

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906**

**WASTE DISCHARGE REQUIREMENTS  
ORDER NO. R3-2007-0008**

(Waste Discharger Identification No. 3 271001001)

**FOR**

**CALIFORNIA UTILITIES SERVICE  
MONTEREY COUNTY**

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds that:

**FACILITY INFORMATION**

1. California Utilities Service, Inc. (hereafter referred to as the "Discharger") owns and operates a wastewater collection, treatment, and disposal facility (hereafter referred to as the "Facility"). The Facility was historically owned and operated by Salinas Utilities Services and Toro Management Services until approximately March 1986. The Facility has been in operation since 1965.
2. The Facility is located in northern Monterey County, north of Reservation Road (just east of the intersection of Reservation Road and Highway 68), approximately three miles southwest of the City of Salinas, as shown on Attachment A of this Order. The Facility address is 16625 Reservation Road, Salinas. The lower reach of the Salinas River is adjacent to and north of Reservation Road.
3. The Discharger provides wastewater collection and treatment services to the residential and light commercial areas in the Toro area along Highway 68 south of Reservation Road. The Facility currently serves 1,114 connections primarily consisting of residential dwellings. Light commercial facilities served by the Facility

include an elementary school, the Corral de Tierra Country Club, the Cypress Church, and a number of small business parks and office buildings.

**Treatment & Disposal**

4. The treatment Facility consists of an emergency influent storage basin, lift station, influent screen, two sequencing batch reactor (SBR) tanks, chlorine contact tank, effluent pump station, effluent storage pond, aerobic sludge digester, sludge drying beds, and a dewatered sludge storage area. The Facility also has influent and effluent flow metering.
5. The emergency influent storage pond has a storage capacity of approximately 3.23 million gallons (approximately ten day storage capacity at an average daily design flow of 300,000 gallons per day). The effluent storage pond has an approximately 7.8 million gallon storage capacity.
6. The Facility is reportedly designed to handle average daily flow rates of 300,000 gallons per day and peak daily flow of up to 450,000 gallons per day (gpd). Influent flow data submitted by the Discharger as part of the 2005 annual monitoring report indicates average monthly flow rates for the Facility are approximately 214,000 gpd.

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February 9, 2007 Board Meeting  
California Utilities Service, Inc.

(This value is an average of the average monthly flow rates provided by the Discharger.)

7. An evaluation of reported average monthly flows for 2005 by Regional Board staff indicate there is no significant difference in average dry weather (May through October) and average wet weather (November through April) flows. The ratios of average wet weather flow to average dry weather flow were 0.88 and 1.01 for the Facility in 2004 and 2005, respectively. Ratios close to one indicate a relatively low incidence of inflow and infiltration. The 2004 ratio of less than one is somewhat anomalous given wet weather flows are generally greater than dry weather flows.
8. Wastewater treatment data for 2004 and 2005 is summarized in the following table for the Facility.

**Summary of 2005 Effluent Data for  
California Utilities Service**

Parameter	2004	2005
<b>Annual average/minimum/maximum values (units are mg/L or as otherwise noted)</b>		
Influent Flow <sup>a</sup> (mgd)	0.200	0.214
	0.158	0.203
	0.242	0.237
BOD <sub>5</sub> <sup>b</sup>	NR	NR
Total Suspended Solids <sup>b</sup>	NR	NR
Settleable Solids (ml/L) <sup>e</sup>	0.11	0.11
	0.1	0.1
	0.2	0.14
Total Kjeldhal Nitrogen (as N) <sup>c</sup>	4.69	4.13
	1.7	1.1
	7.3	9.4
Nitrate (as N) <sup>c</sup>	12.39	12.6
	0.28	6.3
	19	16.0
TDS <sup>d</sup>	NA	1295
		1240
		1350
Sodium <sup>d</sup>	NA	280
		270
		290
Chloride <sup>d</sup>	NA	400
		390
		410
Sulfate <sup>d</sup>	NA	84
		82
		86
Boron <sup>d</sup>	NA	0.40
		0.40
		0.40
pH <sup>c</sup>	7.4	7.3
	7.2	7.2
	7.7	7.5
Chlorine Residual <sup>a</sup>	4.37	5.0
	1.6	4.4
	5.5	5.5
Total Coliform <sup>a</sup> (mpn/100 ml)	239.5	158.8
	8.5	14
	877	500

Notes:

- a. Collected daily
- b. (NR) Not required as part of Order No. 95-23
- c. Collected monthly
- d. Collected semiannually; (NA) Not available, Discharger failed to collect samples
- e. Collected three times per week

9. Although no influent or effluent wastewater data has been required other than for effluent settleable solids and nitrogen that would indicate relative treatment efficiency and waste stabilization, the limited data and visual observations by Central Coast Water Board staff during inspections indicate the Facility achieves good waste stabilization and high effluent clarity. The Facility is likely achieving relatively high biochemical oxygen demand and total suspended solids removals as is consistent with sequencing batch reactor treatment systems. Nitrogen removal appears to be moderate with average effluent nitrate and total Kjeldhal nitrogen concentrations of around 12 mg/L and 4.5 mg/L, respectively. However, properly designed and operated sequencing batch reactor treatment units can achieve effluent nitrate concentrations of around 5 mg/L.
  10. Effluent chlorine residual and total coliform data also indicates a high level of treatment with regard to pathogen removal. However, the necessity for disinfection for pathogen removal and related monitoring is in question given the location and method of effluent disposal. The effluent is land applied via overhead irrigation to an area with no public access. Title 22, Division 4, Chapter 3, Section 60304(d) of the California Code of Regulations allows the use of un-disinfected secondary effluent for irrigation of non-food bearing trees or fodder and fiber crops. Moreover, Section 60303 provides an exemption from the Title 22 Chapter 3 Water Recycling Criteria requirements provided public access to the recycled water use site is restricted. The Discharger is requesting to discontinue disinfection and effluent monitoring for chlorine residual and total coliform. Other facilities in the Central Coast Region that treat and dispose of domestic wastewater in a similar fashion are not required to disinfect the effluent prior to disposal and are not evaluated as recycling facilities as is consistent with current regulations.
  11. The Discharger owns about 112 acres of land within and immediately adjacent to (north of) the Salinas River Channel. This land is bordered to the north by an agricultural service road and active agricultural areas on an elevated embankment to the north. Of the approximately 74 acres of land suitable for spray irrigation disposal of effluent, the Discharger is currently applying treated wastewater to approximately 38 acres. The Discharger is currently expanding its irrigation system within the 74 acres to spread the effluent over a larger area. The irrigation area is at a lower elevation than the adjacent agricultural road and fields to the north and appears to be within the former Salinas River channel. The irrigation disposal area is now separated from the active river channel by an earthen levee and dense riparian vegetation. Setbacks from the irrigation disposal area to the active Salinas River channel are unknown, but estimated to be in excess of 100 feet based on review of aerial photographs.
  12. Treated effluent is conveyed from the treatment facility south of the Salinas River to the spray irrigation disposal area north of the river via an eight inch diameter pipe located 20 feet below the river bottom. The subsurface effluent pipe was installed in 2001. The historic two-inch diameter pipe suspended over the river channel is maintained for backup purposes. Two full time staff maintain and operate the irrigation disposal area. Wastewater application is rotated daily within the irrigation disposal area to facilitate regular wetting and drying cycles and to disc the soil.
  13. Biosolids (i.e., sewage sludge) wasted from the SBRs are treated via an aerobic digester and are dewatered at the Facility in a sludge drying bed prior to disposal at the Monterey Regional Landfill as vegetative cover soil amendment. The Facility produced approximately 301 tons of dewatered biosolids in 2005.
- Water Supply**
14. The potable water supply for the Facility wastewater service area is provided by California Water Service Company (Cal Water), Cal-Am Water Company, and the Toro Water Company via water supply wells located in the Toro area. The total

depths and screen intervals of the wells are unknown. As shown in the following table, the water supply is of poor to moderate quality with regard to analyzed constituents. The water provided by Cal Water is the most representative of the water quality as they supply water to most of the homes in the Facility service area.

#### Water Supply Quality Data for Facility Service Area<sup>a</sup>

Parameter (mg/L)	Cal-Am	Cal Water	Toro
Total Dissolved Solids	672	488	937
Sodium	97	75	183
Chloride	142	100	365
Sulfate <sup>b</sup>	92	54	37
Nitrate (as NO <sub>3</sub> )	2.5	7	12

#### Notes:

- Average data from 2003 water purveyor's consumer confidence reports unless noted otherwise.
- August 2005 annual water supply monitoring

#### Groundwater

- The spray irrigation areas are located primarily on alluvial soils consisting of sands, gravels, and clays. There are perched groundwater zones beneath the disposal areas. Clay aquitards of unknown thickness depth in the vicinity of the disposal areas likely separate the shallow groundwater from the deeper water bearing zones used for domestic supply as is generally consistent within the Salinas River groundwater basin. Due to the proximity of the discharge to the Salinas River channel it is uncertain what affect the discharge has on Salinas River underflow.
- There are four groundwater monitoring wells located within the spray irrigation disposal area as shown on Attachment B. Monitoring well MW-1 is located in the upgradient portion of the disposal area, MW-2 and MW-3 are within central portions of the disposal area, and MW-4 is located in the downgradient portion of the disposal area. The groundwater flow direction is generally consistent with the flow direction of the Salinas River as supported by depth

to groundwater data from the monitoring wells. Semiannual groundwater (receiving water) monitoring was required by the previous order in February and August for all monitoring wells. An evaluation of available groundwater data is presented in the following table:

#### Summary of Semiannual Groundwater Data

Parameter	MW-1	MW-2	MW-3	MW-4
	Avg/Min/Max <sup>a</sup> (mg/L)			
Groundwater Depth (ft)	14.9 14.5 15.3	16 15.5 16.5	14.2 13.6 14.8	18.5 17.5 19.5
Total Dissolved Solids	1583 1430 1980	1380 1290 1490	1660 1530 1790	1135 340 1470
Sodium	163 150 200	185 140 280	298 280 340	178 78 300
Chloride	198 160 240	155 150 160	308 130 490	188 41 390
Sulfate	445 290 850	318 300 314	314 96 510	179 11 310
Boron	0.42 0.36 0.51	0.41 0.36 0.46	0.47 0.39 0.58	0.35 0.22 0.46
Nitrate (as N)	6.3 3.3 15	1.8 0.86 2.7	2.4 0.23 3.8	2.4 0.48 3.3
TKN (as N)	2.1 1.5 3.3	1.5 0.78 1.8	1.1 0.28 1.8	2.8 1.6 3.4

#### Notes:

- Average, minimum and maximum values calculated from four semiannual sampling events for 2004 and 2005; depth to groundwater data calculated using two sampling events in 2005
- Available groundwater data appears to be for first encountered shallow groundwater in the vicinity of the monitoring well locations. Well construction details were not available for the facility monitoring wells. No apparent trends in groundwater quality were noted for individual wells; however, notable differences in water quality are apparent based on well location. Water quality generally improves in a downgradient direction for the

parameters tested with the exception of average sodium and total Kjeldhal nitrogen concentrations. Comparison of effluent and groundwater data indicates the effluent is of better quality with the exception of chloride and nitrate. This implies that the discharge is likely improving shallow groundwater quality in the vicinity of the discharge. Poor groundwater quality in the vicinity of the discharge area is likely the result of widespread historical agricultural uses of the land immediately adjacent to and north of the Salinas River.

### Surface Water

18. Water quality data for the reach of the Salinas River upstream and downstream of the irrigation disposal area is available on the Central Coast Ambient Monitoring Program (CCAMP) website<sup>1</sup>. CCAMP is the Central Coast Regional Water Quality Control Board's regionally scaled water quality monitoring and assessment program. The following table is a summary of selected data for two surface water sampling stations; Salinas River at Chualar Bridge on Chualar River Road, approximately ten miles upstream of the discharge area, and Salinas River at Davis Road (Bridge), approximately two miles downstream of the discharge area.

**Summary of Selected CCAMP Data for Salinas River**

Parameter	Chualar Bridge <sup>a</sup>	Davis Road <sup>b</sup>
<b>average/minimum/maximum values (units are mg/L or as otherwise noted)</b>		
Flow <sup>c</sup> (ft <sup>3</sup> /sec)	192 0 3,470	
Total Nitrogen (as N)	- - -	7.2 <sup>g</sup> 0.5 28
Nitrate (as N)	2.33 <sup>d</sup> 0.18 6.02	9.8 <sup>h</sup> 0.3 42.2
TDS	470 <sup>e</sup> 340 740	1,072 <sup>i</sup> 246 14,200
Sodium	35.5 <sup>f</sup> 23 61	83 <sup>j</sup> 21 220
Chloride	32 <sup>d</sup> 12 65	108 <sup>k</sup> 11 1,070
Sulfate	- - -	175 <sup>i</sup> 68 390
Boron	0.16 <sup>f</sup> 0.11 0.24	65 <sup>j</sup> - 480
Total Coliform (mpn/100 ml)	3,025 <sup>d</sup> 30 30,000	18,994 <sup>m</sup> 50 240,000

Notes:

- a. Chualar River Road bridge crossing approximately 8 miles upstream of Development
- b. Davis Road bridge crossing approximately 4 miles downstream of Development
- c. Based on 75 years of USGS data up to 05/04/06 from Spreckles gauging station; 1 ft<sup>3</sup>/sec = 6.46x10<sup>5</sup> gallons per day
- d. Based on 12 samples collected between 02/99 and 04/00
- e. Based on 9 samples collected between 02/99 and 01/00
- f. Based on 8 samples collected between 06/99 and 02/00
- g. Based on 10 samples collected between 07/02 and 11/04
- h. Based on 40 samples collected between 02/99 and 11/04
- i. Based on 36 samples collected between 02/99 and 11/04
- j. Based on 29 samples collected between 05/99 and 11/04
- k. Based on 33 samples collected between 02/99 and 11/04

<sup>1</sup> www.ccamp.org

- l. Based on 11 samples collected between 05/99 and 11/04
- m. Based on 37 samples collected between 02/99 and 08/04

19. Comparison of upstream and downstream data indicates significant degradation of surface water quality in the Salinas River between the Chualar River Road bridge crossing and the Davis Road bridge crossing. The observed impacts are likely attributable to the significant contribution of agricultural runoff, recharge of shallow impacted groundwater into the river channel,<sup>2</sup> and the City of Salinas storm drain discharge to the Salinas River just upstream of the Davis Road bridge. Comparison of this data is somewhat suspect because the timing of upstream and downstream sampling events did not always coincide. Therefore, a portion of the observed impacts may also be attributable to variations in river flow and quality, and flow contributions at the time of sampling.

20. The average effluent flow for the Facility is approximately 0.16% of the average Salinas River flow. Any incidental runoff or underflow contribution to the Salinas River from the discharge area would be a minor fraction of the total effluent flow and would constitute an even lower contribution to the Salinas River. Potential incidental runoff to the Salinas River would likely occur during significant storm events and higher Salinas River flows resulting in runoff flows and constituent loading to the Salinas River being virtually imperceptible. Available site information and water quality data does not indicate the discharge is impacting or has the potential to impact the Salinas River.

#### PURPOSE OF ORDER

21. The Facility was formerly permitted under Waste Discharge and Water Reclamation Requirements Order No. 95-23 issued to the Discharger by the Board on February

<sup>2</sup> Shallow groundwater quality generally trends towards increasing nutrient and salt concentrations along the reach of the Salinas River downstream of the Chualar River Road bridge crossing.

10, 1995. The previous Order was over ten years old and in need of review and revision.

22. The Discharger submitted a report of waste discharge (ROWD) application on March 30, 2005. The ROWD application is primarily predicated on the Discharger's request to eliminate the treatment system disinfection requirement and total coliform and chlorine residual monitoring requirements.

23. As previously discussed in above findings there is no legal requirement or technically defensible rationale for requiring continued disinfection and associated monitoring for the Facility given the location and method of discharge. In addition to eliminating these requirements, this Order also updates various other requirements consistent with similar facilities in the Salinas River basin.

#### APPLICABLE LAW

##### Basin Plan

24. The Water Quality Control Plan, Central Coast Basin (Basin Plan) was adopted by the Regional Board on November 19, 1989, and approved by the State Water Resources Control Board (State Board) on August 16, 1990. The Regional Board approved amendments to the Basin Plan on February 11, 1994, and September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the Basin Plan.

25. The Basin Plan designates the existing and anticipated beneficial uses of groundwater in the vicinity of the land discharge to include:

- a. Domestic water supply;
- b. Agricultural water supply
- c. Industrial process supply; and,
- d. Industrial service supply.

26. The Basin Plan specifies water quality objectives for certain groundwater basins, which are intended to serve as a baseline for evaluating water quality management

in the basin. The objectives are, at best, representative of gross areas only, and are as follows for the 180 and 400 foot aquifer sub-area of the Salinas River groundwater basin beneath the Facility and recycled water irrigation reuse areas:

**Median Groundwater Objectives for the Salinas River/180 Foot Aquifer Groundwater Sub-basin/Sub-area**

Parameter	Concentration (mg/L)
TDS	1500
Cl	250
Sulfate	600
Boron	0.5
Sodium	250
Nitrate as N	1

Excerpted from Table 3-8, page III-16 of the Basin

Plan

**Median Groundwater Objectives for the Salinas River/400 Foot Aquifer Groundwater Sub-basin/Sub-area**

Parameter	Concentration (mg/L)
TDS	400
Cl	50
Sulfate	100
Boron	0.2
Sodium	50
Nitrate as N	1

Excerpted from Table 3-8, page III-16 of the Basin

Plan

27. The Salinas River is the closest surface water body to the Facility and disposal area. The Basin Plan designates existing and anticipated beneficial uses of the Salinas River along the reach adjacent to the Facility and reuse areas (upstream of the Spreckles Gauge to Chular) that could be affected by the discharge to include:

- a. Municipal and Domestic Supply;
- b. Agricultural Water Supply;
- c. Industrial Process Supply;
- d. Industrial Service Supply;
- e. Groundwater Recharge;
- f. Water Contact Recreation;
- g. Non-Contact Water Recreation;
- h. Wildlife Habitat;
- i. Cold Freshwater Habitat;
- j. Warm Freshwater Habitat;
- k. Migration of Aquatic Organisms;

I. Commercial and Sport Fishing.

28. The Basin Plan specifies water quality objectives for certain surface waters, which are intended to serve as a baseline for evaluating water quality management in the basin. The objectives are, at best, representative of gross areas only, and are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. Water quality objectives are as follows for the Salinas River above Spreckles.

**Surface Water Quality Objectives for the Salinas River (Above Spreckles)**

Parameter	Concentration (mg/L)
TDS	600
Cl	80
Sulfate	125
Boron	0.2
Sodium	70

Excerpted from Table 3-7, page III-13 of the Basin

Plan

**Anti-Degradation**

29. Any change in water quality authorized by these waste discharge requirements will not violate SWRCB Resolution 68-16 or (for discharges to surface water) the federal antidegradation policy (40 CFR sec. 131.12) (SWRCB Order No. WQ 86-17).
30. Resolution 68-16 provides if there is degradation of water quality it must not "unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed [by water quality control] policies." The related provision in the federal anti-degradation policy states, "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." In short, the degradation may not violate water quality objectives or in the absence of objectives, must not unreasonably affect existing and designated beneficial uses. Also, if there is degradation the Board must determine that it has been demonstrated the change "will be consistent with the maximum

benefit to the people of the State." The related provision in the federal policy states, "allowing lower water quality is necessary to accommodate important economic or social development."

31. The application of undisinfected secondary wastewater to the irrigation disposal area, if appropriately managed, as authorized by this Order will not cause appreciable degradation of receiving waters including Salinas River, Monterey Bay, and groundwater. This permit requires that Facility effluent be applied to irrigation disposal area at times and rates which do not result in surface runoff and minimizes the leaching of water, nutrients, and minerals to groundwater. In addition, this Order requires that no waste constituents be discharged at concentrations that exceed Basin Plan water quality objectives or background conditions in the groundwater basin or that exceed the assimilative capacity of the groundwater basin. Although the prescribed effluent limits are in excess of applicable surface water quality objectives for the Salinas River, any incidental runoff or underflow contribution from the disposal area will not constitute an appreciable flow or constituent contribution to the Salina River.
32. The discharge of undisinfected secondary wastewater to the irrigation disposal area will not degrade receiving water quality. Even if it did cause degradation the discharge would not cause or contribute to receiving water quality that is less than necessary to protect existing and potential beneficial uses. Any water quality degradation that may be authorized under this Order is necessary to accommodate important economic or social development and is consistent with the maximum benefit to the people of the State.

#### **TMDL**

33. Section 303(d) of the Clean Water Act requires states to identify and prepare lists of water bodies that do not meet water quality standards and to establish Total Maximum Daily Loads (TMDL) for listed water bodies.

34. The Salinas River and several of its tributaries are on the 303(d) list as impaired due to elevated concentrations of nutrients and fecal coliform. Waste load and load allocations will be developed for sources of nutrients and fecal coliform in the Salinas River, the Salinas River Lagoon (north), the Old Salinas River Estuary, as well as other water bodies within the Salinas River watershed. Allocations will be proposed in two separate TMDLs and presented to the Water Board for approval, after a 45-day public review period, at a regular Water Board meeting within the first six months of 2007 (anticipated). If Water Board staff determine that discharges from the Facility are causing or contributing to nutrient or fecal coliform related water quality impairment, waste discharges described in this Order may be modified to meet the allocations described in a proposed TMDL.

#### **Biosolids Handling and Disposal**

35. On February 19, 1993, the United States Environmental Protection Agency (USEPA) issued the final rule for the use and disposal of biosolids, or sewage sludge (40 CFR Part 503), a regulation that governs the final use or disposal of biosolids. The intent of this Federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.
36. The promulgated regulations require that producers of sewage sludge meet certain reporting, handling, and disposal requirements. As the USEPA has not delegated the authority to implement the sludge program to the State of California, the enforcement of sludge requirements that apply to the Discharger remains under USEPA's jurisdiction at this time. USEPA, not this Regional Board, will oversee compliance with 40 CFR Part 503. See Section G, *Biosolids Requirements*, and MRP Section VIII, *Biosolids Monitoring and Reporting*.
37. 40 CFR Part 503.4 (Relationship to other regulations) states that the disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2,



that complies with the requirements in 40 CFR part 258 constitutes compliance with section 405(d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit shall ensure that the sewage sludge meets the requirements in 40 CFR Part 258 concerning the quality of materials disposed in a municipal solid waste landfill unit.

### **Sanitary Sewer Overflows**

38. The Discharger's sanitary sewer system collects wastewater using pipes, pumps, and/or other conveyance systems, and directs the raw sewage to the wastewater treatment facility. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment facility. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system, and discharges to these facilities are not considered sanitary sewer overflows provided that the waste is fully contained within these temporary storage/conveyance facilities.
39. Sanitary sewer overflows can consist of varying mixtures of domestic sewage, industrial wastewater, and commercial wastewater. The mixture generally depends on the pattern of land use in the sewage collection system area tributary to an overflow location. The chief causes of sanitary sewer overflows include, but are not limited to, line blockages due to grease, roots, or debris; sewer line flood damage; manhole structure failures, vandalism, pump station mechanical failures; power outages; storm water or groundwater inflow/infiltration; lack of capacity; and contractor-related incidents.
40. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants. Sanitary sewer overflows can pose a threat to public health, cause temporary exceedances of applicable water quality objectives, adversely affect aquatic life, and impair the

public recreational use and aesthetic enjoyment of surface waters in the area.

41. The State Water Resources Control Board adopted Statewide General Waste Discharge Requirements for sanitary sewer systems and the associated monitoring and reporting program by issuing Order No. 2006-0003 (General Order) on May 2, 2006.
42. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to apply for coverage under and comply with the terms of the General Order.
43. The wastewater collection system and treatment facility are owned and operated by California Utilities Service, a privately owned company. As a privately owned facility the Discharger is not required to apply for coverage under the General Order. This Order contains a provision requiring the Discharger to implement a sewer system management plan and to report and track overflow events. The sewer system management plan requirements contained within this Order are consistent with the General Order.

### **EVALUATION OF NUTRIENT AND SALT LOADING TO THE GROUNDWATER BASIN**

#### **Nutrient Loading**

44. Nitrogen loading to the groundwater basin as a result of the land application of treated domestic wastewater is a water quality concern. The application of nutrients in excess of the vegetation demand can result in the leaching of nutrients beneath the root zone and the contamination of groundwater. The California Department of Health Services (DHS) has established a maximum contaminant level (MCL) for drinking water for nitrate of 45 mg/L (10 mg/L as nitrogen). Review of available groundwater data indicates shallow groundwater in the vicinity of irrigation disposal area monitoring well MW-1

sporadically exceeds the MCL for nitrate. However, data suggests that the higher nitrate levels in MW-1 are likely attributable to agricultural practices in the area.

45. Effluent sampling for nitrate and total Kjeldhal nitrogen has been conducted on a monthly basis by the Discharger as required by the previous permit. Effluent data indicates the Facility achieves a moderate level of nitrogen removal through nitrification and denitrification processes. However, the Facility effluent contains annual average nitrate concentrations in excess of the MCL at levels of up to 12.6 mg/L. The Facility may achieve an even higher level of nitrogen removal with the implementation of relatively simple operational changes and adjustments to the SBR system treatment phase run times provided sufficient hydraulic capacity exists.
46. Given the potential nutrient benefits of the wastewater for irrigation purposes, complete nitrification and subsequent denitrification is not essential. However, the Discharger is currently managing the irrigation disposal area by conducting regular vegetation removal and disking of the soil to maximize infiltration. Consequently, only limited nutrient uptake by vegetation is likely occurring. A nitrogen balance submitted as part of the Discharger's March 2005 ROWD application estimates an average annual nitrogen uptake from the native trees within the disposal area to be 50 lbs/acre<sup>3</sup>. It is generally understood that a limited amount of biologically mediated denitrification will occur within the soil column depending on suitable organic carbon to nitrate ratios and soil conditions. The Discharger assumes a 20% reduction<sup>4</sup> in nitrogen loading due to denitrification within the soil column.
47. The Discharger has been negotiating with third parties to grow alfalfa within the disposal area, but it is uncertain whether this alternative will be implemented. Year

<sup>3</sup> Estimate based on monthly nitrogen uptake values in the EPA Land Treatment Manual.

<sup>4</sup> No technical justification or reference for this assumption was provided.

round alfalfa production within the disposal area could significantly reduce the amount of nutrients potentially percolating to groundwater. The Discharger estimates that nitrogen uptake within the disposal area would be approximately 250 lbs per acre per year with alfalfa production.

48. To limit the leaching of nitrate to groundwater, Facility modifications should be made to improve nutrient removal efficiency and/or the irrigation disposal area should be managed to maximize nutrient uptake by vegetation. If the latter is implemented effluent should be applied in an amount that will not cause nitrogen within the root zone to exceed the agronomic demand for nitrogen. When applying effluent the total amount of nitrogen applied should take into consideration the amount of nitrogen required by the plants being irrigated while minimizing leaching of nitrogen below the root zone.
49. The Discharger provided an annual nitrogen balance for the Facility discharge as part of the March 2005 ROWD application. Based on an assumed effluent nitrogen concentration of 10 mg/L, a 20% nitrogen reduction in the soil column due to denitrification, and neglecting nitrogen uptake by plants the nitrogen balance estimates a mass loading of nitrogen to groundwater of 6,099 lbs/year. The actual nitrogen loading may be more or less depending on effluent nitrogen concentrations, plant uptake and site specific soil denitrification potential. For example, using the same algorithm, an estimated effluent nitrogen concentration of 6 mg/L would result in a reduced annual nitrogen loading to the basin of 4,310 lbs.
50. The preparation and implementation of a nutrient management plan is warranted to ensure wastewater is applied at rates that will protect beneficial uses of the receiving water. This Order requires the Discharger prepare and implement a nutrient management plan to mitigate nitrogen loading to the groundwater basin.

