

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ORDER NO. R9-2003-055

**AN ORDER RESCINDING ORDER NO. R9-2002-0104, NPDES NO. CA0108821,
AND
CEASE AND DESIST ORDER NO. R9-2002-0212
FOR THE
RANCHO CALIFORNIA WATER DISTRICT
SANTA ROSA WATER RECLAMATION FACILITY
DISCHARGE TO THE SANTA MARGARITA RIVER,
RIVERSIDE COUNTY**

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

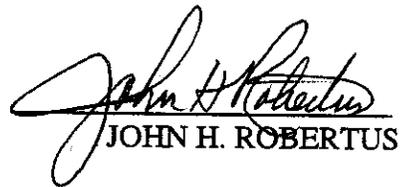
1. On October 9, 2002, this Regional Board adopted National Pollutant Discharge Elimination System (NPDES) Order No. R9-2002-0104, NPDES No. CA0108821, *Waste Discharge Requirements for the Rancho California Water District Santa Rosa Water Reclamation Facility Discharge to the Santa Margarita River, Riverside County*. Order No. R9-2002-0104 establishes requirements for the discharge of up to 2.0 Million Gallons per Day (MGallons/Day) of treated wastewater to the surface waters of Murrieta Creek, tributary to the Santa Margarita River.
2. On October 9, 2002, this Regional Board also adopted Cease and Desist Order (CDO) No. R9-2002-0212, for the *Rancho California Water District Santa Rosa Water Reclamation Facility Discharge to the Santa Margarita River*. CDO No. R9-2002-0212 establishes interim effluent limitations and a time schedule to comply with the discharge specifications of Order No. R9-2002-0104.
3. On October 16, 2002 the Rancho California Water District (RCWD) submitted a letter notifying this Regional Board of their intent to terminate the discharge to Murrieta Creek, starting October 18, 2002.
4. On November 26, 2002, RCWD submitted a second letter, formally requesting that Order Nos. R9-2002-0104 and R9-2002-0212 be rescinded. In this letter, the District clarified that a flow diversion structure that prohibits the discharge of recycled water to Murrieta Creek had been put in place. The District also provided verification that the facility's wet-weather treatment, storage, and disposal capacity are sufficient to handle the entire plant effluent flow, as currently permitted under Order No. 94-92, *Waste Discharge Requirements for the Rancho California Water District Wastewater Reclamation Facilities, Riverside County*.

March 12, 2003

5. On November 7, 2002, Regional Board staff inspected the facilities and verified that the RCWD discharge of treated wastewater to Murrieta Creek, which is subject to Order No. R9-2002-0104 and CDO No. R9-2002-0212, has been terminated.
6. The Regional Board has notified the discharger and all known interested parties of its intent to rescind Order No. R9-2002-0104 and CDO No. R9-2002-0212.
7. The Regional Board, in a public meeting, heard and considered all comments pertaining to the rescission of Order No. R9-2002-0104 and CDO No. R9-2002-0212.
8. Rescission of requirements upon termination of a discharge does not constitute a "project" to be carried out or approved by the Regional Board to which the California Environmental Quality Act (CEQA) would apply (Public Resources Code 21080).

IT IS HEREBY ORDERED that Order No. R9-2002-0104, NPDES No. CA0108821, and Cease and Desist Order No. R9-2002-0212 are rescinded.

I, John H. Robertus, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Diego Region, on March 12, 2003.


JOHN H. ROBERTUS

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**ORDER NO. R9-2002-0104
NPDES PERMIT NO. CA0108821**

**WASTE DISCHARGE REQUIREMENTS FOR THE
RANCHO CALIFORNIA WATER DISTRICT
SANTA ROSA WATER RECLAMATION FACILITY
DISCHARGE TO THE SANTA MARGARITA RIVER
RIVERSIDE COUNTY**

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**WASTE DISCHARGE REQUIREMENTS FOR THE
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DISCHARGE TO THE SANTA MARGARITA RIVER
RIVERSIDE COUNTY**

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On August 11, 1994, this Regional Board adopted Order No. 94-92, *Waste Discharge Requirements for the Rancho California Water District, Wastewater Reclamation Facilities, Riverside County*. Order No. 94-92, as amended with Addendum Nos. 1 & 2, establishes requirements for the discharge to land of up to 5.0 million gallons per day (MGallons/Day) from the Rancho California Water District's (RCWD) Santa Rosa Water Reclamation Facility (SRWRF).
2. On November 14, 1996 this Regional Board adopted Order No. 96-54, National Pollutant Elimination System (NPDES) Permit No. CA0108821, *Waste Discharge Requirements for the Rancho California Water District Santa Rosa Water Reclamation Facility, Riverside County*, authorizing the discharge of up to 2.0 MGallons/Day of treated wastewater to the surface waters of Murrieta Creek, tributary to the Santa Margarita River. This order was established on the basis that the discharge to Murrieta Creek was part of a "pilot study", and complete termination of the discharge would be a readily available response to any deleterious effects which might be observed within the downstream receiving waters.
3. On May 17, 2001, the RCWD submitted an incomplete NPDES permit application for the renewal of Order No. 96-54. The application requested that the Regional Board re-designate the "demonstration project" status of the existing SRWRF discharge of 2.0 MGallons/Day to Murrieta Creek as permanent, and that the discharge flow limits be increased, as a demonstration project, to 3.0 MGallons/Day during the months of May through November, and 5.0 MGallons/Day during the months of December through April. After the discharger submitted additional information, the application was considered complete on March 25, 2002.
4. The RCWD SRWRF, located at 26266 Washington Avenue in the City of Murrieta in Riverside County, has an average design flow of 5.0 MGallons/Day and serves the Cities of Temecula, Murrieta and other unincorporated areas of Riverside County. The SRWRF collects additional wastewater inflow diverted from Eastern Municipal Water District's (EMWD) Murrieta Interceptor for treatment. Any treated effluent in excess of 2.0

MGallons/Day is currently being discharged via existing percolation and water reuse sites, pursuant to Regional Board Order No. 94-92.

5. Existing wastewater treatment unit operations and processes at the SRWRF consist of screening (bar racks), grinding, grit removal, mixing, aeration, sedimentation and decanting in the sequencing batch reactors (SBRs), flocculation, clarification, gravity filtration, chlorination and dechlorination. SBRs are known to have some nutrient removal capabilities. The SRWRF effluent has an average discharge concentration of 3.6 mg/L for total nitrogen and 0.82 mg/L for total phosphorous. Existing solids handling operations and processes at the SRWRF consist of thickening (gravity table thickener) and sludge dewatering (belt press). In accordance with Section 2200, Title 23 of the California Code of Regulations (CCR), the threat to water quality and complexity of the discharge from the SRWRF to Murrieta Creek is determined to be category 1A.
6. The discharge point on Murrieta Creek is located immediately adjacent to the SRWRF at the corner of Washington Avenue and Elm Street in the City of Murrieta in Riverside County. Murrieta Creek flows south from the discharge point to its confluence with Temecula Creek, where the two creeks form the Santa Margarita River. The Santa Margarita River flows southwesterly through the steep and narrow Temecula Canyon, passing near the communities of Rainbow and Fallbrook. The river then enters the broader coastal valley, passing through the U.S. Marine Corps Base at Camp Pendleton. Eventually the river flows into the Santa Margarita Lagoon, which then empties into the Pacific Ocean at a location just north of the City of Oceanside.
7. The terms, conditions, and limitations of this Order have been developed to protect the beneficial uses and water quality of Murrieta Creek and all downstream water bodies, including groundwater basins.
8. The *Water Quality Control Plan, San Diego Basin (9)* (hereinafter Basin Plan) was adopted by this Regional Board on September 8, 1994 and subsequently approved by the State Water Resources Control Board (State Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan designates beneficial uses, narrative and numerical water quality objectives, and prohibitions, which are applicable to the discharge regulated under this NPDES permit.
9. The discharge from SRWRF to Murrieta Creek is located in Hydrologic Subarea (HSA) 2.32 (Murrieta), where the beneficial uses listed are MUN, AGR, IND, PROC, REC-1 (proposed), REC-2, WARM, and WILD. HSA 2.32 is part of the Murrieta Hydrologic Area (HA 2.30) in the Santa Margarita Hydrologic Unit (HU 902.00), upstream of HAs 2.10 (Ysidora), 2.20 (DeLuz), and 2.50 (Pechanga).
10. The Basin Plan establishes the following existing and potential beneficial uses (BUs) for the surface waters of HAs 2.10, 2.20, 2.30, and 2.50:

BU	HA 2.10	HA 2.20	HA 2.30	HA 2.50
Municipal & domestic supply	●	●	●	●
Agricultural supply	●	●	●	●
Industrial service supply	●	●	●	●
Industrial process supply	●		●	●
Ground water recharge				●
Contact water recreation	●	●	○	○
Non-contact water recreation	●	●	●	●
Warm fresh water habitat	●	●	●	●
Cold fresh water habitat	●	●		
Wildlife habitat	●	●	●	●
Preservation of rare and endangered species	●	●		

● = existing beneficial use ○ = potential beneficial use

11. The Basin Plan establishes the following existing and potential BUs for the ground waters of HAs 2.10, 2.20, 2.30, and 2.50:

BU	HA 2.10	HA 2.20	HA 2.30	HA 2.50
Municipal & domestic supply	●	●	●	●
Agricultural supply	●	●	●	●
Industrial service supply	●	●	●	●
Industrial process supply	●		●	

12. The Basin Plan establishes surface and ground water quality objectives for HAs 2.10, and 2.30 and Hydrologic Subareas (HSA) 2.21, 2.22 and 2.52. These objectives are identified in Tables 3-2 and 3-3 of the Basin Plan. The table below identifies the most restrictive water quality objectives for any of these HAs and/or HSAs.

The following concentrations may not be exceeded more than 10% of the time during any one year period:			
Constituent	Unit	Surface Water	Ground Water
Total Dissolved Solids (TDS)	mg/L	750	750
Chloride	mg/L	250	250
Percent Sodium*	%	60	60
Sulfate	mg/L	250	250
Nitrogen & Phosphorous	mg/L	**	**
Nitrate	mg/L	--	10
Iron	mg/L	0.3	0.3
Manganese	mg/L	0.05	0.05
Methylene Blue Active Substances (MBAS)	mg/L	0.5	0.5
Boron	mg/L	0.75	0.75

The following concentrations may not be exceeded more than 10% of the time during any one year period:			
Constituent	Unit	Surface Water	Ground Water
Odor	--	None	None
Turbidity	NTU	20	5
Color	Units	20	15
Fluoride	mg/L	1.0	1.0

* = The Regional Board Executive Officer may authorize the use of adjusted sodium absorption ratio (ASAR) instead of percent sodium to indicate the potential sodium hazard.

