

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
December 16, 2015

ITEM: 11

SUBJECT: Information Item: Presentation on the San Ysidro Land Port of Entry Wastewater Treatment and Reuse Facility as a Model Facility for Sustainability (*Alex Cali*)

PURPOSE: To provide Board Members and the public with information about a domestic wastewater treatment and management project that applies sustainability and water reuse features.

RECOMMENDATION: This is an information item; since there will not be a Board action on this item there are no recommendations at this time.

KEY ISSUES:

1. The San Ysidro Land Port of Entry (SYLPOE) is a model facility for sustainability in the San Diego Region.
2. The SYLPOE captures and reuses storm water, and treats and reuses the wastewater generated onsite.

PRACTICAL VISION: The SYLPOE is the type of facility envisioned by the Strategy for Achieving a Sustainable Local Water Supply,¹ because the facility increases the production and use of recycled water in the region, and incorporates low impact development features for storm water capture and reuse. The beneficial reuse of recycled water from the Wastewater Treatment and Reuse Facility (WWTRF) at the SYLPOE aids ongoing water conservation efforts and is consistent with the goal of increasing regional uses of recycled water mandated by the statewide Recycled Water Policy.²

DISCUSSION: The SYLPOE is a federal facility that functions as an international border crossing. It is located in San Ysidro on

¹ Practical Vision, Chapter 5 at:
http://www.waterboards.ca.gov/sandiego/water_issues/Practical_Vision/docs/PV_5_Sustainable_Local_Water_Supply_Dec2013.pdf

² Available at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2013/rs2013_0003_a.pdf

the border between the United States and Mexico (Supporting Document 1). The WWTRF is designed to treat and reuse domestic wastewater generated from operations at the SYLPOE. The WWTRF is permanently connected to the City of San Diego's municipal sanitary sewer line as a fail-safe measure.

The treatment processes used by the WWTRF include screening units, a flow equalization tank, an anoxic tank, an aeration tank, ultrafiltration membranes - a membrane bioreactor treatment process, and an ultraviolet (UV) disinfection system. The treatment system is illustrated in the schematic in Supporting Document 2.

The treated effluent from the WWTRF is blended in a cistern with potable water from the City of San Diego, with collected on-site rainfall, and with condensate from building air conditioning units. The blended water is pumped from the cistern through a filtration and ozonation treatment system before reuse. The blended water is reused for toilet and urinal flushing, cooling tower make-up water, and landscape irrigation.

The WWTRF was enrolled in the Statewide General Order for Small Domestic Treatment Systems³ on September 23, 2015. The WWTRF is permitted to treat and reuse up to 50,000 gallons per day.

**SUPPORTING
DOCUMENTS:**

1. Project Vicinity Map
2. Treatment System Schematic

PUBLIC NOTICE:

The public notice for this item is satisfied by publication of the agenda and meeting notice pursuant to the Bagley-Keene Open Meeting Act.

³ Statewide General Order WQ-2014-0153-DWQ at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf