CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. R9-2003-0394
NPDES PERMIT NO. CA0108944

WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF ESCONDIDO HALE AVENUE RESOURCE RECOVERY FACILITY

INTERMITTENT WET WEATHER DISCHARGE
TO ESCONDIDO CREEK
SAN DIEGO COUNTY

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

1. On September 9, 1998, this Regional Board adopted Order No. 98-10, NPDES CA0108944, *Waste Discharge Requirements for the City of Escondido Hale Avenue Resource Recovery Facility, Intermittent Wet Weather Discharge to Escondido Creek.* Order No. 98-10 established requirements for the discharge of up to 9.0 million gallons per day (MGD) of tertiary treated wastewater from the City of Escondido's Hale Avenue Resource Recovery Facility (HARRF) to Escondido Creek under certain circumstances.

2. Pursuant to Provision E.3 of Order No. 98-10, the City of Escondido (hereinafter City) was required to submit their Report of Waste Discharge 180 days prior to the September 9, 2003 expiration date. On March 13, 2003, the City submitted an NPDES permit application for the renewal of Order No. 98-10. On August 5, 2003, the application was determined to be complete. Since the discharger has submitted a complete application for renewal of the NPDES permit, Order No. 98-10 is administratively extended until the adoption of tentative Order No. R9-2003-0394 pursuant to Title 40 of the Code of Federal Regulations (CFR), Part 122.41(b) [40 CFR 122.41(b)].

3. On November 10, 1999, this Regional Board adopted Order No. 99-72, NPDES No. CA0107981, *Waste Discharge Requirements for the City of Escondido Hale Avenue Resource Recovery Facility, Discharge to the Pacific Ocean via the San Elijo Ocean Outfall.* Order No. 99-72, which superceded Order No. 94-104, established requirements for the discharge of up to 16.5 MGD of secondary treated wastewater to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall.

4. On June 13, 1996, this Regional Board issued, *"Cease and Desist Order No. 96-31 for the City of Escondido,"* for discharging secondary effluent to Escondido Creek during periods of sustained or significant rainfall in violation of the Federal

Clean Water Act. Order No. 96-31 required the City either to pursue a strategy to increase the capacity of the San Elijo Ocean Outfall or to seek authorization for discharges of treated wastewater to Escondido Creek. At the request of the City, this Regional Board issued Addendum No. 1 to CDO No. 96-31 on February 5, 2003. Addendum No. 1 to CDO No. 96-31 extended the deadline for the City to complete measures to terminate all unauthorized discharges to Escondido Creek and tributaries thereto from November 11, 2002 to June 16, 2003.

5. The HARRF is located at 1521 Hale Avenue in the City of Escondido, adjacent to Escondido Creek in the northwest 1/4 of Section 29, T12S, R2W, SBBM, which is the southeastern portion of the City of Escondido within the Escondido Hydrologic Subarea (HSA 904.62) of the Escondido Creek Hydrologic Area (HA 904.60) of the Carlsbad Hydrologic Unit (HU 904.00). The facility is upstream of the San Elijo Hydrologic Subarea (HSA 904.61), which contains San Elijo Lagoon.

6. The City provides wastewater collection, treatment, and disposal to areas within its incorporated boundaries. The City owns the HARRF and the land it occupies, and is responsible for operating and maintaining the treatment and disposal facilities. The City also manages the distribution and off-site use of the recycled water produced by the HARRF. Recycled water use is regulated under separate waste discharge requirements.

7. The conceptual process schematic for the HARRF describes the facility as consisting of preliminary treatment (bar screens and grit removal), primary sedimentation, secondary treatment aeration basins, secondary clarifiers, anaerobic digesters, pre-filtration chlorination, tertiary filters, UV disinfection, flow equalization basin, solids handling and dewatering facilities, chemical addition facilities, and odor control processes.

8. The City reported that the San Elijo Ocean Outfall (SEOO) capacity is limited by pressure restrictions on a 4,000-foot, 30-inch diameter section of the outfall (along the nearshore) which has a maximum pressure limit of 22-psi (50 feet). To protect the 30-inch diameter section from rupture, HARRF effluent is directed through a flow control station prior to discharge to the SEOO. The flow control station is equipped with an automatic valve that regulates land outfall flows to insure the design pressure of the nearshore segment is not exceeded. The City has experienced three episodes during the past several years when wastewater flows exceeded the outfall system. The City was forced to discharge secondary effluent to Escondido Creek in January 1993, March 1995, and January 1997.

9. The proposed discharge location to Escondido Creek is located at latitude 33°06'22", and longitude 117°07'01".

10. The terms, conditions, and limitations of this Order have been developed to protect the beneficial uses and water quality of Escondido Creek and all downstream water bodies, including groundwater basins.

11. 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 Order.

12. In order to protect designated beneficial uses, the Basin Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the inland surface waters, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions. The Basin Plan also contains prohibitions applicable to surface waters subject to tidal influence and for inland surface waters. The applicable prohibitions and discharge provisions of the Basin Plan have been incorporated herein.

13. The Basin Plan establishes the following existing beneficial uses for the Escondido Creek Hydrologic Subarea (HSA's 904.61 and 904.62):

    a. Municipal and domestic supply
    b. Agricultural supply
    c. Water contact recreation
    d. Non-contact recreation
    e. Warm fresh water habitat
    f. Cold fresh water habitat
    g. Wildlife habitat

14. The Basin Plan identifies the following beneficial uses for San Elijo Lagoon (HSA 904.61) as follows:

    a. Water contact recreation
    b. Non-contact recreation
    c. Preservation of biological habitats of special significance
    d. Wildlife habitat
    e. Preservation of rare and endangered species

f. Estuarine habitat

g. Marine habitat

h. Migration of aquatic organisms

i. Spawning, reproduction, and/or early development

15. The Basin Plan establishes surface and ground water quality objectives for HA 904.60. The following table identifies the most restrictive water quality objectives within HA 904.60 (concentrations not to be exceeded more than 10 percent of the time during any one year period):

Constituent	Surface Water	Ground Water
Total Dissolved Solids	500 mg/L	750 mg/L
Chloride	250 mg/L	300 mg/L
Percent Sodium	60 %	60 %
Sulfate	250 mg/L	300 mg/L
Nitrogen & Phosphorus	*	--
Nitrate	--	10 mg/L
Iron	0.3 mg/L	0.3 mg/L
Manganese	0.05 mg/L	0.05 mg/L
Methylene Blue Active Substances (MBAS)	0.5 mg/L	0.5 mg/L
Boron	0.75 mg/L	0.75 mg/L
Odor	None	None
Turbidity	20 NTU	5 NTU
Color	20 Units	15 Units
Fluoride	1.0 mg/L	1.0 mg/L

Notes: mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units

* Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those that stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentration 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 percent 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 phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

16. The Basin Plan contains, in part, objectives for inland surface waters for: color, taste and odors, floating material, suspended material, settleable materials, oil

and grease, sediment, turbidity, hydrogen-ion concentrations and dissolved oxygen, which are applicable to the discharge.

17. The SWRCB adopted the 2002 Clean Water Act section 303(d) list of water quality limited segments at its February 4, 2003 Board Meeting. The list was approved by the United States Environmental Protection Agency (USEPA) Region 9 on July 25, 2003. The San Elijo Lagoon has been listed by this Regional Board as an impaired water body in accordance with Clean Water Act Section 303(d). The entire 330- acre lagoon is listed as impaired due to eutrophication problems associated with point and non-point source nutrient loading. In addition, 150 acres of the lagoon are listed as impaired due to excessive sedimentation. If/when Waste Load Allocations (WLA's) are calculated in accordance with Total Maximum Daily Load (TMDL) procedures, the limits contained in this or subsequent Orders will be modified accordingly.

18. Pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, *"Statement of Policy with Respect to Maintaining High Quality of Waters in California"* (collectively "antidegradation policies"), as described in the Basin Plan, the Regional Board shall ensure that any increase in pollutant loading to a receiving water meets the requirements stated in the foregoing policies. At a minimum, permitting actions shall be consistent with the following:

    a. Existing instream water uses and the level of water quality necessary to protect existing beneficial uses shall be maintained and protected;

    b. Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, the quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area to which the waters are located;

    c. Where high quality waters constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected; and

    d. In those cases where potential water quality impairment associated with a thermal discharge in involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Clean Water Act.

19. The Regional Board has taken into consideration the requirements of the State and Federal "antidegradation" policies (40 CFR 131.12 and State Board Resolution No. 68-16), the water quality objectives contained in the Basin Plan, and the listing of San Elijo Lagoon as an impaired waterbody, in establishing the

requirements contained herein, and has determined that any reduction in water quality as a result of this discharge will not result in any long-term deleterious effect on water quality. In addition, this Order prohibits the City of Escondido from increasing the amount of nutrients in the lagoon by implementing a nutrient reduction program approved by the Regional Board.

20. The discharger has developed pretreatment programs 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), 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 U.S. EPA on June 29, 1982. Pretreatment requirements are contained in the City of Escondido's NPDES permit for wastewater discharge through the San Elijo Ocean Outfall.

21. Stormwater discharges from the HARRF are subject to the terms and conditions of Water Quality Order No. 97-03, *"Waste Discharge Requirements (WDR's) for Discharges of Storm Water Associated With Industrial Activities Excluding Construction Activities."*

22. Effluent limitations, industrial pretreatment standards, biosolid use and disposal regulations, and criteria established under Section 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. Regulations not specified in this Order are contained in the City of Escondido's NPDES permit for wastewater discharge through the San Elijo Ocean Outfall.

23. This Order shall serve as an NPDES permit for the discharge of tertiary treated wastewater from the City of Escondido's HARRF to Escondido Creek and/or its tributaries pursuant to Section 402 of the CWA and amendments thereto.

24. This 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 consideration;

h. The need for developing housing within the Region; and

i. The need to develop and use recycled water.

25. The issuance of waste discharge requirements for this discharge is exempt from the requirements 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.

26. On July 22, 1998, the Escondido City Council certified a final environmental impact report in accordance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.).

27. The Regional Board has considered all water resources related to environmental factors associated with the discharge of treated wastewater from the HARRF to Escondido Creek and/or its tributaries.

28. The Regional Board has notified the City of Escondido and all known interested parties of its intent to issue NPDES permit requirements for the proposed discharge of waste.

29. The Regional Board has, at a public meeting, heard and considered all comments pertaining to the discharge of treated wastewater from the HARRF to Escondido Creek and contiguous waters.

30. This Order complies with Section 402(o) of the Federal Clean Water Act, and the implementing regulations of 40 CFR 122.44(l) which prohibit the establishment of effluent limits in a renewed, reissued or modified NPDES permits that are less stringent than the limits established in the previous permit.

IT IS HEREBY ORDERED, that the City of Escondido (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 (see Attachment No. 1) is a required condition of this Order.

2. A discharge of tertiary treated wastewater to Escondido Creek from the HARRF in excess of a 9.0 MGD flowrate at any time is prohibited unless the discharger obtains revised waste discharge requirements authorizing an increased flowrate.

3. Discharges from the HARRF to Escondido Creek are prohibited unless all of the following conditions have been met:

   a. The discharge to the San Elijo Ocean Outfall from the HARRF and the San Elijo Water Pollution Control Facility exceeds the maximum capacity of the outfall.

   b. All emergency in-plant storage has been used.

   c. Stream flows recorded at the County of San Diego's stream gauging station located approximately 100 yards upstream of the HARRF, exceed an average flow of 300 cubic feet per second during the discharge and are not below 100 cubic feet per second at any time during the discharge.

   d. The mouth of the San Elijo Lagoon is open or the Regional Board Executive Officer approves otherwise.

   e. The discharge occurs between November 1 and April 30.

4. The discharge of wastes to State Water Quality Protection Areas, as designated by the State Water Resources Control Board, is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

5. 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.

6. The discharge of any pollutant that is not subject to an effluent limitation in this permit is prohibited except in the following circumstances:

   a. The pollutant has been identified in the administrative record for the permit.

   b. The pollutant has not been identified in the administrative record for the permit, so long as the discharger: (1) has complied with applicable requirements for disclosure of information about its pollutant discharges, operations and sources of wastes; and (2) complies with all applicable requirements for notification of changes in its operations and discharges.

7. The discharge of oil, trash or other solids, municipal waste biosolids or digester supernatant directly to a surface water or in any manner which may permit it to be washed into a surface water is prohibited.

8. The discharge of waste shall not cause surface erosion or scouring of aquatic substrates.

9. Odors, vectors, and other nuisances beyond the boundaries of the HARRF are prohibited.

10. The bypassing of untreated wastes to Escondido Creek and/or its tributaries containing concentrations of pollutants in excess of the effluent limitations of this Order is prohibited.

11. The discharge of any substances in concentrations toxic to human, animal, plant or aquatic life is prohibited.

12. The discharge shall not:

    a. Cause a nuisance or adversely affect beneficial uses for the surface waters in HSA's 904.61, 904.62 and San Elijo Lagoon, as established in the Basin Plan;

    b. Cause odors, septicity, mosquitoes, weed growth or other vectors or nuisance conditions in Escondido Creek, its tributaries, or San Elijo Lagoon.

B. DISCHARGE SPECIFICATIONS

1. The discharge of treated wastewater from the HARRF to Escondido Creek or its tributaries containing pollutants in excess of the following effluent limitations is prohibited:

    a. The monthly average percent removal for Carbonaceous Biochemical Oxygen Demand (CBOD, performed at 20°C for 5 days) shall not be less than 85%.

    b. The monthly average percent removal for Total Suspended Solids (TSS) shall not be less than 85%.

    c. 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.

    d. 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.

    e. Effluent Limitations for Major Constituents and Properties of Wastewater:

Constituent	Units	Monthly Average	Weekly Average	Daily Maximum
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L lbs/day	25 1876	40 3002	45 3377
Suspended Solids	mg/L lbs/day	30 2251	45 3377	50 3753
pH	Units	Within the limits of 6.0 and 9.0 at all times		

Notes: mg/L = milligrams per liter
lbs/day = pounds per day

f. California Toxics Rule (CTR) Effluent Limitations:

Constituent	Units	Monthly Average	Daily Maximum
Bis (2-Ethylhexyl) Phthalate	µg/L lbs/day	11 0.83	24 1.8
Bromoform	µg/L lbs/day	51 3.8	103 7.7
Chlorodibromomethane	µg/L lbs/day	4.4 0.33	13 0.98
Dichlorobromomethane	µg/L lbs/day	0.56 0.042	1.7 0.13
Gamma-BHC	µg/L lbs/day	0.23 0.017	0.46 0.035
Mercury	µg/L lbs/day	0.05 0.0038	0.11 0.0083
Methylene Chloride	µg/L lbs/day	12 0.90	39 2.9
Selenium	µg/L lbs/day	3.8 0.29	8.8 0.66
Tetrachloroethylene	µg/L lbs/day	0.8 0.60	1.6 0.12

Notes: µg/L = micrograms per liter
lbs/day = pounds per day

g. Effluent Limitations for Basin Plan Constituents:

Constituent	Units	Daily Maximum[1]
Total Dissolved Solids	mg/L lbs/day	1100 82566
Chloride	mg/L lbs/day	300 22518
Sulfate	mg/L lbs/day	325 24394

Constituent	Units	Daily Maximum[1]
Nitrogen (Total)	mg/L lbs/day	35 2627
Phosphorus (Total)	mg/L lbs/day	3.0 225
Iron	mg/L lbs/day	0.3 22
Manganese	mg/L lbs/day	0.10 7.5
Methylene Blue Active Substances	mg/L lbs/day	0.5 37
Boron	mg/L lbs/day	1.1 83
Color	Units	20
Fluoride	mg/L lbs/day	1.5 112
Ammonia (NH_4^+ plus NH_3)	mg/L lbs/day	25 1877
Phenolic Compounds	µg/L lbs/day	1.0 0.075
Inorganic Chemicals	Not to exceed limits specified in California Code of Regulations, Title 22, Table 64431-A of Section 64431. (Attachment 4)	
EPA Toxic Pollutants	Not to exceed limits specified in 40 CFR 131.36.	
Organic Chemicals	Not to exceed limits specified in California Code of Regulations, Title 22, Table 64444-A of Section 64444. (Attachment 5)	
Radionuclides	Not to exceed limits specified in California Code of Regulations, Title 22, Table 4 of Section 64443. (Attachment 6)	

1 Not to cause exceedances of water quality objectives

Notes: mg/L = milligrams per liter
µg/L = micrograms per liter
lbs/day = pounds per day

2. The Mass Emission Rate (MER) limits in this Order were calculated using a flowrate (Q) = 9.0 MGD and the indicated concentration values. When the discharge flowrate is lower than 9.0 MGD, the MER limits shall be correspondingly lower.

3. Compliance with the daily, weekly and monthly average limits specified in Section B.1.e and the monthly average specified in Section B.1.f shall be determined from the flow-weighted average of all samples taken during the specified periods. Compliance with the instantaneous limits specified

in Sections B.1.f and B.1.g shall be determined from the results of grab samples taken during the specified periods.

4. There shall be no visible oil or grease in the discharge.

5. The discharge of treated wastewater from the HARRF to Escondido Creek or its tributaries shall be adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated effluent) or equivalent, pursuant to Title 22, Division 4, Chapter 3, Article 5, Section 60315 of the California Code of Regulations.

   The wastewater shall be considered adequately disinfected if in the effluent at some location in the treatment process, the median number of coliform organisms does not exceed 2.2 per 100 mL and the number of coliform organisms does not exceed 23 per 100 mL in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed.

   Filtered wastewater means an oxidized, coagulated, and clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth (or equivalent as determined by the State Department of Health Services), so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

6. Wastewater discharged from the HARRF to Escondido Creek must be essentially free of:

   a. Material that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that form sediments which degrade benthic communities or other aquatic life.

   c. Substances which will accumulate to harmful levels in adequate sediments or biota.

   d. Substances which significantly decrease the natural light to benthic communities and other aquatic life.

   e. Materials that result in aesthetically undesirable discoloration of surface waters.

7. Waste discharges from the HARRF shall be discharged in such a manner as to provide maximum protection to aquatic environments.

8. The discharge shall not cause pollution, contamination, or nuisance, as those terms are defined in CWC Section 13050, as a result of the treatment or discharge of wastes.

9. The discharge from the HARRF to Escondido Creek shall not result in an increase in nutrient loading to San Elijo Lagoon nor contribute to any increase in biostimulation within the lagoon.

C. TOXICITY REQUIREMENTS

1. Acute Toxicity

   The discharge shall not result in acute toxicity in ambient receiving waters. The effluent shall be deemed acutely toxic when:

   a. The toxicity test of 100% effluent results in less than 90 percent survival 50 percent or more of the time, or

   b. The survival rate of the test organisms is less than 50 percent in any single test.

2. Chronic Toxicity

   The discharger is required to conduct chronic toxicity monitoring as specified in the Monitoring and Reporting Program No. R9-2003-0394.

3. Toxicity Reduction Requirements and Provisions

   a. If the result of any individual chronic toxicity test of the effluent exceeds 1.0 TU_c, the discharger shall implement the accelerated monitoring program as per the attached Monitoring and Reporting Program.

   b. If the results of two consecutive chronic toxicity tests of the effluent exceed 1.0 TU_c the discharger is required to investigate the causes of the toxicity in accordance with an investigation program approved by the Executive Officer of the Regional Board.

   c. If warranted by the results of the investigation program described in Toxicity Requirement C.4, the discharger shall, in a timely manner, take all reasonable steps as agreed upon by the Regional Board's Executive Officer to identify the source(s) of toxicity through a Toxicity Identification Evaluation (TIE) and, if appropriate, a Toxicity Reduction Evaluation (TRE).

   d. Upon notification by the Regional Board' s Executive Officer that a TIE/TRE is required, the discharger shall submit the proposed schedule under which these actions will be implemented.

4. TIE/TRE Requirements for Chronic Toxicity

At a minimum, TIE/TRE for chronic toxicity shall be conducted in accordance with the following:

a. In the absence of EPA approved protocols for conducting TIE/TRE investigations for chronic toxicity, the discharger shall conduct a TIE/TRE investigation using the draft protocols published by the USEPA (Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase 1: EPA-600/6-91/005; June, 1991) and/or protocols approved by the Executive Officer of the Regional Board. Upon adoption of EPA approved protocols, those protocols shall be used for conducting TIE/TRE's.

b. In the event that the acute effluent limitations continue to be exceeded or chronic toxicity is identified in the effluent one year after the completion of the agreed upon toxicity source identification and reduction measures, the discharger will be required at the discretion of the Regional Board's Executive Officer to conduct additional toxicity investigations to assess the propriety of prior TRE findings, determine whether new sources of toxicity are present, and whether and what additional toxicity reduction measures are appropriate and reasonable.

c. In determining whether enforcement of an exceedance of a toxicity limitation is appropriate, among other factors, the actions of the discharger to address the exceedance, source of the pollutants, prior notice, test variability, and ability to identify and rectify the source of the problem will be considered.

D. RECEIVING WATER LIMITATIONS

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

1. Bacteriological Standards

a. In waters designed for contact recreation (REC1) 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. In waters designated for noncontact recreation (REC2), and not designated for contact recreation (RECI), the average fecal coliform concentration for any 30-day period, shall not exceed 2,000 per 100 mL nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 per 100 mL.

c. In waters designated for contact recreation (REC1) the monthly average *E. coli* concentration shall not exceed 126/100 mL and the maximum concentration shall not exceed 576/100 mL

d. In bays and estuaries, the most probable number of coliform organisms in the upper 60 feet of the water column shall be less than 1,000 per 100 mL provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 mL, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 mL.

e. At all areas where shellfish may be harvested for human consumption (SHELL), the median total coliform concentration for any 30-day period shall not exceed 70 per 100 ml, nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 per 100 mL for a five-tube decimal dilution test or 330 per 100 mL when a three-tube decimal dilution test is used.

2. Physical Standards

a. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

b. 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.

c. 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.

d. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.

e. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface water.

f. Natural light shall not be significantly reduced as a result of the discharge of treated wastewater.

g. The rate of deposition of solids and the characteristics of solids in receiving water sediments shall not be changed such that benthic communities are degraded.

h. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

3. Chemical Standards

   a. Dissolved oxygen levels shall not be less than 5.0 mg/L in inland surface waters with designated WARM beneficial uses or less than 6.0 mg/L in waters designated as COLD beneficial uses. The annual mean dissolved oxygen concentration shall not be less than 7.0 mg/L more than 10 percent of the time.

   b. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0. In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.

   c. The dissolved sulfide concentration of waters in and near sediments and throughout the water column shall not be significantly increased above that present under natural conditions.

   d. The concentration of organic materials in receiving water sediments shall not be increased to levels that would degrade aquatic life.

   e. 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 and shall not degrade indigenous biota.

4. Biological Standards

   a. Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded.

   b. Waters shall not contain taste or odor producing substances at concentrations that cause a nuisance or adversely affect beneficial uses. The natural taste, odor, and color of fish, shellfish, or other inland surface water resources used for human consumption shall not be impaired.

   c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

   d. The concentration of contaminants in waters which are existing or potential sources of drinking water shall not occur at levels that are harmful to human health.

5. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which 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.

6. 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.

7. The discharge shall not cause the dissolved oxygen concentration of Escondido Creek or contiguous waters to be depressed below 5.0 mg/L. If the ambient dissolved oxygen concentration is less than 5.0 mg/L, the discharge shall not cause a further depression.

8. 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.

E. PROVISIONS

1. The discharge shall comply with the attached Monitoring and Reporting Program No. R9-2003-0394.

2. 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.

3. The discharger must comply with all standard provisions, where applicable, as stated in 40 CFR 122 (see Attachment No. 2) and Additional Standard Provisions (see Attachment No. 3), which are incorporated into this permit by reference.

4. 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

5. 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.

6. 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.

7. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

8. 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.

9. This Order expires on December 10, 2008, 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].

10. Order No. 98-10 is rescinded when this Order becomes effective.

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 December 10, 2003.

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

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. 3

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 of 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) & (l), "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 submitter 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.

Attachment No. 4
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 NO3)	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. 5
22 CCR Section 64444
Table 64444-A
Maximum Contaminant Levels
Organic Chemicals

Chemical	Maximum Contaminant Level (mg/L)
(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

Chemical	Maximum Contaminant Level (mg/L)
(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. 6
Table 4 of Section 64443
Maximum Contaminant Levels
MCL Radioactivity

Constituent	Maximum Contaminant Level (pCi/L*)
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

Notes: pCi/L = picoCurie per Liter

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. R9-2003-0394
NPDES PERMIT NO. CA0108944

FOR THE
CITY OF ESCONDIDO
HALE AVENUE RESOURCE RECOVERY FACILITY
INTERMITTENT WET WEATHER DISCHARGE
TO ESCONDIDO CREEK
SAN DIEGO COUNTY

A. PURPOSE

This monitoring program is intended to:

1. Document the short-term and long-term effects of the discharge on water quality and the beneficial uses of the receiving waters.

2. Assess treatment plant performance and compliance with the NPDES permit terms and conditions.

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 MRP 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.

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 5 percent from true discharge rates

throughout the range of expected discharge volumes. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. The discharger shall maintain calibration records including a written statement signed by a registered professional engineer certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required.

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. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this MRP or approved by the Executive Officer.

6. 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 March 1 of each year which summarizes the QA/QC activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of 10 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 Executive Officer, 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.

7. The discharger shall implement this monitoring and reporting program on the first day of the month following the effective date of Order No. R9-2003-0394. The Monitoring and Reporting Program of Order No. 98-10 shall remain in effect between the adoption date of Order No. R9-2003-0394 and the implementation of this MRP.

8. 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.

9. The discharger shall report all instances of noncompliance at the time monitoring reports are submitted.

10. Monitoring results must be reported in a format approved by the Executive Officer.

11. All reports submitted in response to this MRP shall comply with the signatory requirements of 40 CFR 122.22.

12. If the discharger monitors any pollutants more frequently than required by this MRP, using test procedures approved under 40 CFR, Part 136, or as specified in this MRP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

13. 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 State Water Resources Control Board *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (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 of the Implementation Policy. The discharger must select from all Minimum Levels from Appendix 4 of the Implementation Policy that are below the effluent limitation. If the effluent limitation is lower than all the Minimum Levels in Appendix 4 of the Implementation Policy, then the discharger must select the lowest Minimum Level.

14. Minimum Levels in Appendix 4 of the Implementation Policy 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. 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.

15. 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 of the Implementation Policy.

16. In addition to paper copies, the discharger shall, upon request by the Executive Officer, submit all monitoring results in an electronic format approved by the Executive Officer.

17. The discharger 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 MRP, and records of all data used to complete the application for this MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Executive Officer or the United States Environmental Protection Agency. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling or measurements;

    b. The individuals who performed the sampling or measurements;

    c. The date(s) analyses were performed;

    d. The laboratory and individual(s) who performed the analyses;

    e. The analytical techniques or methods used; and

    f. The results of all such analyses.

18. 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.

19. 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.

20. The annual average shall be the mean of all samples collected in one calendar year.

21. The monthly average shall be the mean of all samples collected in a calendar month.

22. The weekly average shall be the mean of all samples collected in a calendar week, Sunday through Saturday.

23. The daily maximum shall be the maximum result of all samples collected in a calendar day.

24. The instantaneous maximum, or "maximum at any time" effluent limitation shall apply to each sample independently (i.e. all results shall be compared to the limit).

25. 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.

26. 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.

27. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

    mass emission rate (lb/day) = 8.34 x Q x C

    in which Q and C are the flow rate in MGD and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor with units of [lb/MG] / [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.

28. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order No. R9-2003-0394 or this monitoring and reporting program.

29. 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 Executive Officer to be appropriate. Detection methods used for escherichia coli 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 Executive Officer to be appropriate.

30. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

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

    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.

31. By March 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 influent, effluent, and receiving water 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 of Order No. R9-2003-0394 and this monitoring and reporting program. A discussion and interpretation of the receiving water data collected during the previous year shall also be provided.

32. Monitoring results shall be reported at intervals and in a manner specified in Order No. R9-2003-0394 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	February May August November	April 1 August 1 October 1 February 1
Annually	January – December	March 1

33. Revisions to this MRP may be made by the Regional Board at any time during the term of Order No. R9-2003-0394, and may include a reduction or increase in the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

C. CHRONIC WHOLE EFFLUENT TOXICITY

1. Test Species and Methods

   a. 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, *Selanastrum capricornutum* (growth test) for the first three suites of tests. After this screening period, monitoring shall be conducted using the most sensitive species.

   b. If after four samplings, one of the three species is determined to be significantly more sensitive to both the effluent and the receiving water samples, the Executive Officer may permit future testing to be reduced to only the more sensitive species.

   c. In the event that recommended species is/are not available or the prescribed tests are not successful due to no fault of the discharger, other species/tests may be substituted with the prior approval of the Regional Board Executive Officer.

   d. The presence of chronic toxicity shall be estimated as specified in EPA's methods (USEPA 600/4-91-002).

   e. Chronic toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, a control containing no effluent, and a downstream sample immediately below the mixing zone shall be conducted during the first discharge event of each year.

f. Toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for any of the tests, but lack of an expected dose-response relationship should be noted whenever it occurs.

g. The discharger shall increase the frequency of chronic toxicity testing whenever the chronic toxicity of the undiluted effluent exceeds 1.0 TU_c. The first test under the accelerated schedule shall be conducted during the next discharge event after the test result that exceeds 1.0 TU_c, and testing shall be conducted once during every discharge event thereafter. The discharger may resume the regular test schedule when the result of a chronic toxicity less than 1.0 TU_c, or when the discharger has satisfactorily completed the toxicity reduction requirements and provisions specified in Section C.3 of this Order.

h. Tests shall be repeated whenever, in any test, more than 10% of the control organisms die within 96 hours, or more than 20% of the control organisms die during the duration of the test. The discharger shall review the test acceptability criteria in accordance with the EPA test protocols, EPA/600/4-91/002.

i. The results of the toxicity testing program shall be summarized in the monitoring report and shall be submitted to the Executive Officer within 30 days of the completion of all the tests. The report shall include, for the chronic toxicity tests, the no observed effect level (NOEL) shall be reported and converted to toxic units:

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 requirements are specified in Discharge Specifications of Order No. R9-2003-0394.