** = Concentrations of nitrogen and phosphorous, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorous (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorous are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

Units

mg/L = milligrams per Liter

NTU = Nephelometric Turbidity Units

13. Order No. 96-54 established alternate effluent limitations for nitrogen and phosphorus in accordance with Chapter 4 of the Basin Plan, with the condition that the discharger develop and implement a watercourse monitoring and management plan (WMMP). The data generated from the WMMP indicates that the total nitrogen and total phosphorous concentrations in the downstream receiving waters are greater than the Basin Plan objectives of 1.0 and 0.1 mg/L, respectively. This Order contains revised nutrient effluent limitations in accordance with the objectives established in the Basin Plan.
14. While the WMMP data does not demonstrate "deleterious effects" within the downstream receiving waters that would warrant termination of the pilot study, the assimilative capacity for nutrients in the receiving waters has not been determined. An increase, or permanent allocation, of nutrient mass emissions should not be established without this information.
15. This order contains requirements for the discharge of up to 2.0 MGallons/Day as part of a continued "pilot study". Complete termination of the discharge to surface waters will remain a readily available response. Pursuant to Order No. 94-92, the discharger has the capacity for storage and disposal to land of up to 5.0 MGallons/Day.
16. The discharger has developed a pretreatment program pursuant to Section 307 of the Clean Water Act, Parts 35 and 403 of Title 40, Code of Federal Regulations (40 CFR 35 and 40 CFR 403), and/or Section 2233, Article 4, Subchapter 9, Chapter 3, Title 23, California Code

of Regulations. The discharger's pretreatment program was approved by the United States Environmental Protection Agency (USEPA) on June 1, 1983.

17. On November 16, 1990, the USEPA promulgated NPDES permit application requirements for stormwater discharges (40 CFR Parts 122, 123, and 124) which are applicable to the RCWD SRWRF. On April 17, 1997 the State Water Resources Control Board (SWRCB) adopted Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 Waste Discharge Requirements (WDRs) for Discharges of Storm Water Associated With Industrial Activities Excluding Construction Activities. Stormwater discharges from RCWD's SRWRF are subject to the terms and conditions of Water Quality Order No. 97-03-DWQ.
18. Effluent limitations, industrial pretreatment standards, biosolid use and disposal regulations, and criteria established under Sections 208(b) , 301, 302, 303(d) , 304, 306, 307, 403 and 405 of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), are applicable to the discharge.
19. The Regional Board, in establishing the requirements contained herein, has taken into consideration the requirements of the State and Federal "antidegradation" policies and has determined that:
 - a. The terms and conditions of this Order require that the existing beneficial uses and water quality of the Santa Margarita River and/or its tributaries be maintained and protected;
 - b. The discharge from the SRWRF to the Santa Margarita River and/or its tributaries in accordance with approved plans indicated in the findings is necessary to accommodate economic and social development important to the people of the communities of the San Diego region;
 - c. No surface waters covered under the terms and conditions of this Order have been designated an outstanding national resource water by the State Water Resources Control Board; and
 - d. No surface waters covered under this order have been designated as Areas of Special Biological Significance (ASBS) by the State Water Resources Control Board.
20. The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that a discharge in compliance with this Order is consistent with these Antidegradation Policies.
21. This Order shall serve as an NPDES permit for the discharge of treated wastewater from the RCWD SRWRF to the Santa Margarita River and/or its tributaries pursuant to Section 402 of the CWA and amendments thereto.

22. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

- a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;
- b. Other waste discharges;
- c. The need to prevent nuisance;
- d. Past, present, and probable future beneficial uses of the waters under consideration;
- e. Environmental characteristics of the waters under consideration;
- f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
- g. Economic considerations; and
- h. The need for developing housing within the region.

23. The Board of Directors of the Eastern Municipal Water District (EMWD) adopted a Statement of Overriding Consideration and certified a Final Environmental Impact Report (EIR) for EMWD's Rancho California Regional Water Reclamation Facility (RCRWF) Expansion and Live Stream Discharge to the Santa Margarita River (SCH#88030713) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 *et seq.*) on September 19, 1990. The September 19, 1990 certified EIR included the proposed live stream discharge from the RCWD's 5.0 MGallons/Day capacity SRWRF. The final EIR indicated that the proposed ultimate discharge of up to 45.0 MGallons/Day (30 MGallons/Day from the RCRWF and 15.0 MGallons/Day from the SRWRF) to the Santa Margarita River would have the following water quality impacts:

"The project would increase TDS concentrations in wet weather flows, increase nitrogen and phosphorus concentrations in Murrieta Creek, and increase groundwater basin TDS concentrations (by) 50 mg/L in the Upper Ysidora and Chappo basins. Possible improvement of TDS concentrations in the Lower Ysidora groundwater basin would occur. These basins are an important source of water supply for Camp Pendleton."

The Final EIR indicated the following measures to mitigate for the above water quality impacts:

"EMWD is committed to formation of a proposed 'regional watershed management agency' consisting of representatives of Eastern Municipal Water District (EMWD), RCWD, Fallbrook Public Utilities District (FPUD), and Camp Pendleton. If necessary, mitigation could include construction of well water demineralization facilities for Camp

Pendleton to preserve local water supply quality. As an alternative, reclaimed water from EMWD's San Jacinto Basin treatment plants (540 mg/L TDS) could be piped to RCWD for blending prior to discharge to Murrieta Creek."

The Regional Board has reviewed the final EIR and found that the mitigation measures identified above, and compliance with the terms and conditions of this Order, would adequately mitigate or avoid the water quality impacts identified in the final EIR.

24. The issuance of waste discharge requirements for this discharge is exempt from the requirement for preparation of environmental documents under the CEQA (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.
25. The Regional Board has considered all water resource related environmental factors associated with the discharge of treated wastewater from RCWD's SRWRF to the Santa Margarita River and/or its tributaries.
26. The Regional Board has notified RCWD and all known interested parties of its intent to issue NPDES permit requirements for the proposed discharge of waste.
27. The Regional Board has, at a public meeting, heard and considered all comments pertaining to the discharge of treated wastewater from RCWD's SRWRF to the Santa Margarita River and/or its tributaries.

IT IS HEREBY ORDERED, that RCWD (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. Compliance with the Waste Discharge Prohibitions, as stated in the 1994 Basin Plan (Attachment 1), is required as a condition of this order.
2. Discharge to the Santa Margarita River or its tributaries from the SRWRF in excess of 2.0 Mgallons/Day, measured as a total daily flow from midnight to midnight, is prohibited.
3. The discharge of waste at points that have not been specifically described in the report of waste discharge, and for which valid waste discharge requirements are not in force, is prohibited.
4. The discharge of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to the Santa Margarita River and/or its tributaries is prohibited.

5. The deposition of rubbish or refuse into surface waters or at any place where they would be eventually transported to the Santa Margarita River and/or its tributaries is prohibited.

B. DISCHARGE SPECIFICATIONS

The discharge of treated wastewater from the SRWRF to the Santa Margarita River or its tributaries containing pollutants in excess of the following effluent limitations is prohibited:

1. The 30-day average percent removal for Biochemical Oxygen Demand (BOD, performed at 20°C for 5 days) shall not be less than 85%.
2. The 30-day average percent removal for Total Suspended Solids (TSS) shall not be less than 85%.
3. Total coliform concentration of the effluent shall not exceed a MPN (most probable number) of 2.2 per 100 mL, based on the median of the results of the last 7 days for which analyses have been completed; and shall not exceed a MPN of 23 per 100 mL in more than one sample in any 30-day period. No samples shall exceed an MPN of 240/100 mL.
4. Turbidity concentration of the effluent shall not exceed a daily average value of 2 Nephelometric Turbidity Units (NTU), shall not exceed 5 NTU more than 5% of the time during a 24-hour period, and shall not exceed 10 NTU at any time.

5. Limitations for Major Properties of Wastewater

Constituent	Unit	Limit			
		Daily Maximum	Weekly Average	Monthly Average	Monthly Median
BOD	mg/L	20	15	10	--
	lb/day	334	250	167	
TSS	mg/L	20	15	10	--
	lb/day	334	250	167	
Total Organic Carbon (TOC)	mg/L	15	--	8	--
	lb/day	250		133	
Total Residual Chlorine (TRC)	mg/L	0.02	--	--	--
	lb/day	0.3			
Chronic toxicity	TUc	1.8	--	--	1.0

Units

mg/L = milligrams per Liter

lb/day = pounds per day

TUc = Toxic Units, chronic

6. California Toxics Rule (CTR) Effluent Limitations

Constituent	Unit	Limit	
		Daily Maximum	Monthly Average
Bis (2-Ethylhexyl) Pthalate	µg/L	3.61	1.8
	lb/day	60	30
Chlorodibromomethane	µg/L	0.82	0.41
	lb/day	0.14	0.07
Copper	µg/L	26.9	13.4
	lb/day	4.5	2.2
Cyanide	µg/L	8.5	4.3
	lb/day	1.4	0.72
Dichlorobromomethane	µg/L	1.1	0.56
	lb/day	0.18	0.09
Methylene Chloride	µg/L	9.4	4.7
	lb/day	1.57	0.78
Selenium	µg/L	7.63	4.27
	lb/day	1.27	0.71

Units

µg/L = micrograms per Liter

lb/day = pounds per day

7. Limitations for Basin Plan Constituents

Constituent	Unit	Limit		
		Daily Maximum	Monthly Average	Annual Average
Total Dissolved Solids (TDS)	mg/L lb/day	825 13,800	750 12,500	--
Chloride	mg/L lb/day	250 4,200	--	--
Adjusted Sodium Absorption Ratio (ASAR)	Not to exceed the slight to moderate range of values referenced in Table 3-1 of the Basin Plan.			
Sulfate	mg/L lb/day	250 4,200	--	--
Nitrogen (total)	mg/L lb/day	1.1 18	--	1.0 17
Phosphorous (total)	mg/L lb/day	0.11 2	--	0.1 2
Nitrate	mg/L lb/day	--	--	10 167
Iron	mg/L lb/day	0.4 5	0.3 7	--
Manganese	mg/L lb/day	0.06 1	0.05 1	--
Methylene Blue Activated Substances (MBAS)	mg/L lb/day	0.5 8	--	--
Boron	mg/L lb/day	0.75 13	--	--
Color	Units	20	--	15
Fluoride	mg/L lb/day	1.0 17	--	--
Ammonia (un-ionized)	mg/L lb/day	0.025 0.42	--	--
Phenolic Compounds	µg/L lb/day	1.0	--	--
pH	Units	Between 6.5 and 8.5 at all times		
Inorganic Chemicals*	Not to exceed MCLs** set forth in CCR, Title 22, Table 64431-A of Section 64431 (Attachment 2)			
Organic Chemicals*	Not to exceed MCLs set forth in CCR, Title 22, Table 64444-A of Section 64444 (Attachment 3)			
Radionuclides	Not to exceed MCLs set forth in CCR, Title 22, Table 4 of Section 64443 (Attachment 4)			
Secondary Drinking Water Standards*	Not to exceed MCLs specified in CCR, Title 22, Table 64449-A of Section 64449 (Attachment 5)			
Total Trihalomethanes (THMs)	mg/L lb/day	0.1 1.7	--	--

* = in cases where an effluent limitation for a specific constituent and time period already exists, only the more stringent limit shall apply.

