

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF OCTOBER 19, 2007  
Updated September 5, 2007**

**ITEM: 13**

**SUBJECT: Waste Discharge Requirements for City of Solvang, Santa Barbara County – Order No. R3-2007-0069**

**KEY INFORMATION**

<b>Location:</b>	101 Alisal Street, Solvang, California 93463
<b>Discharger:</b>	City of Solvang
<b>Indirect Discharger:</b>	Santa Ynez Community Services District (domestic wastewater)
<b>Facility Name:</b>	City of Solvang Wastewater Treatment Facility
<b>Facility Address:</b>	101 South Alisal Street Solvang, CA 93463 Santa Barbara County
<b>Type of Waste:</b>	Domestic wastewater
<b>Treatment:</b>	Facility effluent is treated to secondary treatment standards.
<b>Disposal:</b>	To evaporation/percolation disposal ponds
<b>Facility Design Flow:</b>	Average flow of 1.5 million gallons per day (MGD)
<b>Facility Permitted Flow:</b>	Average flow of 1.5 MGD
<b>Existing Order:</b>	Waste Discharge Requirements Order No. 97-20
<b>Recycling Requirements:</b>	None
<b>This Action:</b>	Reissue Waste Discharger Requirements

**SUMMARY**

The City of Solvang (Discharger) owns and operates municipal wastewater collection, treatment, and land disposal systems located adjacent to the Santa Ynez River, southwest of the City. The Santa Ynez Community Services District (CSD) retains ownership and direct responsibility for wastewater and conveyance systems up to the Fjord pumping station, which is owned and operated by the Discharger.

This Order improves on the existing order by incorporating updated statewide and regionwide policies. This Order replaces existing Waste Discharge Requirements for

the City of Solvang Wastewater Treatment Plant discharges to evaporation/percolation ponds located in the alluvium of Santa Ynez River.

## **DISCUSSION**

### **Facility Description**

The Discharger's Wastewater Treatment Plant is located in Santa Barbara County at 101 Alisal Street, southwest of the City of Solvang, adjacent to Santa Ynez River. The Discharger receives wastewater from both the City of Solvang and the Santa Ynez CSD. The Discharger owns and operates two lift stations (Fjord Street and Alisal Street), 40 miles of collection piping, one mile of force main interceptor line and serves approximately 5,334 service connections.

The treatment facility has a design capacity of 1.5 million gallons a day (MGD). The wastewater treatment processes include a mechanical bar screen, screenings compactor and washer, vortex grit separator, and a sequencing batch reactor where the wastewater is mixed, aerated, and settled. Effluent from the reactor is decanted into a polishing pond. Effluent from the polishing pond discharges to the large evaporation/percolation pond. On high flow days or significant rain events, the large evaporation/percolation pond discharges into a small evaporation/percolation pond for additional storage.

Waste sludge from the sequencing batch reactor is pumped to the aerobic digester. After digestion, sludge is dewatered by a belt press. Biosolids accumulate in roll-off bins and are hauled away by an offsite composting contractor. Wastewater from the belt press is routed back to the facility's headworks.

### **Existing Order**

The Discharger currently operates under Waste Discharge Requirements Order No. 97-20 (Order No. 97-20). Order No. 97-20 requires the Discharger comply with standard provisions, prohibitions, effluent limitations, and groundwater limitations. Furthermore, the Discharger is required to conduct water supply, influent, effluent, and groundwater monitoring.

On May 29, 2007, the Discharger enrolled in the "Statewide General Waste Discharge for Sanitary Sewer Systems Order No. 2006-0003-DWQ (General WDR)." The General WDR, at a minimum, requires the Discharger to develop a Sanitary Sewer Management Plan (SSMP). The Discharger, when developing the SSMP, is required to include organization goals; organization structure; legal authority; measures and activities; design and performance provisions; monitoring; measurement and plan modifications; overflow emergency response plan, source control program, system evaluation and capacity assurance plan, and annual updates. The General WDR also requires the Discharger to report sanitary sewer spills using the web-based Sanitary Sewer Overflow Database.

Santa Ynez CSD enrolled separately in the General WDR program on March 30, 2007. Santa Ynez CSD is obligated to comply with the same collection system requirements as the Discharger.

### Compliance History

Central Coast Water Board staff conducted a review of the Discharger's compliance history. Staff reviewed self-monitoring reports from 2004 to 2007, and annual report summaries from 2004 to 2006. Staff reviewed both effluent violations as well as sanitary sewer overflows (SSOs) events. The following table provides numbers of effluent violations from 2004 to 2007.

City of Solvang Effluent <sup>a</sup> Violation Summary				
Constituents	Number of Violations			
	2007	2006	2005	2004
Average Daily Flow	0	0	0	0
BOD	0	0	0	0
Total Suspended Solids	0	0	0	0
Total Dissolved Solids	0	0	0	4
pH	0	0	0	0
Settleable Solids	0	0	0	0
Sodium	1	0	1	8
Chloride	5	6	9	11

a – Total chlorine residual, chlorine use, and total coliform organisms data was not gathered because the discharger was not required to chlorinate, in accordance with Section B.2, footnote 1 of Order No. 97-20.