**Salt Loading**

51. The effluent concentrations of TDS, sodium, and chloride are all in excess of the range of water supply concentrations for the three supply wells. The increases are likely attributable to domestic use and self-regenerating water softeners. Effluent sulfate concentrations are within the water supply range for the three supply wells, and boron data for the water supply is not available. Delivered concentrations of these salts to the reuse areas are likely higher due to evaporation of wastewater from the effluent storage ponds<sup>5</sup>.
52. Irrigation projects, whether using fresh water or recycled wastewater, will contribute salt loading to the groundwater basin. Whether the salt loading will cause or contribute to exceedances of water quality objectives for salts in groundwater or impact beneficial uses depends on the extent to which the salts are diluted by other inflows of water to the basin.
53. The prolonged application of recycled wastewater can result in the buildup of salts in the soil column and leaching to groundwater. The evaporation and transpiration of the applied recycled wastewater concentrates salts in the root zone. Heavy rainfall or excessive irrigation will leach the accumulated salts from the root zone into the deeper vadose zone, where they accumulate and may eventually percolate to groundwater. This problem occurs for both freshwater and recycled water. However, recycled water generally contains higher salt concentrations than freshwater, resulting in higher salt loading.
54. Some plants are sensitive to the various salt ions in recycled wastewater. This Order is intended to prevent the application of recycled wastewater from impacting groundwater and to protect beneficial uses, including agricultural water supply.
55. A salt balance and evaluation of the assimilative capacity of the groundwater basin beneath the discharge area is generally needed to determine whether the salt loading will cause or contribute to exceedances of water quality objectives for salts in groundwater. The potential impact from salt loading is dependent on a number of factors, including the wastewater application rate and salt concentrations, the background concentration of salts within the groundwater basin, additional salt loads to the basin, depth to groundwater, physical and chemical hydrogeology, and the extent to which the salt is diluted by other inflows of water to the basin. An allowance for dilution is generally provided to allow irrigation projects that use recycled wastewater. This allowance, however, can only be provided if assimilative capacity is available.
56. The evaluation of whether assimilative capacity is available is generally based on three criteria consisting of the following:
- groundwater quality in the vicinity of the application areas is below the applicable Basin Plan water quality objectives;
  - sub-basin or basin-wide salt balance, as appropriate, indicates the average recharge concentration of salts does not exceed the applicable Basin Plan water quality objectives; and
  - the wastewater discharge will not impact any existing or potential future water supply wells.
57. Comparison of available groundwater data with applicable water quality objectives indicates shallow groundwater quality within selected monitoring wells in the vicinity of the discharge area already exceeds the median water quality objective for TDS, sodium and chloride for the 180-Foot Aquifer sub-area of the Salinas River groundwater basin, and the median water quality objectives for TDS, chloride, sulfate, boron, and sodium for the 400-Foot Aquifer sub-area of the Salinas River groundwater basin.
58. In the absence of median water quality objectives in the Basin Plan for the shallow groundwater perched above the 180-Foot Aquifer it is appropriate to apply the

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<sup>5</sup> Effluent samples are collected at the end of the treatment systems prior to the effluent storage ponds.

median water quality objectives for the 180-foot aquifer and the narrative water quality objectives for the protection of designated beneficial uses (i.e. the secondary MCLs) to the perched shallow groundwater.

59. The salt-related secondary MCLs applicable to this discharge are summarized as follows:

**Secondary Maximum Contaminant Levels (mg/L)**

Parameter	Recommended	Upper	Short-Term
TDS	500	1,000	1,500
Chloride	250	500	600
Sulfate	250	500	600

60. Average effluent TDS, sulfate, and boron concentrations are less than the water quality objectives for the 180-Foot Aquifer sub-area of the Salinas River groundwater basin, whereas the average sodium and chloride concentrations exceed the water quality objectives for this sub-area. Average effluent TDS, sodium, chloride, and boron concentrations also exceed the water quality objectives for the 400-Foot Aquifer sub-area of the Salinas River groundwater basin.

61. The median TDS, chloride and sulfate water quality objectives for the 180-Foot Aquifer correspond to the short-term, recommended, and short-term secondary MCLs, respectively. The median water quality objectives for the 400-Foot Aquifer are less than the secondary MCLs for these constituents. The average TDS concentrations within discharge area monitoring wells MW-1 and MW-3 exceed both the short-term and recommended secondary MCLs, respectively. The average chloride concentration within monitoring well MW-3 exceeds the recommended secondary MCL, but is less than the upper and short-term secondary MCLs. Average sulfate concentrations within monitoring wells MW-1, MW-2, and MW-3 exceed the recommended secondary MCL, but are less than the upper and short-term secondary MCLs.

62. Available data indicate shallow groundwater already exceeds secondary MCLs for TDS, chloride and sulfate. However, available data do not indicate the ongoing discharge of wastewater will impact the deeper water bearing zones (180- or 400-foot aquifers). The shallow groundwater zone and 180-foot and 400-foot aquifers are separated by clay aquitards of varying depth and thicknesses throughout the basin. In addition, it is impossible to ascertain natural background shallow groundwater quality near the discharge area for salt constituents because years of agricultural and waste disposal uses in the area have probably contributed to the observed salt levels.

63. Comparison of Facility effluent data, shallow groundwater data, and applicable water quality criteria (median water quality objectives for the 180-Foot Aquifer and secondary MCLs) indicates recharge of shallow groundwater with the discharged effluent will likely result in improved water quality with respect to TDS, sulfate, and boron concentrations in shallow groundwater. Recharge of shallow groundwater with the effluent may increase sodium and chloride concentrations in the shallow groundwater over time. Although sodium and chloride are being discharged at concentrations above the applicable water quality objectives, it is uncertain whether the discharge will result in shallow groundwater concentrations in excess of the applicable water quality objectives or impact beneficial uses given other inflows to the groundwater basin.

64. Given the only other significant recharge contributions to the groundwater basin in the vicinity of the reuse areas are from higher quality (relatively lower salt concentrations) rain water and the percolation of Salinas River water, the average recharge concentration of salts is likely less than the applicable Basin Plan water quality objectives. However, a basin wide evaluation of salt loading incorporating agricultural irrigation inputs and sea water intrusion into the groundwater basin may indicate that the average recharge concentration of salts

exceeds the applicable water quality objectives.

65. There is not sufficient evidence to support a finding that the Discharger should be required to conduct a sub-basin or basin wide salt balance and assimilative capacity evaluation. Such a requirement would be overly burdensome and onerous given the extent of the groundwater basin and the relatively small volume of this discharge relative to additional contributing sources of groundwater recharge.
66. However, salt load monitoring, evaluation, and reporting requirements for the discharge along with the evaluation of potential effluent salt reduction measures are appropriate and warranted to verify compliance with this Order and protect water quality. In addition, this data may be utilized for a basin wide salt balance conducted by others. The requirements contained within this Order require the Discharger to implement a salts management plan to document, evaluate and reduce salt loading to the to the basin.
67. For wastewater irrigation projects (non reclamation), best practicable treatment and control is generally considered to be oxidation, secondary clarification, disinfection, application at agronomic rates, and the implementation of source controls to effectively control salt loads from commercial and industrial facilities. The Facility currently implements best practicable treatment. However, discharges to the Facility consist almost entirely of domestic wastewater from residential units. Therefore, commercial and industrial source control is unnecessary.
68. Effluent salt loading may be reduced by limiting or prohibiting the use of self-regenerating water softeners within the community. Per California Health and Safety Code Section 116786, a local agency<sup>6</sup> may adopt an ordinance to limit the availability or prohibit the installation of

residential self-regenerating water softeners. Before adopting such an ordinance, the local agency must find that this action is necessary to achieve compliance with waste discharge requirements, water reclamation requirements, or a master reclamation permit. The local agency must also adopt and enforce regulatory requirements that limit the volumes and concentrations of saline discharges from nonresidential sources to the extent technologically and economically feasible.

69. The use of alternative disinfection methods instead of chlorination, such as ultraviolet disinfection, that do not add chloride to the recycled water can also reduce effluent salt loading.

#### **MONITORING & REPORTING PROGRAM**

70. Monitoring and Reporting Program No. R3-2007-0008 is a part of the Order. The Monitoring Program requires routine water supply, influent, effluent, groundwater, and facility monitoring to verify compliance with the Order and ensure protection of water quality. The Executive Officer may revise the Monitoring and Reporting Program.

#### **ENVIRONMENTAL REVIEW**

71. These waste discharge requirements are for an existing facility and are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Section 15301, Chapter 3, Title 14, of the California Code of Regulations.
72. The Facility was originally permitted and built prior to the enactment of the California Environmental Quality Act (Public Resources Code, Section 21000, et. seq.) in 1970. The Monterey County Planning Commission later issued a use permit (Use Permit No. 3124) and negative declaration (Resolution No. 86-202) and on July 9, 1986, for expansion of the facility.

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<sup>6</sup> "Local Agency," as defined in Health and Safety Code Section 116780, means a city, county, city and county, district, or any other political subdivision of the state.

**EXISTING ORDERS & GENERAL FINDINGS**

73. The Facility was formerly regulated by Waste Discharge Requirements Order No. 95-23, adopted by the Regional Water Quality Control Board on February 10, 1995.
74. Since the Facility flows do not exceed one MGD, storm water discharges from the Facility do not have to be regulated under the State Water Resources Control Board's General Industrial Activities Storm Water Permit. The General Permit requires development and implementation of a Storm Water Pollution Prevention Plan and Best Management Practices.
75. Storm water collected from the plant treatment area is either discharged into the treatment system via the effluent storage pond adjacent to the treatment facility or to earthen drainage channels tributary to the Salinas River.
76. A permit and the privilege to discharge waste into waters of the State are conditional upon the discharge complying with provisions of Division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, protect beneficial uses, and prevent nuisance. Compliance with this Order should ensure conditions are met and mitigate any potential changes in water quality due to the project.
77. On November 21, 2006, the Board notified the Discharger and other interested parties of its intent to prescribe revised Waste Discharge Requirements. In addition, the Board provided them with an opportunity for a public hearing and to submit their written views and recommendations.
78. The Board, at a public meeting held February 9, 2007, heard and considered all comments pertaining to the discharge and found this Order consistent with the above findings.
79. Any person affected by this action of the Board may petition the State Water Board to review the action in accordance with Section 13320 of the California Water Code and Title 23 of the California Code of Regulations, Section 2050. The State Water Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.
80. Requirements specified in this Order are intended to ensure proper treatment and handling of domestic wastewater for the protection of public health. In addition, wastewater treatment, storage, and discharge requirements of this Order does not pose a significant threat to surface water or underlying groundwater resources.
81. This Order contains restrictions on individual pollutants. Individual pollutant restrictions consist of technology-based effluent limitations and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD) and total suspended solids (TSS) and are based on achievable limits for secondary treatment as demonstrated by historical Facility effluent data and are lower than the minimum technology-based effluent limitations for secondary treatment<sup>7</sup>. Water quality-based effluent limitations in this Order for nitrate, total dissolved solids, sodium, chloride, sulfate and boron have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law. The individual water quality-based effluent limitations are based on the Basin Plan. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. The requirements of the Order take into

<sup>7</sup> 40 CFR Part 133.102 contains BOD and TSS 30-day and 7-day average minimum technology based effluent limitations for secondary treatment of 30mg/L and 45 mg/L, respectively.

consideration past, present, and probable future beneficial uses of the receiving waters, the environmental characteristics, including water quality, of the lower Salinas River hydrographic unit, coordinated control of all factors which affect water quality in the area, and the need to develop and use recycled water. The discharger has not submitted any information regarding economic considerations or the need for developing housing within the region.

**IT IS HEREBY ORDERED**, pursuant to authority in Sections 13263 and 13523 of the California Water Code, that California Utilities Service (Discharger), its agents, successors, and assigns, may collect, treat, store and discharge domestic wastewater providing they comply with the following.<sup>8</sup>

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to Section 13268 of the California Water Code.

Throughout these requirements footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows (requirements without footnotes are BPJ unless otherwise noted). Numbered footnotes generally reference code sections for direct citations:

BPJ	Best Professional Judgment of Regional Water Quality Control Board Staff
ROWD	The Discharger's Report of Waste Discharge

<sup>8</sup> General permit conditions, definitions and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985, included as part of this Order.

40CFR	Title 40 Code of Federal Regulations
BP	Central Coast Regional Water Quality Control Plan
DHS	California Department of Health Services
T22	Title 22 CCR, Division 4, Chapter 3, Water Reclamation Criteria
CWC	Porter-Cologne Water Quality Control Act (California Water Code)

#### A. PROHIBITIONS

1. Discharge of treated wastewater to areas other than the spray irrigation disposal area shown in Attachment "B" is prohibited unless otherwise approved by the Executive Officer.
2. Discharge of any wastes including overflow, bypass, seepage, collection system spills or overflows, or from transport, treatment, storage, or disposal systems to adjacent drainageways or adjacent properties other than approved disposal areas as defined in this Order is prohibited.
3. Bypass of the treatment facility and discharge of untreated or partially treated wastes directly to the spray irrigation disposal area is prohibited.<sup>PC</sup>
4. Discharge of sludges, residues, or any other wastes into surface waters or into any area where it may be washed into surface water is prohibited.<sup>PC</sup>
5. The treatment, storage, or disposal of domestic wastewater shall not create a nuisance as defined in section 13050(m) of the California Water Code.<sup>CWC</sup>
6. No wastewater shall be applied to the spray irrigation disposal area during periods of rainfall or when soils are saturated such that ponding or runoff occurs.<sup>BPJ</sup>
7. Wastewater shall be confined to areas of authorized storage and disposal without

discharge to surface waters or drainages.

*BPJ*

8. The land application or storage of wastewater shall not occur within 100 feet of any existing water supply well.
9. Wastewater spray, mist, or runoff shall not enter surface water drainages or adjacent agricultural areas.

**B. SPECIFICATIONS**

**System Operation**

1. The Facility shall be operated in conformance with an up-to-date facility specific operations and maintenance plan and in a manner consistent with best professional practice. As such, the Discharger shall maintain in good working order and operate as efficiently as possible all facility equipment or control system to achieve compliance with this Order.
2. Land application of wastewater shall be accomplished at a time and in a manner to minimize ponding and the possibility of public contact with sprayed materials. *BPJ*
3. All wastewater effluent storage reservoirs and land application disposal areas with public access shall be posted (in English and Spanish) to warn the public domestic wastewater is being stored or applied. *BPJ*
4. Effluent storage ponds and wastewater ponds shall have sufficient freeboard, no less than two feet<sup>9</sup> (measured vertically, from the water surface up to the point on the surrounding berm or dike having the lowest elevation and not including engineered outlet structures), at all times and shall be designed and constructed to prevent overtopping as a result of windy storm conditions. *BPJ*

<sup>9</sup> Lesser freeboard, no less than one foot, is acceptable for below grade impoundments, and may be approved by the Executive Officer for above ground impoundments if documented by a registered civil engineer that structural integrity and required capacity will not be compromised with the proposed freeboard.

5. Extraneous surface drainage shall be excluded from the wastewater treatment, effluent storage, biosolids storage, and land application areas to the maximum extent practicable. *BPJ*
6. All storm water contacting raw domestic wastewater, treated wastewater, or biosolids shall be contained and managed as such. *BPJ*
7. The treatment, handling, and disposal of sewage sludge (biosolids) generated from treatment process shall be managed in accordance with 40 CFR part 503. *BPJ*

**Flow and Effluent Limitations**

9. Monthly average influent wastewater flow volumes shall not exceed 0.30 MGD. *ROWD, BPJ*
10. The Facility effluent shall not exceed the following effluent limitations:

**Effluent Limitations (mg/L)**

Parameter	Daily Max	30-Day Mean	7-Day Mean
BOD <sub>5</sub> <sup>a</sup>	--	30	45
Total Suspended Solids <sup>a</sup>	--	30	45
Nitrate as N <sup>a</sup>	--	8	10
Total Dissolved Solids <sup>b</sup>	--	1,500	--
Sodium <sup>b</sup>	--	250	--
Chloride <sup>b</sup>	--	250	--
Boron <sup>b</sup>	--	0.5	--
Sulfate <sup>b</sup>	--	600	--

Notes:

- a. As measured after the final treatment process and prior to the effluent storage basins
- b. As delivered concentrations measured in the effluent storage pond

11. The effluent pH shall not be less than 6.5 or greater than 8.4. *BP*

**Groundwater Limitations**

12. The land application of wastewater shall not cause or contribute to nitrate concentrations in the groundwater to



exceed 10 mg/L (as N) or shall not cause or contribute to a statistically significant increase of nitrate concentrations in underlying groundwater, whichever is more stringent.<sup>10, BPJ, BP</sup>

13. The land application of wastewater shall not cause groundwater to contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses.<sup>BP</sup>
14. The application of wastewater shall not cause a statistically significant increase of mineral or organic constituent concentrations in underlying groundwater, as determined by statistical analysis of samples collected from wells in the vicinity of the disposal area.<sup>BP, BPJ</sup>
15. To protect the *municipal and domestic supply* beneficial uses of groundwater underlying the land application area, the application of wastewater shall not cause groundwater to:<sup>BP, BPJ, T22</sup>
  - a. exceed the Primary Maximum Contaminant Levels for organic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444.
  - b. exceed the Primary Maximum Contaminant Levels for inorganic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431.
  - c. exceed the levels for radionuclides set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443.
16. The land application of wastewater shall not cause radionuclides to be present in groundwater in concentrations that are deleterious to human, plant, animal, or aquatic life, or result in the accumulation of radionuclides in the food web to an

extent that presents a hazard to human, plant, animal, or aquatic life.<sup>BP</sup>

#### Nutrient Management Plan

17. Hydraulic and nutrient loading rates for the application of wastewater shall be based on vegetation consumption and tolerance and shall not exceed what is reasonable for uptake by native or cultivated vegetation (i.e., wastewater shall be applied in an amount that will not cause nitrogen within the root zone to exceed the agronomic demand for nitrogen and result in the leaching of nitrate to groundwater).<sup>BPJ</sup>
18. The Discharger shall prepare and implement a nutrient management plan for the land application of wastewater to protect the beneficial uses of groundwater. The plan shall account for all nutrient loading to the application areas and ensure that the total amount of nitrogen applied does not exceed the amount of nitrogen required by the vegetation being irrigated.
19. As part of the nutrient management plan, the Discharger shall submit an annual report documenting allowable and actual nitrogen loading to the disposal area(s). The report shall include, at a minimum:
  - a. Analysis of the contributing sources of nutrients being applied to the land application area(s);
  - b. Analysis of annual nitrogen loading to the basin and application area(s) from each contributing source;
  - c. Analysis of the allowable nutrient and hydraulic loading (based on limiting nitrogen loading) of applied wastewater based on characteristic effluent data for nitrogen, other contributing nitrogen sources, and the nutritive requirements of the application areas;
  - d. Comparison of the actual and allowable annual nitrogen loading rates;
  - e. Analysis of groundwater monitoring data for nitrogen constituents;
  - f. Evaluation of potential impacts of nutrient loading on the groundwater basin;

<sup>10</sup> The evaluation of this requirement will consider pre-existing conditions based on available characteristic groundwater quality data in the vicinity of the use areas.

- g. Evaluation of potential nutrient reduction measures; and,
- h. Recommendations and time schedules for the implementation of measures addressing excessive nitrogen loading (i.e. actual loading greater than allowable loading) as applicable.

20. **Annual nutrient management reports are due March 1<sup>st</sup> of each year** and may be included as part of the annual monitoring report. **The first annual nutrient management plan report is due March 1, 2008.** The Discharger shall review and update the plan annually thereafter as necessary. The Discharger shall submit a copy of the revised plan or statement indicating the plan has been reviewed, but not updated, to the Regional Board as part of the annual monitoring reports.

