

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

**STAFF REPORT FOR REGULAR MEETING MARCH 16-17, 2011**

Prepared on February 17, 2011

**ITEM NUMBER: 8**

**SUBJECT: Enforcement Report**

**DISCUSSION**

**Violations Listing**

Staff uses the California Integrated Water Quality System (CIWQS) to track Water Board data, including violations and enforcement actions. Attachment 1 is a CIWQS list of violations that occurred between November 1, 2010, and December 31, 2010. CIWQS has a sewer system overflow (SSO) module which provides tracking and reporting of such spills.

**Summary of Enforcement Activities**

The following information summarizes significant enforcement action taken by the Water Board during the period between January 1, 2011, and January 31, 2011.

Notices of Violation

Main Street Farms, AW# 236, San Antonio Ranch Four, North of the City of Lompoc, Santa Barbara County

Expedited Payment Letters for Mandatory Minimum Penalties

Lompoc Regional WWTP, Santa Barbara County

El Estero WWTP, Santa Barbara County

City of El Paso De Robles WWTP, San Luis Obispo County

Conoco Phillips Santa Maria Refinery, San Luis Obispo County

Avila WWTP, San Luis Obispo County (Withdrawn)

California Men's Colony WWTP, San Luis Obispo County

San Luis Obispo WWTP, San Luis Obispo County

**Permit Requirements Related To Storms, Flooding, Spills, and Maintenance**

At the February 3, 2011 meeting, the Board discussed several recent sewage spills related to rain events. Staff reviewed waste discharge requirements and NPDES permits and compiled the following information regarding dischargers' responsibilities regarding spills, plant maintenance, and spill reporting.

NPDES Permits

Prohibitions

The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated

wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited.

#### Federal Standard Provisions

4. Proper Operation and Maintenance. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].
5. Twenty-Four Hour Reporting
  - a. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
  - b. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
    - i. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
    - ii. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].
  - c. The Central Coast Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR §122.41(l)(6)(iii)].

#### Central Coast NPDES Standard Provisions

All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.

Safeguards shall be provided to assure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect of accidental discharges shall:

- i. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment

unit outage, and failure of process equipment, tanks and pipes should be considered.)

ii. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.

By January 30th of each year, the discharger shall submit an annual report to the Central Coast Water Board...The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described Central Coast Standard Provision – Provision B.9., above), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility.

#### Waste Discharge Requirements:

1. Facilities and systems for collection, treatment, and control of wastewater shall be properly operated and maintained. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staff and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.
2. Transport and treatment facilities and permanent disposal ponds shall be adequately protected against overflow, flooding, or washout as the result of a 100-year frequency flood or 100-year, 24-hour storm.
3. Safeguards shall be provided to assure maximal compliance with all terms and conditions of this order. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the effect of accidental discharges shall:
  - a) identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.)
  - b) evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the order.
4. Physical facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet weather season.
5. Any noncompliance that may endanger health or the environment shall be reported orally within 24 hours from the time the discharger becomes aware of the circumstances (telephone: 805-549-3147). Unless waived by the Executive Officer of the Regional Board, a written report shall be submitted within five (5)

days of awareness and shall contain a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times) or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. This provision includes, but is not limited to:

- a) violation of a discharge prohibition;
- b) any "upset", "overflow", or "bypass";
- c) violation of a discharge limitation for any "hazardous substance."

#### General Sanitary Sewer System Order

1. For any discharge of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over the affected water bodies, and the appropriate Regional Water Quality Control Board.
3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

#### **Pasadera Wastewater/Recycling Facility (Monterey County); Salt Violations Discussion**

The Pasadera wastewater treatment and reclamation facility is located in Monterey County along Highway 68. The facility has approximately 378 service connections serving two developments, Laguna Seca Ranch and Pasadera (formerly Rancho Monterey). The residential units primarily consist of high-end country/golf club estates with a limited number of lower-income residential units. The facility also serves the Pasadera County Club. California American Water Company (Cal Am) owns and operates the facility, which generates approximately 50K to 75K gallons per day (2010 range of monthly average daily flows) of disinfected tertiary recycled water for reuse/irrigation on the Pasadera County Club Golf

Course. All of the wastewater from the facility is recycled for reuse on the golf course. The recycled water is stored in a lined storage reservoir where it is blended with well water at a ratio of about ten parts well water to one part recycled water before application on the golf course. Blending is not only required to meet irrigation demand, but also to dilute salt concentrations to protect the golf course greens and turf. The facility is permitted under Waste Discharge and Recycled Water Producer Requirements Order No. 98-58 and application of the recycled water is permitted under Recycled Water User Requirements Order No. 98-59.