** = Maximum Contaminant Levels

C. RECEIVING WATER LIMITATIONS

The discharge from the SRWRF shall not, by itself or jointly with any other discharge, cause violations of the following receiving water quality objectives:

1. Bacteriological standards
 - a. The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 mL, nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 mL.
 - b. The enterococcus concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 151/100 mL.
 - c. The *E. coli* concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 576/100 mL.
2. Dissolved oxygen (DO) levels shall not be less than 5.0 mg/L.
3. The pH shall not be depressed below 6.5 nor raised above 8.5 units.
4. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH_3) to exceed 0.025 mg/L (as N).
5. Concentrations of nitrogen and phosphorous, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth.
6. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other resources shall not be impaired.
7. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.
8. Waters shall not contain oils, greases, waxes or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which adversely affect beneficial uses.
9. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.
10. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

11. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
12. Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish or other regional water resources used for human consumption shall not be impaired.
13. The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alterations in temperature does not adversely affect beneficial uses.
14. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods, as specified by the Regional Board.
15. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

D. PROVISIONS

1. The discharger must comply with all conditions of this Order. Any permit noncompliance constitutes a violation of the CWA and the California Water Code, and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of an application for permit renewal, modification, or reissuance.
2. The discharger must comply with all standard provisions, where applicable, as stated in 40 CFR 122 (see Attachment No. 6) and Additional Standard Provisions (Attachment No. 7), which are incorporated into this permit by reference.
3. The discharger shall comply with all existing federal and state laws and regulations that apply to its sewage sludge use and disposal practice(s), and with the CWA Section 405(d) and 40 CFR Part 257.
4. The discharger shall report sewer overflow events that occur at the SRWRF. For purposes of this provision, a sewer overflow event is a discharge of treated or untreated wastewater at a location not authorized by waste discharge requirements and/or NPDES permit which results from a pump station failure, sewer line break, obstruction, surcharge, or any other operational dysfunction. This requirement applies to all sewer overflow events other than those events subject to regulation under this Regional Board's Order No. 96-04, *General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies*.
 - a. If a sewer overflow event results in a discharge of 1,000 gallons or more, or results in a discharge to surface waters (any volume), the discharger shall report the sewer overflow event to the Regional Board by any available means, including telephone, voice mail, or

FAX, within 24 hours from the time that 1) discharger has knowledge of the sewer overflow, 2) notification is possible, and 3) notification can be provided without substantially impeding cleanup or other emergency measures. Notification may be made after normal business hours by leaving a message for the Regional Board on voice mail or FAX.

- (1) For the purpose of this requirement, surface waters include navigable waters, rivers, streams (including ephemeral streams), lakes, playa lakes, natural ponds, bays, the Pacific Ocean, lagoons, estuaries, man-made canals, ditches, dry arroyos, mudflats, sandflats, wet meadows, wetlands, swamps, marshes, sloughs and water courses, and storm drains tributary to surface waters. The term includes waters of the United States as used in the federal Clean Water Act (see 40 CFR 122.2)
 - (2) The information reported to the Regional Board in the initial report shall include the name and phone number of the person reporting the sanitary sewer overflow, the responsible sanitary sewer system agency, the estimated total sewer overflow volume, the location, the receiving waters, whether or not the sewer overflow is still occurring at the time of the report, and confirmation that the local health services agency was or will be notified as required under the reporting requirements of the local health services agency.
- b. If the sewer overflow event results in a discharge of 1,000 gallons or more, or results in a discharge to surface waters (any volume), the discharger shall complete a copy of the Sanitary Sewer Overflow Form attached to Monitoring and Reporting Program No. 96-04, and submit the completed Sanitary Sewer Overflow Report form, along with any additional correspondence, to the Regional Board no later than 5 days following the starting date of the sanitary sewer overflow. Additional correspondence and follow-up reports should be submitted to the Regional Board, as necessary, to supplement the Sanitary Sewer Overflow Report Form to provide detailed information on cause, response, adverse effects, corrective actions, preventative measures, or other information.
 - c. The discharger shall report all sewer overflows, regardless of volume or final destination, in the next quarterly self-monitoring report, in accordance with the format described in Order No. 96-04.
5. The discharger shall also notify the Regional Board, the California Department of Health Services (DHS), and the Riverside County Department of Environmental Health (DEH) within 24 hours of when it becomes aware of any of the following:
 - a. Failure of chlorination equipment
 - b. Effluent Total Coliform bacteria greater than 240 MPN/100 mL.
 - c. Effluent turbidity greater than 10 NTU
 - d. CT less than 450 mg-min./L , *and the effluent is delivered to the distribution system or any reclaimed water use sites.*
 6. Within 180 days from the adoption of this Order, the discharger shall submit a revised Engineering Report for the SRWRF, in accordance with guidelines established under Title 22

CCR, Articles 7 through 10, to the RWQCB, and the DHS. This report shall include the results of:

- a. An alarm simulation shut down test, in the presence of a staff member from the Regional Board and a sanitary engineer from the California DHS, to ensure that the SRWRF is properly operating.
 - b. The modal contact time of the chlorination chamber, as defined under Title 22, Division 4, Chapter 3, Section 60301.600, from a tracer study conducted to ensure that the effluent meets the requirements of Title 22.
7. Chlorination shall be with a disinfection process providing a CT (chlorine concentration times modal contact time) value of at least 450 mg-min/liter at all times at the end of the contact chamber, with a minimum modal chlorine contact time of at least 90 minutes, based on peak dry weather design flow.
 8. The discharger shall submit reports and provide notifications to the Regional Board and other agencies as specified in this Order. Reports and notifications submitted to the Regional Board shall be made to:

California Regional Water Quality Control Board
San Diego Region
POTW Compliance Unit
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340
Telephone: (858) 467-2952
Fax: (858) 571-6972

9. The discharger shall maintain a Sewer Overflow Prevention Plan (SOPP), specific to the treatment facility and the downstream conveyance system, in an up-to-date condition and shall amend the SOPP whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sewerage system or sewerage facilities) which materially affects the potential for sewer overflows. The discharger shall review and amend the SOPP as appropriate after each sewer overflow from the facility. The SOPP and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SOPP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SOPP is readily available to facility personnel at all times and that facility personnel are familiar with it.
10. The discharger shall maintain a Sewer Overflow Response Plan (SORP), specific to the treatment facility and the downstream conveyance system. The SORP shall establish procedures for responding to overflows from the facility so as to (a) minimize the overflow volume which enters surface waters, and (b) minimize the adverse effects of overflows on water quality and beneficial uses. The discharger shall maintain the SORP in an up-to-date condition and shall amend the SORP as necessary to accomplish these objectives. The

discharger shall review and amend the SORP as appropriate after each overflow. The SORP, and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SORP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SORP is readily available to facility personnel at all times and that facility personnel are familiar with it.

11. Appropriate Treatment Plant Operations and Maintenance (O&M) manual(s) shall be posted at a prominent location at the permitted treatment or disposal facility, and shall be available to operating and/or on-site personnel at all times. The O&M manual(s) shall be prepared, revised, and/or updated by qualified engineers to account for any changes in plant operations or processes. The O&M manual(s) shall be reviewed by the discharger at least once every three years. The discharger shall certify, in writing, to this RWQCB that appropriate, updated, and accurate O&M manual(s) are utilized at the treatment or disposal facility, or that modifications to the manual(s) are required, the details of the revisions necessary, and the date and method of completion.
12. Supervisors and operators of the discharger's wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with Chapter 14 of Division 4 of Title 23 of the California Code of Regulations. All operating personnel will be of appropriate grade to perform the operations and/or maintenance they are assigned to. The Annual Report will include the grade certifications of all operating personnel and summaries of any training received in the previous calendar year.
13. The discharger shall submit a written report to the Executive Officer within 90 days after the average dry weather influent flowrate for any 30-day period equals or exceeds 75 percent of the design capacity of any waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter that transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:
 - a. Average daily flow for the 30-day period, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day;
 - b. The discharger's best estimate of when the average daily dry-weather flowrate will equal or exceed the design capacity of the facilities; and
 - c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities and/or control the flowrate before the waste flowrate equals the capacity of present units.
14. All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-rating of an existing treatment facility. For new treatment facilities and expansions, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:

- a. Identify the design capacity of the treatment facility;
- b. Certify the adequacy of each component of the treatment facility; and
- c. Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of how the process and physical design of the facility will ensure compliance with this Order.

The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. The certification report, should, if possible, be submitted prior to beginning construction. The discharger shall not initiate a discharge from a new treatment facility or initiate a discharge from an existing treatment facility at a 30-day average dry weather flowrate in excess of its previously approved design capacity until:

- a. The certification report is received by the Executive Officer;
 - b. The Executive Officer has received written notification of the completion of construction (new treatment facilities and expansions only); and
 - c. An inspection of the plant has been made by the Regional Board staff (new treatment facilities and expansions only).
 - d. The Executive Officer has provided the discharger with written authorization to discharge at a 30-day average dry weather flowrate not to exceed the revised design capacity.
15. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the Riverside County flood control agency.
16. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year frequency 24-hour storm.
17. This Order expires October 9, 2007, after which, the terms and conditions of this permit are automatically continued pending issuance of a new permit provided that all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40CFR 122.6, 23 CCR 2235.4].
18. Order No. 96-54 is rescinded when this Order becomes effective.