21. The Discharger may request a variance to the requirement for additional annual nutrient plan reports beyond the first report due March 1, 2008. The Executive Officer may approve the request, given the following conditions are met:

- a. The initial nitrogen loading evaluation indicates the land application of wastewater at appropriate hydraulic rates (based on the lesser of either soil permeability or nutrient requirements) will not exceed the nutritive requirements of the vegetation being irrigated;
- b. Wastewater is not over applied in an effort to increase disposal that may result in significant soil flushing and runoff; and
- c. Effluent nitrogen concentrations from the Facility regularly meet or are less than the effluent limitations of this Order and are stable.

(Approval of this variance is contingent on reasonable and scientifically defensible assumptions being applied to the loading evaluation)

22. The Executive Officer may allow discharges that exceed the hydraulic

loading rate based on the nutritive requirements of the receiving vegetation on a case-by-case basis upon request by the Discharger, given the following conditions are met:

- a. The nitrogen loading evaluation indicates the land application of wastewater at appropriate hydraulic rates (based on soil permeability) will not exceed the nutritive requirements of the vegetation being irrigated by more than a total nitrogen concentration as determined by the following equation<sup>11</sup>:

$$\Delta N = (\text{TOC} - 5) / 2$$

TOC = effluent Total Organic Carbon

- b. Wastewater is not over applied in an effort to increase disposal that may result in significant soil flushing and runoff;
- c. Effluent nitrogen concentrations from the Facility regularly meet or are less than the effluent limitations of this Order and are stable; and,
- d. The Discharger provides an assimilative capacity analysis and nitrogen balance showing that the additional nutrient loading to the groundwater basin will not cause or contribute to exceedances of water quality objectives for nitrate in groundwater.

(Approval of this variance is contingent on reasonable and scientifically defensible assumptions being applied to the assimilative capacity analysis and nitrogen balance)

#### Salts Management Plan

23. The Discharger shall implement a salts management program to document salt loading and evaluate and implement measures for the reduction of salt loading

<sup>11</sup> Maximum of nitrogen that can be effectively denitrified during rapid infiltrations under optimum operating conditions; Metcalf and Eddy, Third Ed., 1991, page 972.

as the result of the land application of wastewater. Salt reduction measures shall focus on all potential salt contributions from the water supply, and residential, commercial and industrial uses as applicable prior to disposal. The Discharger shall evaluate the applicability of California Health and Safety Code Section 116786 and implement it as appropriate and feasible to reduce salt loading from the domestic use of water softeners.

24. As part of the salts management program, the Discharger shall submit an annual report documenting salt loading and salt reduction efforts. This report shall include, at a minimum:
- a. Analysis of annual salt (TDS, sodium, chloride, sulfate, and boron) loading to the basin and land application area(s);
  - b. Analysis of the contributing sources of salt mass in the wastewater (including the evaporative concentration of salts within the effluent storage ponds);
  - c. Analysis of groundwater monitoring data for salt constituents;
  - d. Evaluation of potential impacts of salt loading on the groundwater basin;
  - e. Evaluation of potential salt reduction measures;
  - f. Summary of existing salt reduction measures and their impact; and,
  - g. Recommendations and time schedules for implementation of proposed salt reduction measures.

24. **Annual salts management reports are due March 1<sup>st</sup> of each year** and may be included as part of the annual monitoring report. **The first annual salts management report is due March 1, 2008.**

#### **Sanitary Sewer Overflows/Sewer System Management Plan Requirements**

25. The Discharger shall develop and implement a Sewer System Management Plan in accordance with Attachment C. The purpose of the Plan is to establish procedures to track, mitigate and prevent overflows from the Discharger's collection system. The Sewer System Management

Plan shall be implemented immediately based on the implementation schedule contained in section E.9 of Attachment C.

#### **C. PROVISIONS**

1. This Order supersedes Order No. 95-23. Order No. 95-23 is hereby rescinded.
2. The Discharger shall comply with all applicable requirements of Monitoring and Reporting Program No. R3-2007-0008 as adopted by the Board and as may be amended by the Executive Officer. The Discharger shall be responsible for ensuring and documenting that the applied wastewater meets the water quality standards of this Order.
3. The Discharger shall permit the Board or its authorized representative in accordance with California Water code section 13267(c):
  - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the Order,
  - b. Access to and copy of any records that must be kept under conditions of this Order,
  - c. Inspection of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order,
  - d. To photograph, sample, and monitor for the purpose of ensuring compliance with this Order.
5. The Discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984. The Board will revise this Order periodically and may revise these requirements when necessary.
6. Pursuant to Title 23, Division 3, Chapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than February 9, 2012, addressing:

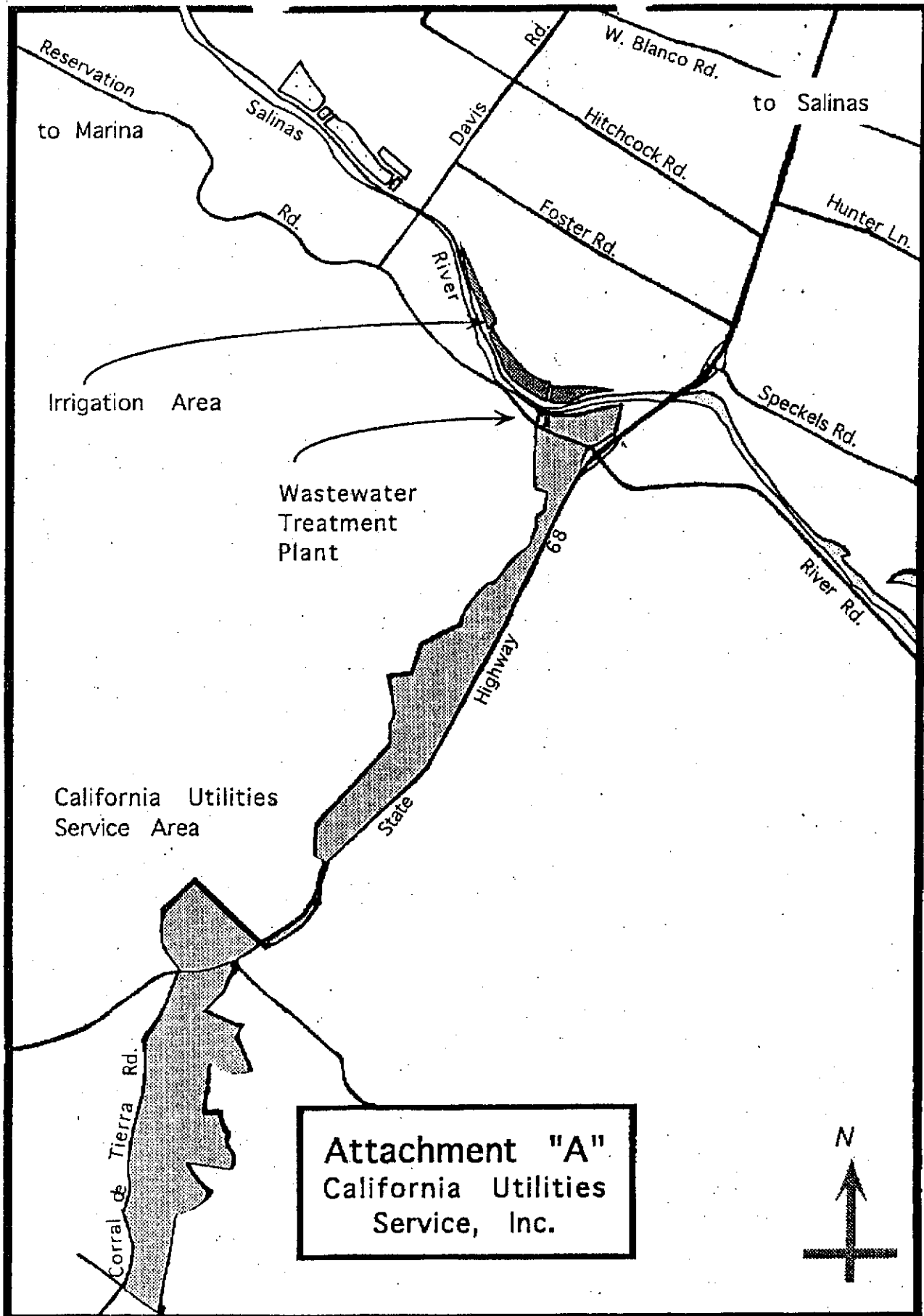
a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,

