

San Diego Regional Water Quality Control Board

September 23, 2015

Mr. Damon Yee
United States General Services Administration
San Ysidro Land Port of Entry
720 East SanYsidro Blvd
San Diego, CA 92173

In reply refer to:
769664: Acali

Subject: Notice of Applicability for Order WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems, San Ysidro Land Port of Entry Wastewater Treatment and Reuse Facility

Mr. Yee:

This Notice of Applicability (NOA) enrolls the discharge from the San Ysidro Land Port of Entry Wastewater Treatment and Reuse Facility in Order WQ 2014-0153-DWQ, *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). A copy of the General Order is enclosed with this letter and is available online at:

http://www.swrcb.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

The San Ysidro Land Port of Entry (hereafter "SYLPOE" or "Discharger") submitted a Report of Waste Discharge (ROWD, dated April 2014) and filing fee for the discharge of up to 50,000 gallons per day (gpd) of disinfected tertiary treated wastewater from the SYLPOE Wastewater Treatment and Reuse Facility (WWTF). Based on the information presented in the ROWD, the WWTF and discharge is consistent with the requirements of the General Order.

1. FACILITY AND DISCHARGE DESCRIPTION

The SYLPOE Wastewater Treatment Facility includes screening units, a flow equalization tank, an anoxic tank, an aeration tank, ultrafiltration membranes (membrane bioreactor treatment process), and an ultraviolet (UV) disinfection system. The membrane bioreactor (MBR) treatment process was developed by BioprocessH2O of Portsmouth, RI. The MBR process uses external, stand-alone ultra-filtration (UF) membrane modules. Following biological treatment, the effluent is disinfected using a UV disinfection system. Once the effluent is disinfected it is discharged to a 315,600 gallon underground concrete storage tank (cistern). Discharged effluent is then blended in the cistern with potable water from the City of San Diego (City), collected on-site rainfall, and condensate from building air conditioning units. The blended water is used for toilet flushing, cooling tower make-up and landscape irrigation. The blended water is pumped from the cistern through a filtration and ozonation system before reuse. Potable water from the City will only be used when

rainwater is not available. Biosolids from the MBR treatment facility is discharged to the City's wastewater collection system for treatment and disposal. A Project Vicinity Map and a Treatment Schematic were provided in the ROWD and are enclosed (Enclosures Nos. 1 and 2).

2. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) action consists of enrolling the discharge from the SYLPOE WWTF in the General Order. Pursuant to title 14, California Code of Regulations (Cal. Code Regs.), section 15303, projects consisting of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure are exempt from the requirements of CEQA. The WWTF installation entailed installing wastewater treatment tanks and components that are completely enclosed inside an existing building. Therefore, enrolling the WWTF in the General Order is exempt from the requirements of CEQA.

3. SITE SPECIFIC REQUIREMENTS AND EFFLUENT LIMITATIONS

The wastewater treatment operator must be familiar with the requirements contained in the General Order, this Notice of Applicability (NOA), and the Monitoring and Reporting Program (MRP).

The General Order contains prohibitions and specifications that apply to all wastewater systems, and specifications that apply only to specific treatment and/or disposal systems. In addition to the requirements that apply to all systems, the specific requirements and effluent limitations for your wastewater treatment system are specified in Table 1, which is enclosed herein (Enclosure 3) and is made part of this NOA by reference.

a. Required Plans

Submit the following plans as described below:

- By July 6, 2015, the SYLPOE shall submit a *Spill Prevention and Emergency Response Plan* (Response Plan) consistent with the requirements of General Order Provision E.1.a.
- By July 6, 2015, the SYLPOE shall submit a *Sampling and Analysis Plan* consistent with the requirements of General Order Provision E.1.b.
- By July 6, 2015, the SYLPOE shall submit a *Sludge Management Plan* consistent with the requirements of General Order Provision E.1.c.