The effluent violation summary table demonstrates that compliance with the chloride and sodium effluent limitations is progressively improving. An ordinance adopted by the City in 1997 prohibits nonresidential water softener use within City boundaries. Furthermore, the Discharger has distributed press releases encouraging residences to use canister exchange water softener systems as opposed to automatic regenerating water softener systems. The Discharger indicated the change in water softener systems will greatly affect the total dissolved solids, chlorides, and sodium loading into the wastewater treatment plant, which will improve effluent quality. Another ordinance allows the Discharger to inspect anyone within City boundaries using a water softener system of any type at a reasonable time. These ordinances demonstrate the Discharger's efforts to manage salts within their jurisdiction. However, the Discharger continues to address water softener use in the residential community.

The following table provides numbers of sanitary system overflows from 2004 to 2007.

City of Solvang SSO Summary <sup>a</sup>				
SSO Category	Number of SSOs			
	2007	2006	2005	2004
Category 1 <sup>b</sup>	0	1	0	2
Category 2 <sup>c</sup>	0	0	0	3

a – data was obtained from the CIWQS database

b – Spills greater than 1,000 gallons or discharges into a water body

c – Spills that are less than 1,000 gallons and do not discharge into a water body

Historical sanitary sewage spills appear to be minimal relative to other similarly sized, publicly owned treatment works within the region. The Discharger is currently enrolled in the statewide General WDR for the management of its sanitary sewer system. Enrollment in the General WDR will require the Discharger to develop and implement a Sanitary Sewer Management Plan (SSMP), which will formalize and improve the existing sanitary system management program. The proposed Order does not include additional sanitary sewer requirements.

### Purpose of Proposed Order

The Discharger submitted a Report of Waste Discharge dated June 6, 2007. The Report of Waste Discharge requested removing references regarding reclaimed wastewater irrigation activities to the adjacent ranch property. The Discharger indicated that irrigation pumps and piping are no longer capable of being used. Furthermore, the Discharger has not reclaimed wastewater via irrigation in approximately eight years and the Discharger currently has no plans to recycle.

The proposed Order No. R3-2007-0069 revises the existing Order No. 97-20, which was adopted by the Central Coast Water Board on September 5, 1997.

### Proposed Changes

#### Waste Discharge Requirements:

1. Groundwater requirements were included in Section C "Groundwater Limitations" of the proposed Order. The inclusion of the groundwater language is consistent with Basin Plan water quality objectives in order to protect beneficial uses.
2. Salt loading to groundwater has been a regionwide concern. This Order proposes that the Discharger address salts through the development of a Salts Management Program. The Salts Management Program will require the Discharger to assess current contributions (i.e., water supply use and residential water softeners use), assess current data to determine salts concentration in the wastewater system, and evaluate current practices and identify potential practices that will improve salt concentration in the Discharger's effluent.

In accordance with Assembly Bill 334, the Discharger adopted two ordinances that prohibit nonresidential water softener use and allow the inspection of residential water softer systems as needed. These two ordinances have been in effect for over 10 years. In addition, the Discharger has proactively developed and distributed press releases that address residential water softener use and its effects if not used properly. Even with the Discharger's diligent efforts, a formalized management program will facilitate an understanding of salts loading in the groundwater basin, help track salt concentrations throughout the entire wastewater system, and prompt the development of solutions to manage salts within the City's jurisdiction.

#### Monitoring and Reporting Program:

1. Influent monitoring has been modified to include sampling and analysis for total dissolved solids, sodium, and chloride. Each constituent shall be sampled and analyzed monthly. Influent sample collection should coincide with monthly effluent sample collections days.
2. Effluent monitoring has been modified to include monthly sampling and analysis for nitrate (as nitrogen). Staff recommends the addition because nitrate monitoring is necessary to track effluent concentrations versus groundwater basin trends.
3. Effluent monitoring has been modified to increase sampling and analysis frequency for total dissolved solids, sodium, and chloride. Effluent sample collection will coincide with monthly influent collection sample days.

#### **ENVIRONMENTAL SUMMARY**

Waste discharge requirements for the City of Solvang Wastewater Treatment Plant discharges are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21100, et seq.) in accordance with Section 13389 of the California Water Code.

In 1992, the Discharger certified an Environmental Impact Report addressing the wastewater treatment plant expansion up to 2.5 million gallons per day in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations. However, wastewater treatment plant expansion is not anticipated at this time due to lack of demand.

#### **PUBLIC NOTIFICATION**

Central Coast Water Board staff notified the Discharger and all known interested parties of its intent to revise waste discharge requirements for the City of Solvang on July 26, 2007. The notification provided interested agencies with a copy of the proposed order and an opportunity to submit written views and comments by August 26, 2007. The

following known interested agencies were notified. The Discharger posted the notice in the Santa Barbra News Press on August 26, 2007.

City of Solvang  
Santa Ynez Community Services District  
Santa Barbara County Environmental Health Services Department  
Santa Ynez River Water Conservation District  
Santa Barbara ChannelKeeper

**COMMENTS**

No written comments were submitted.

**RECOMMENDATION**

Adopt Waste Discharger Requirements Order No. R3-2007-0069 as proposed.

**ATTACHMENTS**

1. WDR Order No. R3-2007-0069
2. Monitoring and Reporting Program No. R3-2007-0069