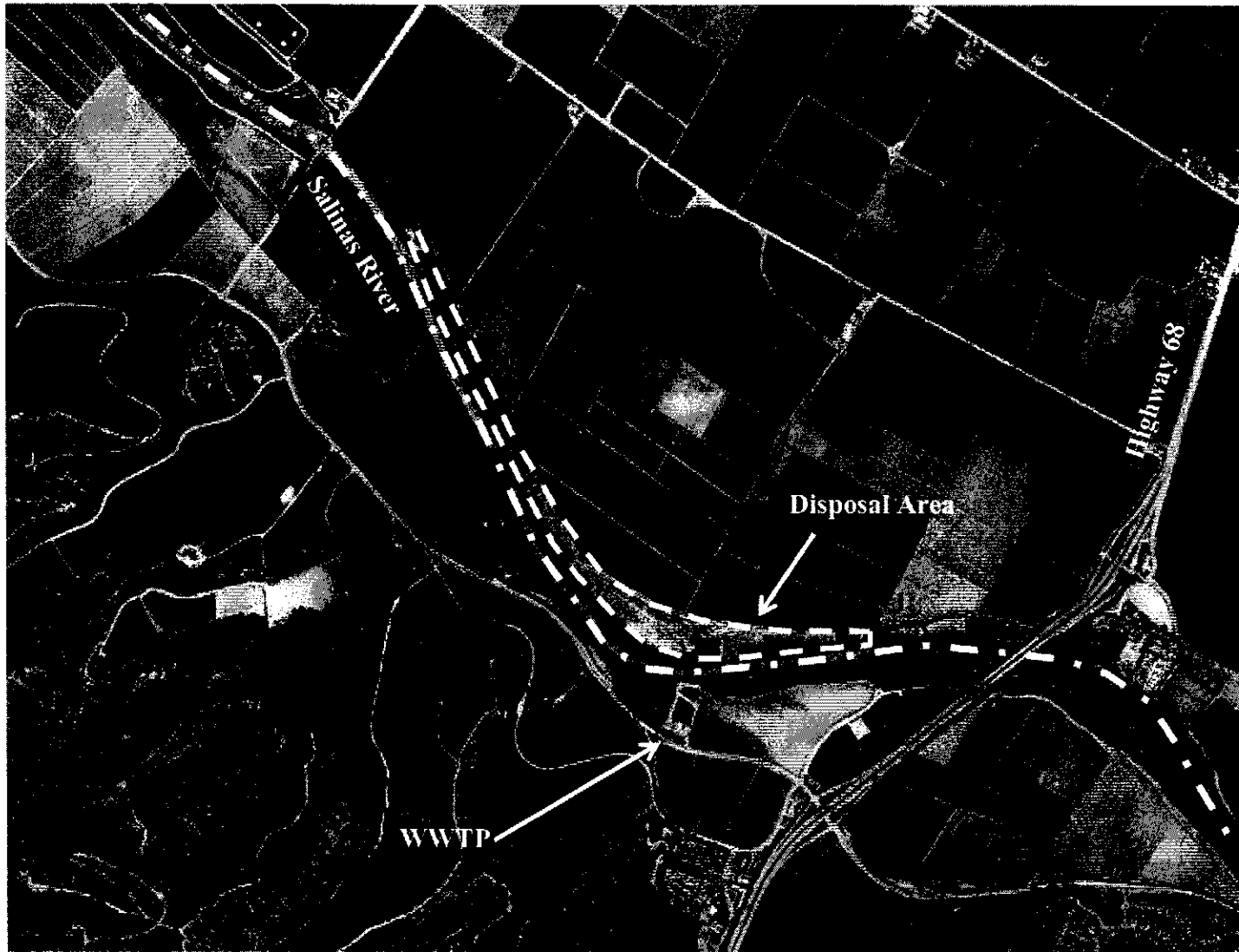
b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.

I, **ROGER W. BRIGGS, Executive Officer**, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 9, 2007

Ordered By:

\_\_\_\_\_  
Executive Officer





## ATTACHMENT C

### SANITARY SEWER SYSTEM REQUIREMENTS<sup>1</sup>

#### A. BACKGROUND

1. These Requirements are attached by reference to facility specific waste discharge requirements for privately owned wastewater treatment facilities for which the associated sanitary sewer collection systems are owned by the same private entity. These Requirements are intended to provide consistency with State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies.
2. To facilitate proper funding and management of sanitary sewer systems, the owner of the sanitary sewer collection system (Discharger) must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to a sewer system overflow (SSO) in a manner designed to minimize water quality impacts and potential nuisance conditions.
3. Many Dischargers in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with these requirements. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
4. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
5. It is the State Water Resources Control Board's (State Water Board) and Central Coast Regional Water Quality Control Board's (Central Coast Water Board) intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
6. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State and Regional Water Boards to effectively analyze the extent of SSOs statewide and their potential impacts on

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<sup>1</sup> Adapted from State Water Resources Control Board Order No. 2006-0003  
Statewide General WDR For Wastewater Collection Agencies



## Attachment C - Sanitary Sewer System Requirements

beneficial uses and public health. The monitoring and reporting program requirements contained herein are necessary to assure compliance with these requirements.

7. Information regarding SSOs must be provided to the State Water Board and Central Coast Water Board and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion
8. The Discharger must comply with all requirements contained herein. Any noncompliance with these Requirements constitutes a violation of the California Water Code and is grounds for enforcement action.
9. It is the intent of the Central Coast Regional Water Quality Control Board that sanitary sewer systems be regulated in a manner consistent with these Requirements. Nothing in these Requirements shall be:
  - a. Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
  - b. Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
  - c. Interpreted or applied to supersede any more specific or more stringent WDR or enforcement order issued by a Regional Water Board.

### B. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
  - a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
  - b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and,
  - c. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility.

## Attachment C - Sanitary Sewer System Requirements

Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

3. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
4. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant head-works.
5. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
6. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
  - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
  - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
  - c. Occurs during, or as a result of, the treatment or disposal of wastes.

### C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

### D. PROVISIONS

1. The Discharger shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Discharger shall take all feasible steps to contain and mitigate the impacts of an SSO.

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2. In the event of an SSO, the Discharger shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.
3. All SSOs must be reported in accordance with Section G of these Requirements.
4. In any enforcement action, the State and/or Central Coast Water Board will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Central Coast Water Board must consider the Discharger's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Central Coast Water Board will also consider whether:
  - a. The Discharger has complied with these Requirements, including requirements for reporting and developing and implementing a SSMP;
  - b. The Discharger can identify the cause or likely cause of the discharge event;
  - c. There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Discharger does not implement a periodic or continuing process to identify and correct problems.
  - d. The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Discharger;
  - e. The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
    - i) Proper management, operation and maintenance;
    - ii) Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc...);
    - iii) Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
    - iv) Installation of adequate backup equipment; and,
    - v) Inflow and infiltration prevention and control to the extent practicable.
  - f. The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.



**E. SEWER SYSTEM MANAGEMENT PLAN (SSMP)**

1. The Discharger shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State or Central Coast Water Board upon request. A copy of this document must be publicly available at the Discharger's office and/or available on the Internet. This SSMP must be approved by the Discharger's governing board at a public meeting as applicable.
2. In accordance with the California Business and Professions Code Sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields' pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
3. The mandatory elements of the SSMP are specified below. However, if the Discharger believes that any element of this section is not appropriate or applicable to the Discharger's sanitary sewer system, the SSMP program does not need to address that element. The Discharger must justify why that element is not applicable.
  - a. **Goals:** The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.
  - b. **Organization:** The SSMP must identify:
    - i) The name of the responsible or authorized representative as described in Section K of this Order.
    - ii) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
    - iii) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Central Coast Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).
  - c. **Legal Authority:** Each Discharger must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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- i) Prevent illicit discharges into its sanitary sewer system (examples may include infiltration and inflow (I/I), stormwater, chemical dumping, unauthorized debris and cut roots, etc...);
  - ii) Require that sewers and connections be properly designed and constructed;
  - iii) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
  - iv) Limit the discharge of fats, oils, and grease and other debris that may cause blockages; and,
  - v) Enforce any violation of its sewer ordinances.
- d. **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Discharger's system:
- i) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
  - ii) Describe routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
  - iii) Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long term plans plus a schedule for developing the funds needed for the capital improvement plan;
  - iv) Provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained; and,

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- v) Provide equipment and replacement part inventories, including identification of critical replacement parts.
- e. **Design and Performance Provisions:**
- i) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and,
  - ii) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.
- f. **Overflow Emergency Response Plan** - Each Discharger shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:
- i) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
  - ii) A program to ensure appropriate response to all overflows;
  - iii) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc...) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
  - iv) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
  - v) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and,
  - vi) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.
- g. **Fats, Oils, and Grease (FOG) Control Program:** Each Discharger shall evaluate its service area to determine whether a FOG control program is

needed. If a Discharger determines that a FOG program is not needed, the Discharger must provide justification for why it is not needed. If FOG is found to be a problem, the Discharger must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- i) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
  - ii) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
  - iii) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
  - iv) Requirements to install grease removal devices (such as traps or interceptors) design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
  - v) Authority to inspect grease producing facilities, enforcement authorities, and whether the Discharger has sufficient staff to inspect and enforce the FOG ordinance;
  - vi) An identification of sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and,
  - vii) Development and implementation of source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified in (f) above.
- h. **System Evaluation and Capacity Assurance Plan:** The Discharger shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:
- i) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity)



and the major sources that contribute to the peak flows associated with overflow events;

- ii) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in "i" above to establish appropriate design criteria;
- iii) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term capital improvement plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- iv) **Schedule:** The Discharger shall develop a schedule of completion dates for all portions of the capital improvement program developed in (i-iii) above. This schedule shall be reviewed and updated consistent with the SSMP program audit and update requirements as described in Sections E. 5 and E.8, respectively.

- 4. **Monitoring, Measurement, and Program Modifications:** The Discharger shall:
  - a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
  - b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
  - c. Assess the success of the preventative maintenance program;
  - d. Update program elements, as appropriate, based on monitoring or performance evaluations; and,
  - e. Identify and illustrate SSO trends, including: frequency, location, and volume.
- 5. **SSMP Program Audits** - As part of the SSMP, the Discharger shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Discharger's compliance with the SSMP requirements contained herein, including identification of any deficiencies in the SSMP and steps to correct them.
- 6. **Communication Program** – The Discharger shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Discharger as the program is developed and implemented.

The Discharger shall also create a plan of communication with systems that are tributary and/or satellite to the Discharger's sanitary sewer system.

- 7. SSMP Certification** - Both the SSMP and the Discharger's program to implement the SSMP must be certified by the Discharger to be in compliance with the requirements set forth herein and must be presented to the Discharger's governing board for approval at a public meeting as applicable. The Discharger shall certify that the SSMP, and subparts thereof, are in compliance with these Requirements within the time frames identified in the time schedule provided below.