Upon approval of the plans by the San Diego Water Board, the discharger shall implement the plans.

b. Applicable Requirements of the General Order

Ensure the discharge complies with the following conditions and sections of the General Order referenced below:

i. Flow Limitation

The average monthly flow rate from the SYLPOE WWTF shall not exceed **50,000 gpd**.

ii. Applicable Effluent Limitations

The discharge must comply with effluent limitations specified in Section D.1.a (see Table 4) of the General Order. Please note only effluent limitations specified in Step 1 of Table 4 apply to the discharge.

iii. Setback Requirements

The discharge must comply with applicable setbacks to be maintained from septic tanks, aerobic treatment units, treatment systems or collection systems, and leach fields specified in Table 3 of the General Order.

iv. Subsurface Disposal Systems

The discharge must comply with the requirements pertaining to subsurface disposal systems specified in Section 6 of the General Order.

4. MONITORING AND REPORTING PROGRAM

The Discharger shall comply with the monitoring requirements below which are from the Monitoring and Reporting Program of the General Order.

- a. Submit quarterly and annual monitoring reports as specified in the reporting section of Attachment C (Information Sheet-Model Monitoring and Reporting Program) of the General Order. The first quarterly report due is the April-June 2015 quarterly report, which must be received by the San Diego Water Board on or before 5:00 pm on **August 1, 2015**. The first annual report due is the January-December 2015 annual report, which must be received by the San Diego Water Board on or before 5:00 pm on **March 1, 2016**.
- b. Conduct monitoring and submit monitoring results as specified in the sections of Attachment C of the General Order pertaining to Septic Tank Monitoring, Aerobic Treatment Unit Monitoring, Disinfection System Monitoring, Subsurface Disposal Area Monitoring, and Solids Disposal Monitoring.
- c. Collect influent samples from a location that provides representative samples of the wastewater quality. At a minimum, influent monitoring shall consist of the following:

Table 2. Influent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

- d. Collect effluent samples from a location that represents the effluent quality distributed to the disposal area as specified in Table 3 below:

Table 3. Effluent Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate ^a	gpd	Meter	Continuous	Quarterly
Biological Oxygen Demand	mg/L ^b	Grab	Monthly	Quarterly
Total Suspended Solids	mg/L ^b	Grab	Monthly	Quarterly
Total Nitrogen	mg/L ^b	Grab	Monthly	Quarterly

Table Notes:

- a. The total flow shall be measured daily, and an average daily flow calculated for each month. Flow rates may be measured on influent or effluent flow.
 - b. mg/L denotes milligrams per liter.
- e. Collect final effluent samples immediately downstream of the disinfection system as specified in Table 4

Table 4. Disinfection System Monitoring

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Total Coliform Organisms	MPN/100mL ^a	Grab	Monthly	Quarterly
Turbidity	NTU ^b	Grab/Meter	Monthly	Quarterly

Table Notes:

- a. MPN/100 mL denotes most probable number per 100 mL sample.
- b. NTU denotes nephelometric turbidity unit.

Table 5. Subsurface Disposal Area

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. ^a	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions ^b	Quarterly	Quarterly
Plant Growth ^c	Quarterly	Quarterly
Vectors or Animal Burrowing ^d	Quarterly	Quarterly

Table Notes:

- a. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
- b. Inspect a disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.
- c. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- d. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

- f. Monitor priority pollutants at the recycled water production facility. Sampling shall be consistent with Table 6:

Table 6. Recycled Water Monitoring

Constituent	Sampling Frequency	Reporting Frequency
Priority Pollutants	5 years	The next annual report.

5. ENFORCEMENT

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. If the discharge violates the terms or conditions listed in the NOA or the General Order, the San Diego Water Board may take enforcement action, to the extent allowed by federal law. Prior to allowing changes to the wastewater strength or generation rate, or if the method of waste disposal changes from that described in the ROWD, you must contact the San Diego Water Board to determine if submittal of a new or revised ROWD is required.

The SYLPOE will generate the waste subject to the terms and conditions of the General Order and will maintain exclusive control over the discharge. As such, the Discharger is primarily responsible for compliance with this General Order and this NOA.