E. PRETREATMENT REQUIREMENTS

1. The discharger shall be responsible and liable for the performance of all pretreatment requirements contained in 40 CFR Part 403, including any subsequent revisions to 40 CFR Part 403. Where 40 CFR Part 403 or subsequent revisions place mandatory actions upon the discharger, but do not specify a timetable for completion, the discharger shall complete the mandatory actions within six months of the issuance date of this Order, or the effective date of the 40CFR403 revisions, whichever comes later. For violations of pretreatment requirements, the discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, and/or the Regional Board, as provided in the CWA and/or the Porter-Cologne Water Quality Control Act (CWC), respectively.

2. The discharger shall implement and enforce its approved pretreatment program **including Ordinance No. 2002-05 and Resolution No. 2002-04 adopted May 16, 2002**, and all subsequent revisions, which are hereby made an enforceable condition of this Order. The discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified those requirements, or in the case of a new industrial user, upon commencement of the discharge.
3. The discharger shall perform the pretreatment functions as required in 40CFR403 and in Section 13263.3 of the CWC including, but not limited to:
 - a) Implement the necessary legal authorities as provided in 40CFR403.8(f)(1);
 - b) Enforce the pretreatment requirements under 40CFR403.5 and 403.6;
 - c) Implement the programmatic functions as provided in 40CFR403.8(f)(2);
and
 - d) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40CFR403.8(f)(3).
4. By March 30th of each year, the discharger shall submit an annual report to the Regional Board; the USEPA Region 9; the State Water Resources Control Board, Division of Water Quality, Regulation Unit; and the Riverside County Department of Environmental Health, describing its pretreatment activities over the previous calendar year. In the event the discharger is not in compliance with any condition or requirement of this Order, or any pretreatment compliance inspection/audit requirements, the discharger shall include the reasons for noncompliance and state how and when it shall comply with such conditions and requirements. The annual report shall contain, but not be limited to, the following information:
 - a) A summary of analytical results from representative flow-proportioned 24 hour composite sampling of the discharger's influent and effluent for those pollutants known or suspected to be discharged by industrial users that the USEPA has identified under Section 307(a) of the CWA which are known or suspected to be discharged by industrial users. This will consist of an annual full priority pollutant scan. Wastewater sampling and analysis shall be performed in accordance with the minimum frequency of analysis stated in the Monitoring and Reporting Program of this Order. The discharger shall also provide influent and effluent monitoring data for nonpriority pollutants which the discharger believes may be causing or contributing to interference and/or pass through. The discharger is not required to sample and analyze for asbestos. Sludge sampling and analysis is addressed in the sludge section of this Order. Wastewater sampling and analysis shall be performed in accordance with 40 CFR Part 136 and amendments thereto.
 - b) A discussion of upset, interference, or pass through, if any, at the POTW which the discharger knows or suspects were caused by industrial users. The discussion

shall include the reasons why the incidents occurred, any corrective actions taken, and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable local pollutant limitations to determine whether any additional; limitations or changes to existing limitations, are necessary to prevent pass through, interference, or noncompliance with sludge disposal requirements.

- c) An updated list of the discharger's significant industrial users (SIU's) including their names and addresses, and showing a list of additions, deletions, or name changes keyed to the previous submitted list. The list shall identify the industrial users subject to federal categorical standards by specifying which standards are applicable. The list shall also indicate which significant (non-categorical) industrial users are subject to local limitations.
- d) The discharger shall characterize the compliance status of each significant industrial user (SIU) by providing a list or table for the following:
 - 1) Name of SIU and category if subject to categorical standards;
 - 2) Type of wastewater treatment or control processes in place;
 - 3) Number of samples taken by SIU during the year;
 - 4) Number of samples and inspections by the discharger during the year;
 - 5) For an SIU subject to discharge requirements for total toxic organics (TTO), whether all required certifications were provided;
 - 6) A list of pretreatment standards (categorical or local) violated during the year, or any other violations;
 - 7) Industries in significant noncompliance (SNC) as defined at 40 CFR Part 403.8(f)(2)(vii) at any time during the year;
 - 8) A summary of enforcement actions or any other actions taken against SIU(s) during the year. Describe the type of action, final compliance date, and the amount of fines and/or penalties collected, if any. Describe any proposed action for bringing an SIU into compliance;
 - 9) The name(s) of any SIU(s) required to submit a baseline monitoring report (BMR), and any SIU's currently discharging under a BMR; and
 - 10) The name(s) of any IU(s) preparing and/or implementing a pollution prevention plan.
- e) A brief description of any program the discharger implements to reduce pollutants from industrial users not classified as SIU's;
- f) A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes in the program's administrative structure, local limits, monitoring program, legal authority, enforcement policy, and funding and staffing levels;
- g) A summary of the annual pretreatment program budget, including the cost of pretreatment program functions and equipment purchases;

- h) A summary of activities to involve and inform the public of the pretreatment program including a copy of the newspaper notice, if any, required under 40CFR403.8(f)(2)(vii);
 - i) A description of any changes in sludge disposal methods; and
 - j) A discussion of any concerns not described elsewhere in the annual report.
5. The discharger shall submit a semi-annual SIU compliance status report to the Regional Board, the State Water Resources Control Board, and the USEPA. The report shall cover the period of January 1 through June 30, and shall be submitted no later than September 1st of each year. The report shall identify:
- a) The name and address of any SIU violating any discharge or reporting requirements during the semi-annual reporting period;
 - b) A description of the violations including whether the discharge violations were for categorical standards or local limits;
 - c) A description of any enforcement actions, or other actions taken to remedy the SIU's noncompliance;
 - d) The status of active enforcement actions, or other actions taken in response to SIU noncompliance identified in previous reports; and
 - e) The status of any IU's preparing and/or implementing pollution prevention plans.
6. The discharger shall continue with its implementation of a Non-industrial Source Control Program consisting of a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the sanitary sewer system. The Program shall be reviewed periodically and addressed in the annual report.

F. BIOSOLID REQUIREMENTS

1. Management of all solids and biosolid must comply with all requirements of 40 CFR Parts 257, 258, 501, and 503; CWA Part 405(d); and Title 23, CCR, Chapter 14, including all monitoring, record-keeping, and reporting requirements. Since the State of California, hence the Regional and State Boards, has not been delegated the authority by the USEPA to implement the biosolid program, enforcement of biosolid requirements of CFR Part 503 is under USEPA's jurisdiction. Once biosolid leaves the SRWRF, it is subject to all applicable local, state, and federal laws and regulations.
2. All solids and biosolid must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a biosolid-only landfill in accordance with 40 CFR Parts 503 and 258, and Title 23 CCR, Chapter 15. If the discharger decides to dispose of solids or

biosolid by a different method, a request for permit modification must be submitted to the USEPA and this Regional Board 180 days prior to alternative disposal.

3. Solids, and biosolid treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
4. The solid and biosolid treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and prevent drainage from the treatment and storage sites. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
5. The discharge of sewage biosolid and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.
6. The discharger shall submit a copy of each of the annual reports required by 40 CFR 503 to this Regional Board at the same time those reports are submitted to the USEPA. The discharger shall also submit an annual report of the quantity and disposition of biosolid generated in the previous calendar year.

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on October 9, 2002.



JOHN H. ROBERTUS
Executive Officer

ATTACHMENT NO. 1**1994 WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO BASIN
(BASIN PLAN) WASTE DISCHARGE PROHIBITIONS**

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person as defined by Section 13050(c) of the California Water Code and to any person who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264, is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code §13376) is prohibited.
4. The discharge of treated or untreated waste to lakes or reservoirs used for municipal water supply, or to inland surface water tributaries thereto, is prohibited.
5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board.
7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.
8. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the Regional Board. (The federal regulations, 40CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and

surface runoff and drainage. 40CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharge resulting from fire fighting activities.) (§122.26 amended at 56 FR 56553, November 5, 1991 57 FR 11412, April 2, 1992).

9. The authorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.
11. The discharge of radioactive waste amenable to alternative methods of disposal into the waters of the state is prohibited.
12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.
14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.
16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.
17. The discharge of treated sewage from vessels to portion of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.
18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep a mean lower low water (MLLW) is prohibited.

Attachment No. 2
22 CCR Section 64431
Table 64431-A
Maximum Contaminant Levels
Inorganic Chemicals

Chemical	Maximum Contaminant Level, mg/L
Aluminum	1.
Antimony	0.006
Arsenic	0.05
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.2
Fluoride	2.
Mercury	0.002
Nickel	0.1
Nitrate (as NO ₃)	45.
Nitrate + Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Selenium	0.05
Thallium	0.002

*MFL = million fibers per liter; MCL for fibers exceeding 10 micrometers in length.

Attachment No. 3
22 CCR Section 64444
Table 64444-A
Maximum Contaminant Levels
Organic Chemicals

<i>Chemical</i>	<i>Maximum Contaminant Level, mg/L</i>
(a) Volatile Organic Chemicals (VOCs)	
Benzene	0.001
Carbon Tetrachloride	0.0005
1,2-Dichlorobenzene	0.6
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane	0.0005
1,1-Dichloroethylene	0.006
cis-1,2-Dichloroethylene	0.006
trans-1,2-Dichloroethylene	0.01
Dichloromethane	0.005
1,2-Dichloropropane	0.005
1,3-Dichloropropene	0.0005
Ethylbenzene	0.7
Monochlorobenzene	0.07
Styrene	0.1
1,1,2,2-Tetrachloroethane	0.001
Tetrachloroethylene	0.005
Toluene	0.15
1,2,4-Trichlorobenzene	0.07
1,1,1-Trichloroethane	0.200
1,1,2-Trichloroethane	0.005
Trichloroethylene	0.005
Trichlorofluoromethane	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2
Vinyl Chloride	0.0005
Xylenes	1.750*

Table 64444-A (continued)
Maximum Contaminant Levels
Organic Chemicals

<i>Chemical</i>	<i>Maximum Contaminant Level, mg/L</i>
(b) Non-Volatile Synthetic Organic Chemicals (SOCs)	
Alachlor	0.002
Atrazine	0.003
Bentazon	0.018
Benzo(a)pyrene	0.0002
Carbofuran	0.018
Chlordane	0.0001
2,4-D	0.07
Dalapon	0.2
Dibromochloropropane (DBCP)	0.0002
Di(2-ethylhexyl)adipate	0.4
Di(2-ethylhexyl)phthalate	0.004
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide (EDB)	0.00005
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor Epoxide	0.00001
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lindane	0.0002
Methoxychlor	0.04
Molinate	0.02
Oxamyl	0.2
Pentachlorophenol	0.001
Picloram	0.5
Polychlorinated Biphenyls	0.0005
Simazine	0.004
Thiobencarb	0.07
Toxaphene	0.003
2,3,7,8-TCDD (Dioxin)	3×10^{-8}
2,4,5-TP (Silvex)	0.05

*MCL is for either a single isomer or the sum of the isomers.