In order to complete this certification, the Discharger's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board  
Division of Water Quality  
Attn: SSO Program Manager  
P.O. Box 100  
Sacramento, CA 95812

- 8. SSMP Updates** - The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing Board of the Discharger is required when significant updates to the SSMP are made. To complete the re-certification process, the Discharger shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.
- 9. SSMP Implementation Schedule** - The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below. The Discharger shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

## Sewer System Management Plan Time Schedule

<b>Task and Associated Section</b>	<b>Completion Date<sup>1</sup></b>			
	<b>Population &gt; 100,000</b>	<b>Population between 100,000 and 10,000</b>	<b>Population between 10,000 and 2,500</b>	<b>Population &lt; 2,500</b>
Establish Online SSO Database Account <b>Section G.6</b>	3 months <sup>2</sup>	3 months <sup>2</sup>	3 months <sup>2</sup>	3 months <sup>2</sup>
Reporting Program <sup>1</sup> <b>Section G</b>	12 months	12 months	12 months	12 months
SSMP Development Plan and Schedule <b>No Specific Section</b>	9 months	12 months	24 months	24 months
Goals and Organization Structure <b>Section E.3.a. &amp; b.</b>	12 months	12 months	24 months	24 months
Overflow Emergency Response Program <b>Section E.3.f.</b>	24 months	30 months	42 months	45 months
Legal Authority <b>Section E.3.c.</b>	24 months	30 months	42 months	45 months
Operation and Maintenance Program <b>Section E.3.d.</b>	24 months	30 months	42 months	45 months
FOG Control Program <b>Section E.3.g.</b>	24 months	30 months	42 months	45 months
Design and Performance <b>Section E.3.e.</b>	36 months	39 months	48 months	51 months
System Evaluation and Capacity Assurance Plan <b>Section E.3.h.</b>	36 months	39 months	48 months	51 months
Final SSMP, incorporating all of the SSMP requirements <b>Section E</b>	36 months	39 months	54 months	57 months

## Notes:

1. Completion date timeframes correspond to facility specific WDR adoption dates for which these Requirements are attached to the adopted WDR unless noted otherwise.
2. Three months from the date these Requirements are issued as part of wastewater treatment facility specific WDRs or from the date State Board establishes criteria for "non-enrollee" SSO database accounts if not available at the time these Requirements are issued.

10. **SSMP Availability** - A copy of the certified SSMP shall be maintained at appropriate locations (such as the Discharger's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

**F. ENTRY AND INSPECTION**

1. The Discharger shall allow the State or Central Coast Water Board or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of these Requirements;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of these Requirements;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under these Requirements; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with these Requirements or as otherwise authorized by the California Water Code, any substances or parameters at any location.

**G. SSO MONITORING AND REPORTING REQUIREMENTS**

1. These monitoring and reporting requirements establish monitoring, record keeping, reporting and public notification requirements for sanitary sewer system overflows. Revisions to these Requirements may be made at any time by the Executive Officer, and may include a reduction or increase in the monitoring and reporting.

**General Monitoring and Reporting Requirements**

2. The Discharger shall furnish to the State or Central Coast Water Board, within a reasonable time, any information which the State or Central Coast Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating these Requirements. The Discharger shall also furnish to the Executive Director of the State Water Board or Executive Officer of the Central Coast Water Board, upon request, copies of records required to be kept by these Requirements.
3. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or

other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man made or natural or concrete lined, shall be reported as required above.

4. All SSOs greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

Office of Emergency Services  
Phone (800) 852-7550

5. The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (Local County Health Officers, Local Director of Environmental Health, State Water Board, or Office of Emergency Services) or State law.

#### **SSO Database Accounts**

6. The Discharger shall obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS)<sup>2</sup>. These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30-days of receiving an account and prior to recording spills into the SSO Database, all Dischargers must complete the "Collection System Questionnaire", which collects pertinent information regarding a Discharger's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

#### **SSO Categories**

7. **Category 1** - All discharges of sewage resulting from a failure in the Discharger's sanitary sewer system that:
  - a. Equal or exceed 1000 gallons, or
  - b. Result in a discharge to a drainage channel and/or surface water; or
  - c. Discharge to a storm drain pipe that was not fully captured and returned to the sanitary sewer system.
8. **Category 2** – All other discharges of sewage resulting from a failure in the Discharger's sanitary sewer system.

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<sup>2</sup> The State Board is currently developing database account criteria for sewer collection system owners other than those required to seek coverage under State Water Resources Control Board Order No. 2006-0003 (Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies). The State Board intends to post "non-enrollee" account application information on its SSO Program webpage located at <http://www.waterboards.ca.gov/ss0/index.html> by November 2, 2006.

9. **Private Lateral Sewage Discharges** – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

**SSO Reporting Timeframes**

10. **Category 1 SSOs** – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Discharger has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Discharger is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 8. k. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.
11. **Category 2 SSOs** – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
12. **Private Lateral Sewage Discharges** – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Discharger's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Discharger must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Discharger) should be identified, if known.
13. If there are no SSOs during the calendar month, the Discharger will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
14. In the event that the SSO Online Database is not available, the Discharger must fax all required information to the appropriate Regional Water Quality Control Board office in accordance with the time schedules identified above. In such events, the Discharger must also enter all required information into the Online SSO Database as soon as practical.

**Mandatory Information to be Included in SSO Online Reporting**

15. At a minimum, the following mandatory information that must be included prior to finalizing and certifying an SSO for each category of SSO:
- a. Category 1 SSOs:
    - i) All information listed for Category 2 SSOs, as well as;

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- ii) Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
  - iii) Estimated SSO amount recovered;
  - iv) Response and corrective action taken;
  - v) If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken NA must be selected.
  - vi) Parameters that samples were analyzed for (if applicable);
  - vii) Identification of whether or not health warnings were posted;
  - viii) Beaches impacted (if applicable). If no beach was impacted NA must be selected;
  - ix) Whether or not there is an ongoing investigation;
  - x) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
  - xi) OES control number (if applicable);
  - xii) Date OES was called (if applicable);
  - xiii) Time OES was called (if applicable);
  - xiv) Identification of whether or not County Health Officers were called;
  - xv) Date County Health Officer was called (if applicable); and
  - xvi) Time County Health Officer was called (if applicable).
- b. Category 2 SSOs:
- i) Location of SSO by entering GPS coordinates;
  - ii) Applicable Regional Water Quality Control Board, i.e. identify the region in which the SSO occurred;
  - iii) County where SSO occurred;
  - iv) Whether or not the SSO entered a drainage channel and/or surface water;
  - v) Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
  - vi) Estimated SSO volume in gallons;
  - vii) SSO source (manhole, cleanout, etc...);
  - viii) SSO cause (mainline blockage, roots, etc...);
  - ix) Time of SSO notification or discovery;
  - x) Estimated operator arrival time;
  - xi) SSO destination;
  - xii) Estimated SSO end time; and
  - xiii) SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.
- c. Private Lateral Sewage Discharges:
- i) All information listed above (if applicable and known), as well as;
  - ii) Identification of sewage discharge as a private lateral sewage discharge; and
  - iii) Responsible party contact information (if known).

16. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final

certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the Central Coast Water Board.

#### **H. RECORD KEEPING**

1. Individual SSO records shall be maintained by the Discharger for a minimum of five years from the date of the SSO. This period may be extended when requested by the State or Central Coast Water Board.
3. All records shall be made available for review upon State or Central Coast Water Board staff's request.
4. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
5. The Discharger shall retain records of all SSOs, such as, but not limited to and when applicable:
  - a. Record of Certified report, as submitted to the online SSO database;
  - b. All original recordings for continuous monitoring instrumentation;
  - c. Service call records and complaint logs of calls received by the Discharger;
  - d. SSO calls;
  - e. SSO records;
  - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
  - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
  - h. A list and description of complaints from customers or others from the previous 5 years; and
  - i. Documentation of performance and implementation measures for the previous 5 years.
6. If water quality samples are required by an environmental or health regulatory agency or state law, or if voluntary monitoring is conducted by the Discharger or its agent(s), as a result of any SSO, records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical technique or method used; and,
  - f. The results of such analysis.



**I. CHANGE IN OWNERSHIP**

1. These Requirements are not transferable to any person or party, except after notice to the Central Coast Water Board Executive Officer. The Discharger shall submit this notice in writing at least 90 days in advance of any proposed transfer of the sanitary sewer collection system. The notice must include contact information for both the existing and new Discharger and a specific date for the transfer of ownership. The existing Discharger will be liable for violations up to the transfer date and the State or Central Coast Water Board will evaluate the regulatory mechanism by which the new Discharger will be required to implement sanitary sewer system requirements from the transfer date forward.

**J. INCOMPLETE REPORTS**

1. If the Discharger becomes aware that it failed to submit any relevant facts in any report required under these Requirements, the Discharger shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

**K. REPORT CERTIFICATION**

1. All reports required by these Requirements and other information required by the State or Central Coast Water Board shall be signed and certified as follows:
  - a. For a corporation; by a responsible corporate officer (i.e., president, secretary, or treasurer, or vice president of appropriate business function) as defined in 40CFR Part 122;
  - b. For a partnership or sole proprietorship; by a general partner or the proprietor, respectively;
  - c. For a "municipality", state, federal, or other public agency; by either a principal executive officer or ranking elected official; or,
  - d. Their "duly authorized representative."
  - e. An individual is a duly authorized representative only if:
    - i) The authorization is made in writing by a person described in paragraphs (i through iii) of this provision; and
    - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.
  - f. Registration of authorized individuals, who may certify reports, will be in accordance with the California Integrated Water Quality System (CIWQS) protocols for reporting. (For purposes of electronic reporting, an electronic

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signature and accompanied certification, which is in compliance with the Online SSO database procedures, meets this certification requirement.)