiego/board\_info/agendas/</u> 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 (ROWD), 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 619-516-1990.

#### 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. Alex Cali at 619-521-3355 or at acali@waterboards.ca.gov.