Attachment No. 4
Table 4 of Section 64443
Maximum Contaminant Levels
MCL Radioactivity

<i>Constituent</i>	<i>Maximum Contaminant Level, pCi/l*</i>
Combined Radium-226 and Radium-228	5
Gross Alpha particle activity (including Radium-226 but excluding Radon and Uranium)	15
Tritium	20,000
Strontium-90	8
Gross Beta particle activity	50
Uranium	20

PCi/l = picoCurie per Liter

Attachment No. 5
22 CCR Section 64449
Table 64449-A
**Secondary Maximum Contaminant Levels
Consumer Acceptance Limits**

Constituents	Maximum Contaminant Levels/Units
Aluminum	0.2 mg/L
Color	15 Units
Copper	1.0 mg/L
Corrosivity	Non-corrosive
Foaming Agents (MBAS)	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Methyl-tert-butyl ether (MTBE)	0.005 mg/L
Odor—Threshold	3 Units
Silver	0.1 mg/L
Thiobencarb	0.001 mg/L
Turbidity	5 Units
Zinc	5.0 mg/L

ATTACHMENT NO. 6

40 CFR STANDARD PROVISION REFERENCES

40 CFR 122.1 Purpose and scope

40 CFR 122.1(a) and (b).

40 CFR 122.2 Definitions

40 CFR 122.2(all).

40 CFR 122.3 Exclusions

40 CFR 122.3(a) through (g).

40 CFR 122.4 Prohibitions (applicable to State programs, see Section 123.25).

40 CFR 122.4(a) through (i).

40 CFR 122.5 Effect of a permit (applicable to State programs, see Section 123.25).

40 CFR 122.5(a) through (c).

40 CFR 122.6 Continuation of expiring permits

40 CFR 122.6(b) through (d).

40 CFR 122.7 Confidentiality of information (applicable to State programs, see Section 123.25).

40 CFR 122.7 (a) through (c).

40 CFR 122.21 Application for a Permit (applicable to State programs, see Section 123.25).

40 CFR 122.21(a) through (q).

40 CFR 122.22 Signatories to permit applications and reports (applicable to State programs, see Section 123.25).

(a) Applications. All applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the

corporation, or (ii) the manager of one or more manufacturing, production, operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in Section 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under §122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- (b) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in paragraph (a) of this section;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - (3) The written authorization is submitted to the Director.
- (c) Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section

must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

40 CFR 122.23 Concentrated animal feeding operations (applicable to State programs, see Section 123.25).

40 CFR 122.23(a) through (c).

40 CFR 122.24 Concentrated aquatic animal production facilities (applicable to State programs, see Section 123.25).

40 CFR 122.24(a) through (c).

40 CFR 122.25 Aquaculture projects (applicable to State programs, see Section 123.25).

40 CFR 122.25(a) and (b).

40 CFR 122.26 Storm water discharges (applicable to State programs, see Section 123.25).

40 CFR 122.26(a) through (g).

40 CFR 122.27 Silvicultural activities (applicable to State programs, see Section 123.25).

40 CFR 122.27(a) and (b).

40 CFR 122.28 General permits (applicable to State programs, see Section 123.25).

40 CFR 122.28(a) and (b).

40 CFR 122.29 New sources and new dischargers.

40 CFR 122.29(a) through (d).

40 CFR 122.30 through 122.37 (Various sections on regulation of small MS4's).**40 CFR 122.41 Conditions applicable to all permits (applicable to State programs, see Section 123.25).**

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in Section 122.42. All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

- (a) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
- (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - (2) The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger

of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- (3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- (b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- (c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (e) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- (f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- (g) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- (h) Duty to provide information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for

modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

(i) Inspection and entry. The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

(j) Monitoring and records.

- (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- (3) Records of monitoring information shall include:
 - i) The date, exact place, and time of sampling or measurements;
 - ii) The individual(s) who performed the sampling or measurements;
 - iii) The date(s) analyses were performed;
 - iv) The individual(s) who performed the analyses;

- v) The analytical techniques or methods used; and
 - vi) The results of such analyses.
- (4) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.
- (5) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

(k) Signatory requirement.

- (1) All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)
- (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(l) Reporting requirements.

- (1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
- i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b); or
 - ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants, which are subject neither to effluent limitations in the permit, nor to notification requirements under §122.42(a)(1).
 - iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported

during the permit application process or not reported pursuant to an approved land application plan;

- (2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- (3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)
- (4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
 - ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- (5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (6) Twenty-four hour reporting.
 - i) The permittee shall report any noncompliance, which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- ii) The following shall be included as information, which must be reported within 24 hours under this paragraph.
 - A. Any unanticipated bypass which exceeds any effluent limitation in the Permit (See 40 CFR 122.41(g)).
 - B. Any upset which exceeds any effluent limitation in the permit.
 - C. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g)).
 - iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.
- (7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.
- (8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

(m) Bypass.

- (1) Definitions.
 - i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (m)(3) and (m)(4) of this section.
- (3) Notice

- i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass.

- i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - A. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - B. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - C. The permittee submitted notices as required under paragraph (m)(3) of this section.
- ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) Upset

- (1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii) The permitted facility was at the time being properly operated; and
 - iii) The permittee submitted notice of the upset as required in paragraph (1)(6)(ii)(B) of this section (24-hour notice).
 - iv) The permittee complied with any remedial measures required under paragraph (d) of this section.
- (4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

40 CFR 122.42 Additional conditions applicable to specified categories of NPDES permits (applicable to State NPDES programs, see Section 123.25).

The following conditions, in addition to those set forth in Section 122.41, apply to all NPDES permits within the categories specified below:

- (a) Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under Section 122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
- (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i) One hundred micrograms per liter (100 ug/l);
 - ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Sec. 122.21(g)(7); or
 - iv) The level established by the Director in accordance with Section 122.44(f).
 - (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i) Five hundred micrograms per liter (500 ug/l);
 - ii) One milligram per liter (1 mg/l) for antimony;

- iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 122.21(g)(7).
 - iv) The level established by the Director in accordance with Sec. 122.44(f).
- (b) Publicly owned treatment works. All POTWs must provide adequate notice to the Director of the following:
- (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and
 - (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under Sections 122.26(d)(2)(iv) and (d)(2)(v) of this part;
 - (4) A summary of data, including monitoring data, that is accumulated throughout the reporting year;
 - i) effluent introduced into the POTW, and
 - ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (c) Municipal separate storm sewer systems. The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the Director under Sec. 122.26(a)(1)(v) of this part must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include:
- (1) The status of implementing the components of the storm water management program that are established as permit conditions;
 - (2) Proposed changes to the storm water management programs that are established as permit condition. Such proposed changes shall be consistent with Section 122.26(d)(2)(iii) of this part; and
 - (3) Annual expenditures and budget for year following each annual report;
 - (4) A summary describing the number and nature of enforcement actions, inspections, and public education programs;
 - (5) Identification of water quality improvements or degradation;

(d) Storm water discharges. The initial permits for discharges composed entirely of storm water issued pursuant to Section 122.26(e)(7) of this part shall require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

40 CFR 122.43 **Establishing permit conditions (applicable to State programs, see Section 123.25).**

40 CFR 122.43(a) through (c).

40 CFR 122.44 **Establishing limitations, standards, and other permit conditions (applicable to State programs, see Section 123.25).**

40 CFR 122.44(a) through (s).

40 CFR 122.45 **Calculating NPDES permit conditions (applicable to State programs, see Section 123.25).**

40 CFR 122.45(a) through (h).

40 CFR 122.46 **Duration of permits (applicable to State programs, see Section 123.25).**

40 CFR 122.46(a) through (e).

40 CFR 122.47 **Schedules of compliance (applicable to State programs, see Section 123.25).**

40 CFR 122.47(a) and (b).

40 CFR 122.48 **Requirements for recording and reporting of monitoring results. (applicable to State programs, see Section 123.25).**

40 CFR 122.48(a) through (c).

40 CFR 122.49 **Considerations under Federal law.**

40 CFR 122.49(a) through (g).

40 CFR 122.50 **Disposal into wells, into publicly owned treatment works (applicable to State programs, see Section 123.25).**

40 CFR 122.50(a) through (c).

40 CFR 122.61 **Transfer of permits (applicable to State programs, see Section 123.25).**

40 CFR 122.61(a) through (b).

40 CFR 122.62 Modification or revocation and reissuance of permits (applicable to State programs, see Section 123.25).

40 CFR 122.62(a) through (b).

40 CFR 122.63 Minor modifications of permits.

40 CFR 122.63(a) through (g).

40 CFR 122.64 Termination of permits (applicable to State programs, see Section 123.25).

40 CFR 122.64(a) through (b)

Note: The sections of 40 CFR Standard Provisions listed above that are not quoted verbatim can be obtained through the following website: www.access.gpo.gov.

ATTACHMENT NO. 7**ADDITIONAL STANDARD PROVISIONS**

1. *Review and revision of permit:* Upon application by any affected person, or on its own motion, the SDRWQCB may review and revise this permit. All requirements shall be reviewed periodically. [CWC 13263(e)]
2. *Termination or modification of permit:* This permit may be terminated or modified for causes, including, but not limited to, all of the following:
 - (a) Violation of any condition contained in this permit.
 - (b) Obtaining this permit by misrepresentation, or failure to disclose fully all relevant facts.
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC 13381]
3. *Material change:* Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a technical report describing such changes. Such changes include but are not limited to the following:
 - (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
 - (b) Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
 - (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
 - (d) Increase in flow beyond that specified in the waste discharge requirements.
 - (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13376, 13264, 23 CCR 2210]
 - (f) Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.
 - (g) Any new discharge of pollutants or new potential pollutant source.