The facility has had difficulty meeting the effluent limitations for total dissolved solids, sodium, and chloride (TDS, Na and Cl, or collectively salts) contained within Order No. 98-58 since the permit was issued. Effluent limitations for recycled water discharged to the recycled water storage and irrigation pond are 600 mg/L for TDS and 125 mg/L for Na and Cl (each). The effluent limitations are substantiated in the staff report for Order No. 98-58 only by stating, "concentrations are based on staff's professional judgment, similar plant performance, and are for the protection of public health and groundwater beneficial uses." Monitoring requirements of Order No. 98-58 were revised in 2002 to include semiannual water supply monitoring for TDS, Na, and Cl and to increase effluent monitoring from quarterly to weekly for these constituents. The following table compares the minimum, maximum, and average water supply, influent, and effluent concentrations for TDS, Na, and Cl for the last five years:

(mg/L)	Water Supply			Facility Influent			Facility Effluent		
	TDS	Na	Cl	TDS	Na	Cl	TDS	Na	Cl
<b>min</b>	639	105	132	853	97	146	1,260	257	428
<b>max</b>	655	149	179	1,970	264	748	1,890	423	702
<b>avg</b>	647	130	157	1,249	200	352	1,557	314	562

Note: Data based on 2006 to 2010 coincident semiannual monitoring data

Monitoring data indicate the water supply (Seaside Groundwater Basin) concentrations for TDS, Na, and Cl regularly exceed the effluent limitations and that domestic use contributes to approximately 54 to 124 percent increases in salt constituent loading to the facility based on comparison of average concentrations. The facility contributes approximately 25 to 60 percent increases in salt constituent concentrations from the influent to the effluent. Domestic contributions of TDS, Na, and Cl are very high due to the relatively poor water supply quality with regard to hardness (300 mg/L as CaCO<sub>3</sub>) and alkalinity and the subsequent use of residential water softeners. A large number of homes within the development, in addition to the Pasadera Country Club, also flush spas and pools into the wastewater collection system that contain potentially high concentrations of salts. Contributions of salts within the treatment process are governed by the use of sodium hypochlorite (contains both Na and Cl) to comply with Title 22 Water Recycling Criteria for disinfection.

Although several notices of violation have been issued to the facility regarding "salt violations," neither Monterey County (facility owner/operator prior to April 2003), or Cal Am have been able to reduce salt loading to the facility. This is because no other water supply is currently available and it is very difficult to regulate the use of domestic water softeners. Cal Am has considered implementing alternative disinfection process such as ultraviolet (UV) disinfection to reduce salt loading, but the cost-benefit of doing so is not favorable given the resulting reduction in salt loading would still not result in compliance with the existing effluent limitations. Cal Am has also conducted outreach with the various homeowners' associations and the County Club with limited success.

The numerous and ongoing TDS, Na and Cl effluent limitation violations are a result of several factors, including the following: 1) poor water supply quality, 2) widespread use of residential self-regenerating water softeners, 3) spa and pool water discharges to the collection system, 4) use of sodium hypochlorite to meet disinfection requirements, and 5) effluent limitations that we should review, considering the facility's current water supply. Staff will propose revisions to the permit for this facility during the next scheduled review to establish reasonable and protective effluent limitations and to facilitate realistic reductions in salt loading from the facility. Specifically, in evaluating the effluent limitations, staff will consider water supply and receiving water (groundwater) quality, blending with higher quality water prior to reuse, and controllable reductions in salt loading. In addition, the revised order should contain specific findings consistent with CWC Section 13148(e) to give Cal Am or the County the authority to regulate residential self-regenerating water softeners. The revised order should also include findings and specifications regarding the development and implementation of salt and nutrient management plans pursuant to the SWRCB Recycled Water Policy.

### **RECOMMENDATION**

This report is for Board information. The Board may provide direction to staff.

### **ATTACHMENTS**

- 1) Violation List
- 2) List of Abbreviations