State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT

August 13, 2014

ITEM: 6

SUBJECT: Adoption of a Master Reclamation Permit for the United

States Marine Corps Base Camp Pendleton, Northern Regional Tertiary Treatment Plant, San Diego County. (Tentative Order No. R9-2014-0006 and Tentative

Monitoring and Reporting Program No. R9-2014-0006) (Alex

Cali)

PURPOSE: To consider adoption of Tentative Order No. R9-2014-0006

and Tentative Monitoring and Reporting Program No. R9-

2014-0006.

RECOMMENDATION: The San Diego Water Board staff recommends adoption of

the Tentative Order and Tentative Monitoring and Reporting

Program. (Supporting Documents Nos. 1 and 2).

KEY ISSUES:

1. The Master Reclamation Permit for the Northern Regional

Tertiary Treatment Plant authorizes the production and

reuse of highly treated recycled water at Camp

Pendleton. Once constructed, the NRTTP is expected to

produce about 2.4 million gallons per day (MGD), however, the necessary infrastructure to convey the recycled water to reuse sites is currently in the

conceptual design phase.

2. Recycled water that cannot be reused will be disposed of

in percolation ponds.

3. The NRTTP will replace Sewage Treatment Plants Nos.

11 and 12, which will be converted to pump stations.

(Supporting Document No. 3).

PRACTICAL VISION: The Tentative Order is consistent with Chapter 5 of the

Practical Vision¹ Strategy for Achieving a Sustainable Local Water Supply, because it permits the production and reuse of recycled water from the NRTTP (Supporting Document No. 4). The beneficial reuse of recycled water from NRTTP will aid the ongoing water conservation efforts at Camp

Pendleton (the Base), and will facilitate the goal of

¹ Practical Vision: http://www.waterboards.ca.gov/sandiego/water_issues/Practical_Vision/index.shtml

EOSR Item 6 August 13, 2014

increasing regional uses of recycled water as envisioned by the Recycled Water Policy.²

DISCUSSION:

The addition of the NRTTP (Supporting Documents 3 and 4) will allow the USMC to consolidate its wastewater treatment operations for the northern part of the Base, eliminating existing wastewater treatment operations at the outdated Sewage Treatment Plants (STPs) Nos. 11 and 12; and provide an additional source of water to support military operations. Camp Pendleton receives no imported water, relying instead on groundwater and recycled water to meet the needs of the base. The facility is the largest USMC base on the western coast of the United States, with approximately 70,000 sailors, marines and their dependents in residence.

The San Diego Water Board recently raised the USMC's permitted production of recycled water at the Base's other recycled water facility, the Southern Regional Tertiary Treatment Plant, from 5 to 7.5 million gallons per day (MGD) in June 2014. If adopted, the Master Reclamation Permit would authorize the NRTTP to provide an additional 2.4 MGD, raising the total permitted recycled water production by 33 percent or from 7.5 to 9.9 MGD. The proposed NRTTP will provide secondary and tertiary treatment of domestic wastewater generated on the northern portion of the Base and includes:

- Primary treatment processes, including mechanically cleaned coarse screens, rotary drum screens, and an aerated grit removal system,
- Secondary treatment processes, including four sequencing batch reactor basins which function as an aeration basin and a clarifier in a single unit. The batch reactor basins incorporate a series of waste water treatment processes, including: aerobic-anoxic-aerobic treatment, settling for solids, and decanting treated wastewater.
- Tertiary treatment processes, including granular sand media filters and two chlorine contact basins. At this time only the media filter will be in use. The existing disinfection treatment step will be activated at a later

² Recycled Water Policy:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf

Agenda Item no. 5: http://www.waterboards.ca.gov/sandiego/board_info/agendas/2014/Jun/Jun26.shtml

EOSR Item 6 August 13, 2014

- date after purveyance of recycled water begins at the NRTTP, and
- Solid waste treatment and management, processes, including management of waste activated sludge holding tanks, use of gravity belt thickeners, aerobic digesters, and centrifuges.