(h) Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC 13264, 23 CCR 2210]

4. *Transfers*: When this permit is transferred to a new owner or operator, such requirements as may be necessary under the California Water Code may be incorporated into this permit.
5. *Conditions not stayed*: The filing of a request by the Discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.
6. *Availability*: A copy of this Order shall be kept at a readily accessible location and shall be available to on-site personnel at all times.
7. *Duty to minimize or correct adverse impacts*: The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
8. *Responsibilities, liabilities, legal action, penalties*: The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the Clean Water Act. [CWC 13385, 13387]

Nothing in this Order shall be construed to protect the Discharger from its liabilities under federal, state, or local laws.

Except as provided for in 40CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Discharger from civil or criminal penalties for noncompliance.

Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties to which the Discharger is or may be subject to under Section 311 of the CWA.

Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

9. *Noncompliance*: Any noncompliance with this permit constitutes violation of the California Water Code and is grounds for denial of an application for permit modification. (Also, see 40CFR 122.41 (a))
10. *Discharge is a privilege*: No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights. {CWC 13263(g)}
11. *Permittee*: For the purposes of this permit, the term "permittee" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "Discharger" used elsewhere in this permit.

12. *Director*: For the purposes of this permit, the term "Director" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "SDRWQCB" used elsewhere in this permit, except that in 40CFR 122.41(h) & (I), "Director" shall mean "SDRWQCB, SWRCB, and USEPA."
13. *Effective date*: This Order shall become effective ten days after the date of its adoption provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
14. *Continuation of expired permit*: After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40CFR 122.6, 23 CCR 2235.4]
15. *Applications*: Any application submitted by the Discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.
16. *Confidentiality*: Except as provided for in 40CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the offices of the SDRWQCB.
17. *Severability*: The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this order shall not be affected thereby.
18. *Discharge Monitoring Quality Assurance (DMQA) Program*: The Discharger shall conduct appropriate analyses on any sample provided by EPA as part of the DMQA program. The results of such analyses shall be submitted to EPA's DMQA manager. [SWRCB/USEPA 106 MOA]
19. *Pollution, Contamination, Nuisance*: The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**MONITORING AND REPORTING PROGRAM NO. R9-2002-0104
NPDES PERMIT NO. CA0108821**

**WASTE DISCHARGE REQUIREMENTS FOR THE
RANCHO CALIFORNIA WATER DISTRICT
SANTA ROSA WATER RECLAMATION FACILITY
DISCHARGE TO THE SANTA MARGARITA RIVER
RIVERSIDE COUNTY**

A. PURPOSE

This monitoring program is intended to:

1. Document the short-term and long-term effects of the discharge to the water quality and the beneficial uses of the receiving waters.
2. Evaluate compliance with the NPDES permit terms and conditions.
3. Assess the effectiveness of industrial pretreatment and toxic control programs.

B. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance.
2. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.
3. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.
4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.

5. The discharger shall have, and implement, an acceptable written Quality Assurance /Quality Control (QA/QC) plan for field and laboratory analyses. An annual report shall be submitted by February 1 of each year which summarizes the QA/QC activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by USEPA or the Regional Board, the discharger will participate in the NPDES discharge monitoring report QA/QC performance study. The discharger should have a success rate equal or greater than 80 percent.
6. All reports submitted in response to this Order shall comply with the signatory requirements of 40 CFR 122.22 (Attachment 6).
7. The discharger shall implement the above monitoring program on the first day of the month following the effective date of this Order. The Monitoring and Reporting Program of Order No. 96-54 shall remain in effect between the adoption date of this Order and the implementation of this Monitoring and Reporting Program.

C. REPORTING REQUIREMENTS

1. The discharger shall submit all information necessary to determine compliance with effluent limitations (e.g. if the permit contains a daily maximum and monthly average for a particular constituent, the discharger shall report the daily maximum and monthly average for that constituent, as defined in the reporting requirements below, and in the same units as the permit limit). For any effluent limitation, compliance shall be determined using sufficient sampling and analysis and appropriate statistical methods to evaluate multiple samples.
2. The discharger shall report with each sample result the reported Minimum Level (ML) and the laboratory's current Method Detection Limit (MDL). For each numeric effluent limitation, the discharger shall select one or more Minimum Levels (and their associated analytical methods) from Appendix 4 of the Implementation Policy. The "reported" Minimum Level is the Minimum Level (and its associated analytical method) chosen by the discharger for reporting and compliance determination from Appendix 4. The discharger must select from all Minimum Levels from Appendix 4 that are below the effluent limitation. If the effluent limitation is lower than all the Minimum Levels in Appendix 4, then the discharger must select the lowest Minimum Level.
3. Minimum Levels in Appendix 4 represent the lowest quantifiable concentration in a sample based on the proper application of method-specific analytical procedures and the absence of matrix interferences. Minimum Levels also represent the lowest standard concentration in the calibration curve for a specific analytical technique after the application of appropriate method-specific factors. Common analytical practices may require different treatment of the sample relative to the calibration standard.

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Some examples of these practices are given in Section 2.4.2 of the Implementation Policy. Other factors may be applied to the Minimum Level depending on the specific sample preparation steps employed. For example, the treatment typically applied when there are matrix effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied during the computation of the reporting limit. Application of such factors will alter the reported Minimum Level.

4. The discharger shall instruct its laboratories to establish calibration standards so that the Minimum Level (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve. In accordance with the Implementation Policy, the discharger's laboratory may employ a calibration standard lower than the Minimum Level in Appendix 4.
5. In addition to paper copies, the discharger shall submit all monitoring results in an electronic (tab delimited) format with the annual report submittals.
6. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
7. A composite sample is defined as a combination of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
8. The annual average effluent limitation shall be the mean of all samples collected in one calendar year.
9. The 30-day average effluent limitation shall be the moving arithmetic mean of daily concentrations over any 30-day period.
10. The monthly average limitation shall be the mean of all samples collected in a calendar month.
11. The 7-day average shall be the moving arithmetic mean of daily concentrations over any 7-day period.
12. The weekly average shall be the mean of all samples collected in a calendar week, Sunday through Saturday.
13. The daily maximum shall be the maximum result of all samples collected in a

calendar day.

14. The instantaneous maximum, or "maximum at any time" effluent limitation shall apply each sample independently (i.e. all results shall be compared to the limit). A Maximum Contaminant Level (MCL) shall be evaluated as an instantaneous maximum.
15. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
16. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.
17. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{mass emission rate (lb/Day)} = 8.34 \times Q \times C$$

in which Q and C are the flow rate in MGallons/Day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor with units of [lb/MGallons/Day] / [mg/L]. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

18. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order or monitoring and reporting program.
19. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN (most probable number). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of *Standard Methods for the Examination of Water and Wastewater* or any improved method determined by the Regional Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Regional Board to be appropriate.
20. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

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where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

21. The adjusted sodium adsorption ratio (ASAR) is calculated as follows:

$$\text{Adj. SAR} = \frac{Na}{\sqrt{(Ca_x + Mg) / 2}}$$

where Na, Ca_x, and Mg are in milliequivalent per liter (meq/L) and Ca_x is a modified Ca value calculated using Table 3-2 contained in *Irrigation with Reclaimed Municipal Wastewater, A Guidance Manual*.

22. Compliance with the daily average operating filter effluent turbidity limit of 2 Nephelometric Turbidity Units (NTU) shall be determined using the levels of recorded turbidity levels at a minimum of four-hour intervals over a 24-hour period. Compliance with the turbidity standard of not exceeding 5 NTU more than 5 percent of the time over a 24-hour period shall be determined using the levels of recorded turbidity taken at intervals of no more than 1.2-hours over a 24-hour period. Should the continuous turbidity meter and/or recorder fail, grab sampling at a minimum frequency of 1.2 hours may be substituted until the turbidity meter and/or recorder is fixed.
23. By February 1 of each year, the discharger shall submit an annual report to the Regional Board and USEPA Region 9 that contains tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken or which may be needed to bring the discharge into full compliance with the requirements this Order and this monitoring and reporting program.
24. Monitoring results shall be reported at intervals and in a manner specified in Order No. R9-2002-0104 and/or this monitoring and reporting program. Monitoring reports shall be submitted to the Regional Board and to USEPA Region 9, as appropriate, according to the following schedule:

Monitoring Frequency	Reporting Period	Report Due
Continuous, Daily, Weekly, Monthly	All	First day of the second month after the month of sampling (e.g., January sampling: due March 1)
Quarterly	January – March April – June July – September October – December	May 1 August 1 November 1 February 1
Semiannually	January – June July – December	August 1 February 1
Annually*	January – December	February 1

*= in addition to applicable effluent monitoring results, the annual report shall include requirements addressed in Provisions D.9-10 (of Order No. R9-2002-0104), Monitoring Provision B.5 (of this MRP), Reporting Requirements C.3 and 21 (of this MRP), and Receiving Water Monitoring Requirement H.3.d (of this MRP). The annual pretreatment report (E.4 of Order No. R9-2002-0104) and biosolids monitoring report (F.6 of Order No. R9-2002-0104) are due, as separate submittals, on the individual dates specified.

D. CHRONIC WHOLE EFFLUENT TOXICITY

The discharger shall conduct monthly freshwater chronic toxicity tests on 24-hour composite effluent samples. Samples shall be taken at the NPDES effluent sampling location. Whenever possible, a split of each toxicity sample collected will be used for the chemical and physical analyses required in Effluent Monitoring Section G.1, below.

1. Test Species and Methods

- a. Upon adoption of this Order, the discharger shall conduct short-term tests with the cladoceran, water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test), and the green alga, *Selenastrum capricornutum* (growth test) for the first three suites of tests. After this screening period, monitoring shall be conducted using the most sensitive species.
- b. Every year, the discharger shall re-screen once with the three species listed above and continue to monitor with the most sensitive species. Re-screening shall be conducted at a different time of year from the previous year's re-screening.
- c. The presence of chronic toxicity shall be estimated as specified in EPA's methods (USEPA 600/4-91-002).

2. Toxicity Limits

- a. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms. Chronic toxicity limits are specified in Discharge Specification B.5 of Order No. 2002-0104.
- b. Results shall be reported in TUC, where $TUC = 100/NOEC$. The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test that causes no observable adverse effect on the test organisms (i.e., the highest concentration of toxicant to which the values for the observed responses are not statistically significantly different from the controls).