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 <u>not</u> 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 fourteen (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 *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the NPDES Program*, 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 100 percent treatment. The regulatory authority would conclude that there *is no toxicity at 100 percent effluent.*

(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 100 percent treatment. The regulatory authority would conclude that there *is toxicity at 100 percent effluent.*

(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 100 percent 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 100 percent treatment. The test is considered valid. The regulatory authority will conclude that there *is toxicity at 100 percent effluent.*

(5) **Very Small but Significant Difference**–The relative difference (see *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the NPDES Program*, variability document EPA/833-R-00-003, Section 6.4.2) between the means for the control and the 100 percent 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 *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the NPDES Program*, variability document EPA/833-R-00-003, Sections 6.4.2 and 6.4.3.

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 below shall apply.

b. If chronic toxicity is identified in the additional test, 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.

D. INFLUENT MONITORING

The sampling station shall be located upstream of any in-plant return flows and where a representative sample of the influent to the treatment plant can be obtained. The date and time of sampling (as appropriate) shall be reported with the analytical values determined. The following shall constitute the influent monitoring program:

Constituent	Units	Type of Sample	Minimum Frequency[1]
$CBOD_5$ @ 20°C	mg/L	24-hr composite	Once per discharge event
Total Suspended Solids	mg/L	24-hr composite	Once per discharge event

1. The minimum sampling frequency shall be at least weekly for discharge events of a duration of more than seven consecutive calendar days.

E. EFFLUENT MONITORING

Effluent monitoring is required to determine compliance with the permit conditions and to identify operational problems and improve the plant's performance. Effluent monitoring also provides information on wastewater characteristics and flows for use in interpreting water quality and biological data.

1. Sample stations shall be established at the point of discharge and shall be located where representative samples of that effluent can be obtained.

2. The date and time of sampling (as appropriate) shall be reported with the analytical values determined.

3. The discharge to Escondido Creek from the HARRF shall be monitored for the following constituents daily during each discharge:

Constituent	Units	Type of Sample
Flow	MGD	Recorder/Totalizer
Turbidity	NTU	Recorder
pH	pH Units	Grab
Total Suspended Solids	mg/L	24-hour Composite
$CBOD_5$ @ 20°C	mg/L	24-hour Composite
Total Coliform	MPN/100 mL	Grab
Fecal Coliform	MPN/100 mL	Grab
Enterococci	Colonies/100 mL	Grab
E. Coli	Colonies/100 mL	Grab

Notes: MGD = Million Gallons per Day
MPN/100 mL = Most Probable Number per 100 milliliters
mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units

The discharger shall compare daily influent total suspended solids and $CBOD_5$ values with the corresponding daily effluent values to determine and report percent removal.

4. The discharge to Escondido Creek from the HARRF shall be monitored for the following constituents once a year during the first discharge of the year*:

Constituent	Units	Type of Sample
Nitrogen (series)[1]	mg/L	24-hr composite
Phosphorus (series)[2]	mg/L	24-hr composite
Total Dissolved Solids	mg/L	24-hr composite
Chloride	mg/L	24-hr composite
Sulfate	mg/L	24-hr composite
Manganese	mg/L	24-hr composite
Boron	mg/L	24-hr composite
Fluoride	mg/L	24-hr composite
Iron	mg/L	24-hr composite
MBAS	mg/L	24-hr composite

Notes: mg/L = milligram per liter

1 Nitrogen (series) = total nitrogen, organic nitrogen, nitrate, nitrite, ammonia

2 Phosphorous (series) = total phosphorous and orthophosphate phosphorous

* The discharger shall review the monitoring data collected in compliance with Section IV Effluent Monitoring of *Monitoring and Reporting Program No. 99-72 for the City of Escondido, Hale Avenue Resource Recovery Facility Discharge Through the San Elijo Ocean Outfall,* to determine if the effluent values comply with the effluent limitations contained the Discharge Specification B.1 of Order No. R9-2003-0394. For those constituents that the effluent value exceeds the effluent limitations contained in this Order, the discharger shall monitor the first three discharges to Escondido Creek. If it is determined that the effluent complies with the effluent limitations contained in this Order, no further sampling shall be required for those constituents for the life of this permit.