The NRTTP is designed to treat an annual average flow of 4.0 MGD, a maximum daily flow of 8.0 MGD, and a peak hourly flow of 12.0 MGD. Although the NRTTP will have an annual average design flow of 4.0 MGD, the actual effluent flow from the NRTTP to the percolation ponds will be up to the permitted flow rate of 2.4 MGD. The design flow is expected to be met once the NRTTP treatment processes and reuse sites are further developed. At that time if the NRTTP needs a greater disposal capacity than 2.4 MGD a permit revision would be necessary to the Master Reclamation Permit. This estimate is based on historical wastewater flow data for STPs Nos. 11 and 12.

STPs Nos. 11 and 12 treat municipal wastewater collected from the northern portion of the Base. The USMC plans to decommission STPs Nos. 11 and 12 and redirect their combined influent waste water streams to the NRTTP which will provide one centralized treatment plant for the northern portion of the Base. STP No. 11 is currently regulated by Order No. 97-13, while STP No. 12 is currently regulated by Order No. 98-05. Tentative Order No. R9-2014-0006 will supersede and rescind Orders Nos. 97-13 and 98-05.

The San Diego Water Board is the lead agency under the California Environmental Quality Act (CEQA) for the proposed project. In Finding No. II.F of the Tentative Order the San Diego Water Board certifies that a "Final Environmental Impact Statement (EIS) for Basewide Utilities Infrastructure" and other supporting information (Supporting Documents 5 and 6) were prepared before an Environmental Impact Report would otherwise be completed for the project. The EIS and other supporting information were noticed in the "Notice of Use of EIS and FSEA as EIR" on May 21, 2014 (Supporting Document No. 7), which complies with the provisions of CEQA and the CEQA Guidelines pursuant to California Code of Regulations, title 14, section 15221(a).

⁵ Waste Discharge Requirements for United States Marine Corps Camp Pendleton, San Mateo Sewage Treatment Plant (12), San Diego County.

Waste Discharge Requirements for United States Marines Corp Base Camp Pendleton, Horno Sewage Treatment Plant (10) and San Onofre Sewage Treatment Plant (11).

EOSR Item 6 August 13, 2014

During the public comment period only the USMC submitted a comment letter (Supporting Document No. 8). Supporting Document No. 9 contains responses to those comments. Staff agreed to make the changes requested by the USMC. Modifications made to the Tentative Order in response to comments are highlighted in underline/strikeout text in Supporting Document No. 10.

LEGAL CONCERNS: None

SUPPORTING 1. Tentative Order No. R9-2014-0006.

2. Tentative Monitoring and Reporting Program No. R9-2014-0006

3. Regional Map of NRTTP and STPs Nos. 11 and 12.

4. Detail map of the NRTTP.

Final Environmental Impact Statement.
 http://www.waterboards.ca.gov/sandiego/board_decisions/tentative_orders/docs/R9-2014-0006/07080423_Basewide_Infrastructure_EIS2[1].pdf

Final Supplemental Environmental Assessment
 http://www.waterboards.ca.gov/sandiego/board_decisio
 ns/tentative_orders/docs/R9-2014-
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7. Public Notice of intent to rely upon EIS and Supplemental EIS as final EIR.

8. Public Comments received on Tentative Order.

- 9. Responses to public comments on Tentative Order.
- 10. Modifications to Tentative Order in underline/strikeout

11. Public Notice for Agenda Item.

SIGNIFICANT CHANGES:

DOCUMENTS:

None. This is a new facility.

COMPLIANCE RECORD:

None. This is a new facility.

PUBLIC NOTICE:

Notification of this agenda item (Supporting Document No. 11) was posted on the San Diego Water Board web page on May 21, 2014. This action satisfies the public notification requirements of Water Code, division 7 section 13167.5 for a 30 day notice.