3. Quality Assurance

- a. A series of at least five dilutions and a control will be tested. The series shall include the following concentrations: 12.5, 25, 50, 75, and 100 percent effluent.
- b. If organisms are not cultured in-house, concurrent testing with a reference toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
- c. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the manual, then the discharger must re-sample and re-test within 14 days or as soon as possible.
- d. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method (see variability document EPA/833-R-00-003, Table 3-6). There are five possible outcomes based on the PMSD result:
 1. **Unqualified Pass**—The test's PMSD is within bounds and there is no significant difference between the means for the control and the IWC treatment. The regulatory authority would conclude that *there is no toxicity at the IWC concentration.*
 2. **Unqualified Fail**—The test's PMSD is larger than the lower bound (but not greater than the upper bound) in Table 3-6 and there is a significant difference between the means for the control and the IWC treatment. The regulatory authority would conclude that *there is toxicity at the IWC concentration.*
 3. **Lacks Test Sensitivity**—The test's PMSD exceeds the upper bound in Table 3-6 and there is no significant difference between the means for the control and the IWC treatment. The test is considered invalid. An effluent sample must be collected and another toxicity test must be conducted. The discharger must re-sample and retest within fourteen (14) days or as soon as possible.
 4. **Lacks Test Sensitivity**—The test's PMSD exceeds the upper bound in Table 3-6 and there is a significant difference between the means for the control and the IWC treatment. The test is considered valid. The regulatory authority will conclude that *there is toxicity at the IWC concentration.*
 5. **Very Small but Significant Difference**—The relative difference (see Section 6.4.2, below) between the means for the control and the IWC treatment is smaller than the lower bound in Table 3-6 and this difference is statistically significant. The test is acceptable. The NOEC is determined as described in Sections 6.4.2 and 6.4.3 (below).

- e. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

4. Preparing the Initial Investigation of the TRE Workplan

The discharger shall submit to the Regional Board a copy of the discharger's Toxicity Reduction Evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the discharger intends to follow if toxicity is detected, and should include, at least the following items:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
- b. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices.
- c. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

5. Accelerated Testing

- a. If the initial investigation indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is identified in this test, then Section 6 shall apply.
- b. If chronic toxicity is identified, then the discharger shall conduct six more tests, approximately every two weeks, over a twelve-week period. Testing shall commence within two weeks of receipt of the sample results of the exceedance of the WET monitoring trigger.
- c. If none of the six tests indicate toxicity, then the discharger may return to the normal testing frequency.

6. Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

- a. If chronic toxicity is detected in any of the six additional tests, then, in accordance with the facility's initial investigation according to the TRE workplan, the discharger shall initiate a TRE within fifteen (15) days of the exceedance to reduce the cause(s) of toxicity. At a minimum, the discharger shall use EPA manual EPA/833B-99/002 as guidance. The discharger will expeditiously develop a more detailed TRE workplan, which includes:

- (1) Further actions to investigate and identify the cause of toxicity

- (2) Actions the discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity
 - (3) A schedule for these actions
- b. The discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.

7. Reporting

- a. The discharger shall submit the results of the toxicity tests, including any accelerated testing conducted during the month, in TUs with the discharge monitoring reports (DMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section 5, then those results also shall be submitted with the DMR for the quarter in which the investigation occurred.
 - b. The full report shall be submitted by the end of the month in which the DMR is submitted.
 - c. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the applicable limit(s).
 - d. Test results for chronic tests also shall be reported according to the chronic manual chapter on Report Preparation and shall be attached to the DMR.
 - e. The discharger shall notify the Regional Board in writing 15 days after the receipt of the results of a monitoring limit exceedance. The notification will describe actions the discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.
8. This permit may be modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124 to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information.

E. ACUTE WHOLE EFFLUENT TOXICITY

1. The Acute Toxicity test will be used to determine the presence of acute toxicity, as specified in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" (EPA 600/4-90/027F, September 1991 or subsequent editions). The test results shall be reported as percent survival of the test organism or 96-hour LC-50 (see below). If acceptable test results are not achieved, the discharger must resample and retest within 14 days.

2. The discharger shall conduct monthly freshwater acute toxicity tests on 24-hour composite effluent samples run at five concentrations (12.5, 25, 50, 75, and 100% effluent) and a control, with a 96-hour static-renewal test, using the most sensitive species, as determined by the screening criteria for chronic toxicity. If the most sensitive test organism determined by the screening above is *Selenastrum*, then the chronic toxicity testing shall also include the second most sensitive test organism, since the chronic toxicity test using *Selenastrum* does not provide a mortality endpoint to determine acute toxicity. Samples shall be taken at the NPDES effluent sampling location.
3. The Acute Toxicity test shall be conducted using an established protocol, e.g., American Society for Testing Materials (ASTM), USEPA, American Public Health Association, or State Board. Acute Toxicity shall be expressed in Toxic Units Acute (TUa), where:

$$TUa = \frac{100}{96\text{-hour } LC_{50}}$$

Where LC_{50} (Lethal Concentration 50%) is the percent waste giving 50% survival of test organisms. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the environment, but not as a result of dilution, the LC_{50} may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC_{50} due to greater than 50% survival of the test species in 100% waste, the toxicity concentration shall be calculated by the following:

$$TUa = \frac{\log(100 - S)}{1.7}$$

where S is the percentage survival in 100% waste. If $S > 99$, TUa shall be reported as zero.

F. INFLUENT MONITORING

A Sampling station location shall be established for the point of inflow to the treatment plant and shall be located upstream of any in-plant return flows, and where representative samples of the influent can be obtained. The date and time of sampling (as appropriate) shall be reported with the analytical values determined. Influent samples shall be collected on the same day as the effluent samples for that constituent.

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The following shall constitute the influent monitoring program:

INFLUENT MONITORING PROGRAM

CONSTITUENT	UNIT	TYPE OF SAMPLE	MONITORING FREQUENCY	REPORTING FREQUENCY
Flowrate*	MGallons /Day	recorder/totalizer	Continuous	Monthly
BOD**	mg/L	24-hr composite	3 x per calendar week	Monthly
Total Suspended Solids (TSS)	mg/L	24-hr composite	3 x per calendar week	Monthly

* = Both the daily average and daily maximum shall be reported for influent flowrate.

** = Biochemical Oxygen Demand, performed at 20° C for 5 days

Units

MGallons/Day = Million Gallons per Day

mg/L = milligrams per Liter

G. EFFLUENT MONITORING

1. A sampling station shall be established at the facility's discharge point where representative samples of the discharge to Murrieta Creek can be obtained. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.

The following shall constitute the effluent monitoring program:

EFFLUENT MONITORING PROGRAM

CONSTITUENT	UNITS	TYPE OF SAMPLE	MONITORING FREQUENCY	REPORTING FREQUENCY
Flowrate ¹	MGallon s/Day	Recorder/ totalizer	Continuous	Monthly
Specific conductance ¹	µmhos/ cm	Recorder	Continuous	Monthly
Turbidity ²	NTU	Recorder	Continuous	Monthly
Total Residual Chlorine ³	mg/L lb/day	Recorder/ totalizer	Continuous	Monthly
pH ¹	Units	Grab or Continuous	Daily	Monthly
Total Coliform ⁴	MPN/ 100 mL	Grab	Daily	Monthly
BOD	mg/L lb/day	24-hr composite	3 x per calendar week	Monthly
TSS	mg/L lb/day	24-hr composite	3 x per calendar week	Monthly
Fecal Coliform	MPN/ 100 mL	Grab	Weekly	Monthly
Enterococcus	CFU/ 100 mL	Grab	Weekly	Monthly
<i>E. coli</i>	CFU/ 100 mL	Grab	Weekly	Monthly
Total Organic Carbon (TOC)	mg/L lb/day	Grab	Weekly	Monthly
Total Dissolved Solids (TDS)	mg/L lb/day	24-hr composite	Monthly	Monthly
Chloride	mg/L lb/day	24-hr composite	Monthly	Monthly
ASAR	--	24-hr composite	Monthly	Monthly
Sulfate	mg/L lb/day	24-hr composite	Monthly	Monthly
Nitrogen (series) ⁵	mg/L lb/day	24-hr composite	Monthly	Monthly
Nitrate	mg/L lb/day	24-hr composite	Monthly	Monthly
Ammonia (un-ionized)	mg/L lb/day	24-hr composite	Monthly	Monthly
Phosphorus (series) ⁶	mg/L lb/day	24-hr composite	Monthly	Monthly
Iron	mg/L lb/day	24-hr composite	Monthly	Monthly
Mangane	mg/L lb/day	24-hr composite	Monthly	Monthly
MBAS	mg/L lb/day	24-hr composite	Monthly	Monthly

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CONSTITUENT	UNITS	TYPE OF SAMPLE	MONITORING FREQUENCY	REPORTING FREQUENCY
Boron	mg/L lb/day	24-hr composite	Monthly	Monthly
Fluoride	mg/L lb/day	24-hr composite	Monthly	Monthly
Color	Units	24-hr composite	Monthly	Monthly
Acute Toxicity	TUa	24-hr composite	Monthly	Monthly
Chronic Toxicity	TUc	24-hr composite	Monthly	Monthly
Bis (2-Ethylhexyl) Pthalate	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Chlorodibromomethane	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Copper	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Cyanide	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Dichlorobromomethane	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Methylene Chloride	µg/L lb/day	24-hr composite	Semiannually	Semiannually
Selenium	µg/L lb/day	24-hr composite	Semiannually	Semiannually
(Total) Trihalomethanes	mg/L	24-hr composite	Semiannually	Semiannually
Phenolic compounds	mg/L	24-hr composite	Annually	Annually
Inorganic chemicals ⁷ not already referenced (Attachment 2)	mg/L	24-hr composite	Annually	Annually
Organic chemicals ⁷ not already referenced (Attachment 3)	mg/L	24-hr composite	Annually	Annually
Radionuclides ⁷ (Attachment 4)	PCi/L	24-hr composite	Annually	Annually
Secondary Drinking Water standards ⁷ not already referenced (Attachment 5)	--	24-hr composite	Annually	Annually
EPA Priority Pollutants not already referenced	µg/L	24-hr composite	Annually	Annually

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- 1 = Both the daily average and daily maximum shall be reported for the flowrate to Murrieta Creek. Specific conductance and pH shall only be reported as the daily averages, from midnight to midnight.
- 2 = Effluent turbidity analyses should be conducted using a continuous monitoring and recording turbidimeter. The discharger shall report monthly results of four-hour turbidity readings, average effluent turbidity (24-hours), 95 percentile effluent turbidity (24-hours), and the daily maximum turbidity (daily being defined as the 24-hour period from 12 am to 12 am). Continuous turbidity monitoring must also be provided prior to filtration to ensure adequate process control, and automatic actuate coagulant feed when the turbidity of the secondary treated effluent is greater than 10 NTU.
- 3 = Chlorine concentrations shall be recorded by a continuous recording meter. The discharger shall report the daily average, maximum, and minimum values. Compliance with CT (chlorine concentration times modal contact time) values shall be determined at least daily.
- 4 = Results of daily total coliform monitoring shall be reported, along with the running 7-day median calculation, and the maximum daily coliform reading from the previous month.
- 5 = Nitrogen (series) = total nitrogen, organic nitrogen, nitrate, nitrite, ammonia
- 6 = Phosphorous (series) = total phosphorous and orthophosphate phosphorous
- 7 = The minimum frequency of monitoring for these constituents is automatically increased to semiannually if any analysis for this constituent yields a result higher than any effluent limit specified or referenced in this Order for this constituent. The increased minimum frequency of monitoring shall remain in effect until the results of two consecutive analyses for this constituent are below all effluent limits specified.