Failure to comply with the requirements in the General Order, or in this NOA, could result in an enforcement action as authorized by provisions of the Water Code and other provisions of federal law. Discharges of wastes other than those described in the ROWD are prohibited.

6. ANNUAL FEES AND SAN DIEGO WATER BOARD CONTACT INFORMATION

The discharge has a threat to water quality and complexity rating of 3-B. The annual fee corresponding to a threat to water quality and complexity of 3-B is currently \$4,699; however, based on the flow rate, the discharge qualifies for the 50-percent fee discount. The annual fee for this discharge is therefore \$2,349. The fee is due and payable on an annual basis until enrollment in the General Order is formally terminated. To terminate enrollment, you must provide written notice if the wastewater discharge ceases so that the San Diego Water Board may terminate enrollment and avoid unnecessary billing.

Please review the conditions specified in this NOA and notify the San Diego Water Board if for any reason the discharge is not able to comply with any of the conditions specified in this NOA.

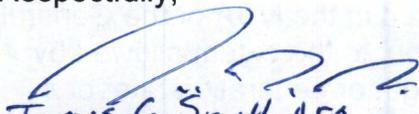
Please submit all future reports to the San Diego Water Board by email. The email submittals must include a signed cover or transmittal letter (with the facility name, facility contact information, and reference code: **769664:Acali**), and be sent via email to sandiego@waterboards.ca.gov. Routine email correspondence may be sent directly to individual San Diego Water Board staff members.

Documents that are 50 megabytes or larger should be transferred to a disk and mailed to the San Diego Water Board. For more extensive information provided in Reports of Waste

Discharge (ROWDs) and/or large documents; the San Diego Water Board staff may request that specific individual items such as appendices to large/complex technical reports and/or large drawings, grading plans, or maps continue to be provided in paper format. If you have any specific questions about email submittal procedures please contact Ms. Cleo Munoz in our Mission Support Unit, at 619-521-3384 or cleo.munoz@waterboards.ca.gov.

In the subject line of any response, please include reference number 769664:Acali. Please contact Mr. Alex Cali at (619) 521-3355, or at alex.cali@waterboards.ca.gov, if you have any questions or comments.