Units

MGallons/Day = Million Gallons per Day

µmhos/cm = micromhos per centimeter

NTU = Nephelometric Turbidity Units

mg/L = milligrams per Liter

µg/L = micrograms per Liter

MPN/100 mL = most probable number in 100 mL (sample volume)

lb./day = pounds per day

TUa = toxic units, acute

TUc = toxic units, chronic

CFS = Cubic Feet per Second

CFU = Colony Forming Units per 100 mL

2. The SWRCB Implementation Policy requires that each major POTW monitor its effluent for the presence of the 17 congeners of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) for which USEPA has published toxic equivalency factors (TEFs) once during dry weather and once during wet weather for each of the three years following adoption of the Policy. Due to the delay in implementing this requirement, in lieu of the above monitoring schedule, the discharger shall conduct this monitoring twice during dry weather and twice during

wet weather, for one year. For each of the 17 congeners, the discharger shall provide the analytical results of the effluent monitoring, including the quantifiable limit and MDL, and the measured or estimated concentration. In addition, the discharger shall provide a multiplication of the measured or estimated congener concentration by its respective toxic equivalency factor (TEF) and the sum of these values. Refer to Section 2.3 of the Implementation Policy for SWRCB-approved laboratory methods, reporting requirements, and a list of the 17 congeners. This information shall be submitted to the RWQCB as part of the discharger's self-monitoring reports, under penalty of perjury, as it becomes available, and no later than April 28, 2003 (for the final submittal).

H. RECEIVING WATER MONITORING

1. To determine compliance with water quality standards, the receiving water quality monitoring program must document conditions in the vicinity of the receiving water discharge points, at reference stations, and at areas beyond the immediate vicinity of the discharge points where discharge impacts might reasonably be expected. Monitoring must reflect conditions during all critical environmental periods.
2. The following shall constitute the receiving water monitoring stations:

Station Number	Location
1	Murrieta Creek channel, upstream from the SRWRF discharge. (Station #1 in Order No. 96-54)
2	Murrieta Creek channel, 250 feet downstream of the SRWRF discharge, prior to any confluence with Murrieta Creek.
3	Murrieta Creek at Temecula, USGS Gauging Station , located immediately upstream of where Murrieta Creek and Temecula Creek combine to form the Santa Margarita River.
4	Reference Station- Temecula Creek at I-15, upstream of where Murrieta Creek and Temecula Creek combine to form the Santa Margarita River.
5	Santa Margarita River at Willow Glenn , (previously Station #2) located approximately 11 miles downstream of the SRWRF discharge, immediately above the confluence of the Santa Margarita River and Rainbow Creek.
6	Santa Margarita River at DeLuz crossing , (previously Station #3) located approximately 13 miles downstream of the SRWRF discharge, immediately downstream from the confluence of the Santa Margarita River and DeLuz Creek.

3. Monitoring surveys conducted to meet receiving water monitoring requirements of the "Monitoring and Reporting Program" shall include, as a minimum, the following information:

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- a. A description of climatic and receiving water characteristics at the time of sampling [e.g., observations of wind (direction and speed); weather (cloudy, sunny, or rainy, etc.); observations of water color or discoloration (percent algal cover at surface and bottom); oil and grease; turbidity; odor, and materials of sewage origin in the water or on the riverbank(s); time of sampling; air temperature ($^{\circ}\text{C}$); water temperature ($^{\circ}\text{C}$), etc.].
 - b. A description of sampling stations, including characteristics unique to each station [e.g., GPS coordinates for station location, photodocumentation, sediment characteristics, rocks, river flow (contiguous or terminated), and estuary mouth conditions (i.e. open or closed due to sand deposition) etc.].
 - c. A description of the sample collection and preservation procedures used in the survey and a description of the specific method used for laboratory analysis.
 - d. An annual in-depth discussion of the survey results. The discussion shall compare data from the reference station(s) with data from the stations located in the area of the discharge. All tabulations and computations shall be explained.
4. Receiving water monitoring shall be conducted (at stations where there is flowing water) during periods of discharge from the SRWRF. Whenever possible, samples shall be collected on the same day that these constituents are collected at the effluent point. Sample methods, preservation, and analyses, when not specified, shall be approved by the Executive Officer. The following shall constitute the receiving water monitoring program:

RECEIVING WATER MONITORING PROGRAM

CONSTITUENT	UNITS	SAMPLE TYPE	STATION #	MINIMUM FREQUENCY OF ANALYSES
Flowrate	CFS	Cross-sect. velocity/area	1-6	Weekly
Dissolved Oxygen*	mg/L	Grab	1-6	Weekly
Temperature	° C	Grab	1-6	Weekly
Specific conductance	µmhos/ cm	Grab	1-6	Weekly
pH	units	Grab	1-6	Weekly
Total Residual Chlorine	mg/L	Grab	1-3	Weekly
Fecal Coliform	MPN/100 mL	Grab	1-6	Weekly
Entertococcus	CFU/100 mL	Grab	1-6	Weekly
<i>E. coli</i>	CFU/ 100 mL	Grab	1-6	Weekly
Turbidity	NTU	Grab	1-6	Weekly
Chlorophyll-a	mg/m ³	Grab	1-6	2 times/month
Phosphorous (series)	mg/L	Grab	1-6	2 times/month
Nitrogen (series)	mg/L	Grab	1-6	2 times/month
TDS	mg/L	Grab	1-6	Monthly
TOC	mg/L	Grab	1-6	Monthly
Benthic invertebrates**	IBI**	**	1-6**	**

* If only one measurement is collected for dissolved oxygen, it shall be determined no later than 8:00 A.M. For each measurement reported, the discharger shall also report the percent saturation (calculated based on temperature).

** Benthic invertebrate analysis shall be conducted in May, August, October, and December of each year, using the California Stream Biassessment Procedure (CSBP), professional level point source protocol, and reported using the Index of Biotic Integrity (IBI), as well as each of the individual endpoints. The sampling locations shall be within ½ mile upstream or downstream of the chemical sampling location, at a reach with five riffles or runs. If necessary, reaches with 3-4 riffles will be acceptable. The site shall be selected at the time of sampling, using the sampler's discretion. If a location is dry at the time of sampling the sampler shall attempt to conduct sampling whenever possible for that month.

5. The discharger shall notify the Regional Board within 24 hours if any one of the following conditions is noted:
 - a. The minimum dissolved oxygen level is below 4 mg/L
 - b. The percent coverage by algal mats exceeds 50%, and the stream velocity is less than 1 CFS.
 - c. The percent coverage by algal mats exceeds 75%

I. GROUNDWATER MONITORING

1. Within 90 days from the adoption of this order, the discharger shall propose, in writing to the Executive Officer, two (new or existing) groundwater monitoring well

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sites that are distanced, but indicative of groundwater flow from the SRWRF discharge. The well sites shall be located between the discharge location and the nearest downgradient domestic water supply well.

2. After suitable well monitoring locations have been selected, the discharger shall sample the designated well sites for the following constituents, in compliance with the frequencies specified below. Samples shall be collected on the same day that these constituents are collected at the effluent point. Results shall be submitted with the discharge monitoring reports, as well as entered into the USEPA STORET database.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MONITORING FREQUENCY	REPORTING FREQUENCY
TOC	mg/L	Grab	Quarterly	Semi-annually
Total Nitrogen	mg/L	Grab	Quarterly	Semi-annually
Total Coliform	MPN/ 100 mL	Grab	Quarterly	Semi-annually
(Total) Trihalomethanes	mg/L	Grab	Quarterly	Semi-annually
Phenolic compounds	mg/L	Grab	Quarterly	Semi-annually
Inorganic chemicals (Attachment 2)	mg/L	Grab	Quarterly	Semi-annually
Organic chemicals (Attachment 3)	mg/L	Grab	Quarterly	Semi-annually
Radionuclides (Attachment 4)	--	Grab	Once every 5 years	Once every 5 years
Secondary Drinking Water standards (Attachment 5)	mg/L	Grab	Annually	Annually

3. Within 1 year from the adoption of this Order, the discharger shall submit the results of a study using pharmaceutical compounds to identify and quantify effluent contributions at the selected well site from the SRWRF discharge.

J. SOLIDS MONITORING

1. A log of the type, quantity, and manner of disposal of solids removed in the course of sewage treatment shall be maintained and submitted quarterly to the RWQCB.
2. A report identifying the volume of screenings, sludges, grit, and other solids removed from the wastewater and the point(s) at which these wastes were disposed of shall be submitted annually. A copy of all annual reports required by 40 CFR Part 503 shall be submitted to the Regional Board at the same time those reports are submitted to USEPA.

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In addition, an annual report shall be submitted to the USEPA and this RWQCB containing monitoring results and vector attraction reduction requirements in accordance with 40 CFR 503.

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of a Monitoring and Reporting Program adopted by the California Regional Water Quality Control Board, San Diego Region, on October 9, 2002.



JOHN H. ROBERTUS
Executive Officer