Respectfully,


for David W. Gibson
Executive Officer

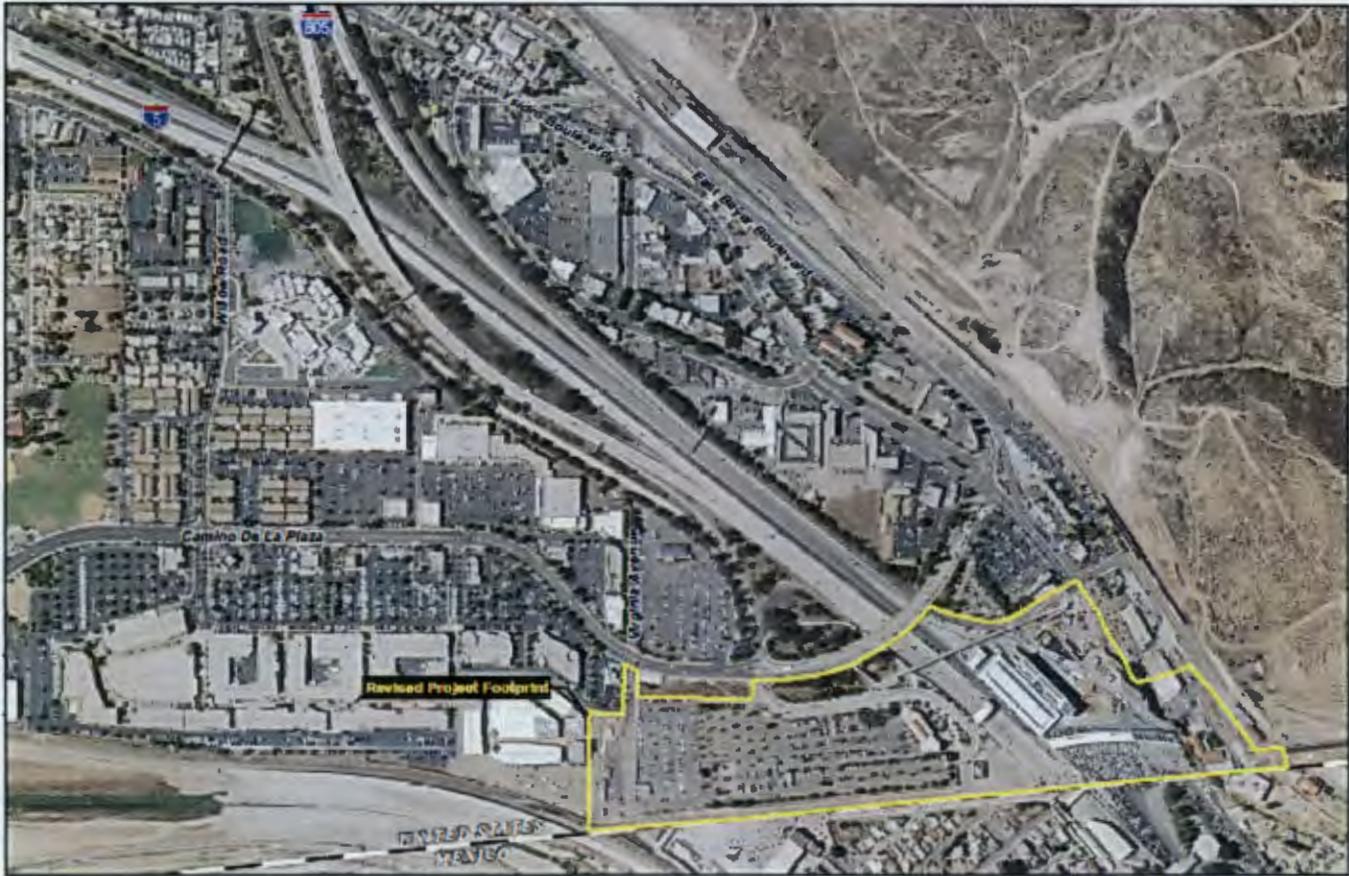
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Enclosures:

1. Project Vicinity Map
2. Treatment System Schematic
3. Table 1- Summary of General Order Requirements
4. Copy of General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems

CIWQS INFO	
Place ID	769664
Party ID	528410
Regulatory Measure ID	397032

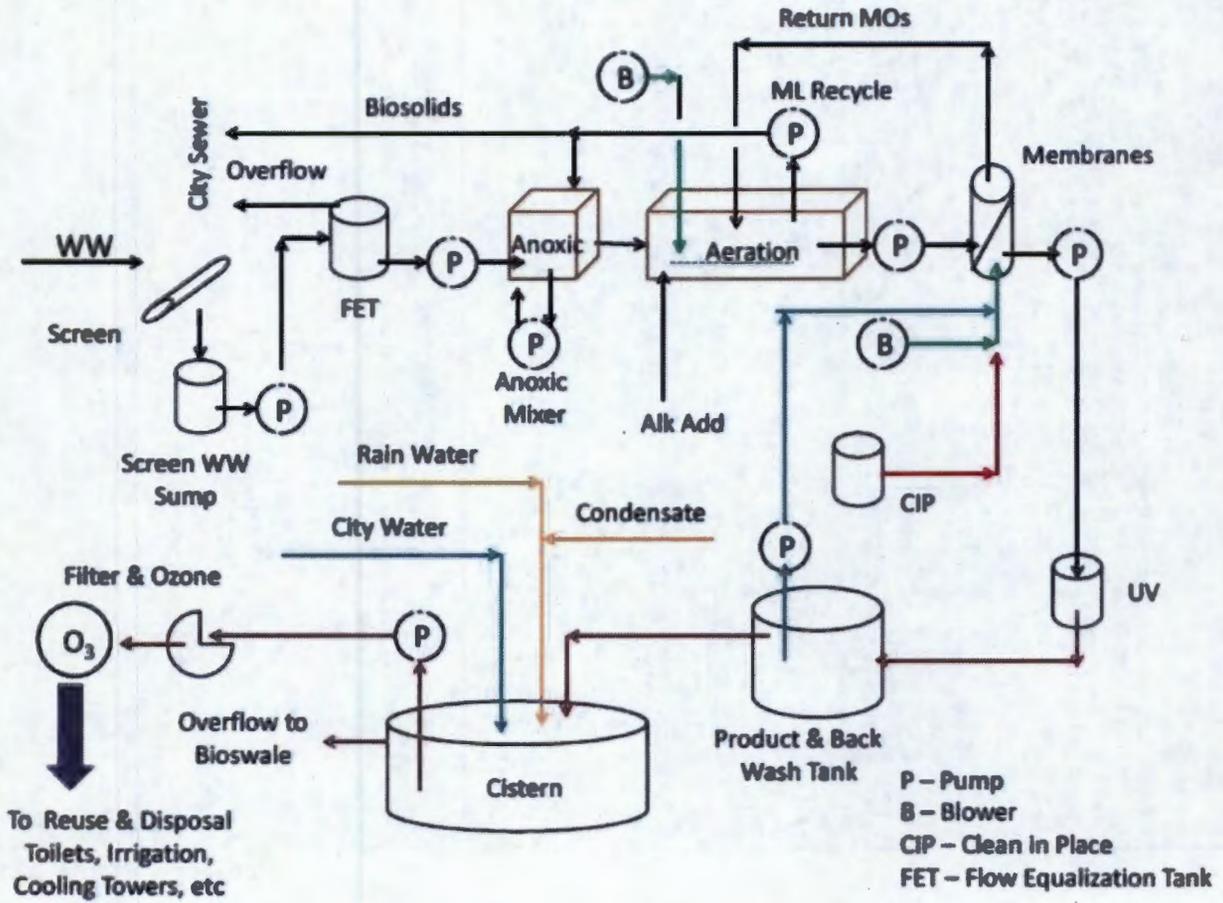
Enclosure 1:



Project Vicinity Map

SAN YSIDRO LPOE IMPROVEMENTS

Enclosure 2:



Simplified Wastewater Treatment System Process Flow Diagram

TABLE 1. SUMMARY OF GENERAL ORDER REQUIREMENTS

General Order Section	Page	Numeric Limit	Requirement (refer to General Order and NOA for details)
A. PROHIBITIONS			
A.1-A.11	15	--	Prohibitions
B. REQUIREMENTS BY WASTEWATER SYSTEM TYPE			
B.1a-B.1.l	16	--	All Wastewater Systems.
B.1.a	16	50,000	Wastewater Flow Limit (measured at headworks).
B.6.a-B.6.h	24	--	Subsurface Disposal Systems.
C. GROUNDWATER AND SURFACE WATER LIMITATIONS			
C.1	27	--	Refer to General Order section.
D. EFFLUENT LIMITATIONS			
Activated Sludge, MBR, or similar			
D.1.a	28	30/45 mg/L	Five Day Biochemical Oxygen Demand (BOD ₅) (refer to General Order Table 4 for averaging allowances).
D.1.a	28	30/45 mg/L	Total Suspended Solids (TSS) (refer to General Order Table 4 for averaging allowances).
D.1.a	28	50% ⁱ	Value represents the minimum percent reduction compared to the untreated wastewater value.
B.7.f	26	NTU	Turbidity - nephelometric turbidity units (NTU).
E. PROVISIONS			
Technical Report Preparation Requirements (list the reports below as appropriate)			
E.1.a	28	Have on-site.	Spill Prevention and Emergency Response Plan.
E.1.b	29	Have on-site.	Sampling and Analysis Plan.
E.2.h	32	Have on-site.	A copy of NOA and General Order.

ⁱ The value represents the minimum percent reduction compared to the untreated wastewater value. Reduction shall be calculated on an annual basis. In no case shall the reduction result in an effluent limitation lower than 10 mg/L total nitrogen.