5. The discharge to Escondido Creek from the HARRF shall be monitored for the following constituents once a year during the first discharge of the year*:

Constituent	Units	Type of Sample
Arsenic	mg/L	24-hr composite
Antimony	mg/L	24-hr composite
Barium	mg/L	24-hr composite
Beryllium	mg/L	24-hr composite
Cadmium	mg/L	24-hr composite
Chromium (Total)	mg/L	24-hr composite
Cobalt	mg/L	24-hr composite
Copper	mg/L	24-hr composite
Lead	mg/L	24-hr composite
Mercury	mg/L	24-hr composite
Molybdenum	mg/L	24-hr composite
Nickel	mg/L	24-hr composite
Selenium	mg/L	24-hr composite

Constituent	Units	Type of Sample
Silver	mg/L	24-hr composite
Thallium	mg/L	24-hr composite
Vanadium	mg/L	24-hr composite
Zinc	mg/L	24-hr composite
Phenolic compounds	mg/L	24-hr composite
Inorganic chemicals**	--	24-hr composite
EPA toxic pollutants	--	24-hr composite
Organic chemicals***	--	24-hr composite
Radionuclides****	--	24-hr composite

* The discharger shall review the monitoring data collected in compliance with Section IV Effluent Monitoring of *Monitoring and Reporting Program No. 99-72 for the City of Escondido, Hale Avenue Resource Recovery Facility Discharge Through the San Elijo Ocean Outfall,* to determine if the effluent values comply with the effluent limitations contained the Discharge Specification B.1 of Order No. R9-2003-0394. For those constituents that the effluent value exceeds the effluent limitations contained in this Order, the discharger shall monitor the first discharge each year to Escondido Creek. If it is determined that the effluent complies with the effluent limitations contained in this Order, no further sampling shall be required for those constituents for the life of this permit.

** See Attachment 4 of Order No. R9-2003-0394.

*** See Attachment 5 of Order No. R9-2003-0394.

**** See Attachment 6 of Order No. R9-2003-0394.

6. In conformance with Federal Regulations [40 CFR 122.45(c)], analyses to determine compliance with the effluent concentration limitations for heavy metals shall be conducted using the total recoverable method. For these constituents, if the discharger satisfactorily demonstrates to the Executive Officer an acid soluble/total recoverable method relationship, determination of compliance will be based on a comparison of the adjusted total recoverable method results to permit limits.

F. RECEIVING WATER MONITORING

1. Core Monitoring

   a. 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.

b. The following shall constitute the core baseline and receiving water (surface water) monitoring stations:

Station Number	Location
907	Escondido Creek just upstream of the La Bajada bridge
910	Escondido Creek at Elfin Forest Trailer Park at the inlet side of the bridge
911	Escondido Creek at Elfin Forest Recreation Park at the inlet side of the foot bridge
912	Escondido Creek at Country Club Drive and Harmony Grove Road upstream of the bridge
913	Escondido Creek at the granite yard upstream of bridge
916	Escondido Creek at the downstream side of Harmony Grove Bridge (upstream of HARRF discharge point to Escondido Creek)

c. Monitoring surveys conducted to meet baseline and receiving water monitoring requirements of this MRP shall include, as a minimum, the following information:

(1) 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 (°C); water temperature (°C), etc.].

(2) 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.].

(3) A description of the sample collection and preservation procedures used in the survey and a description of the specific method used for laboratory analysis.

(4) 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.

d. A permanent stream gauging station shall be established in accordance with standard practices of the U.S. Geological Survey at a location at or near Station 916. Measurements shall be recorded by a method approved by the Regional Board Executive Officer.

e. Stream flow measurements at Stations 907, 910, 911, 912 and 913 shall be conducted using a velocity-area method approved by the Regional Board Executive Officer.

f. Baseline monitoring of the receiving water shall be conducted at Stations 907, 910, 911, 912, 913 and 916 four times per year (during February, May, August, and November) on days when no discharge from the HARRF to Escondido Creek occurs. The baseline monitoring program shall commence in February 2004.

g. Sample methods, preservation, and analyses, when not specified, shall be approved by the Executive Officer. The following shall constitute the baseline and receiving water monitoring program:

Constituent	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Flowrate	CFS	Cross-sect. velocity/area	quarterly	quarterly
pH	units	grab	quarterly	quarterly
Nitrogen (series)[1]	mg/L	grab	quarterly	quarterly
Phosphorous (series)[2]	mg/L	grab	quarterly	quarterly
Dissolved Oxygen[3]	mg/L	grab	quarterly	quarterly
Total dissolved solids	mg/L	grab	quarterly	quarterly
Total suspended solids	mg/L	grab	quarterly	quarterly
Volatile suspended solids	mg/L	grab	quarterly	quarterly

Notes: CFS = cubic feet per second
mg/L = milligram per liter

1. Nitrogen (series) = total nitrogen, organic nitrogen, nitrate, nitrite, ammonia

2. Phosphorous (series) = total phosphorous and orthophosphate phosphorous

3. 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).

2. REGIONAL WATERSHED MONITORING

The discharger shall participate and coordinate with state and local agencies and other dischargers in the San Diego Region in development and implementation of a regional watershed monitoring program for the Escondido Creek Watershed as directed by the Executive Officer. The intent of a regional watershed monitoring program is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled resources of the region. During a coordinated watershed sampling effort, the discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of discharges to the watershed.

4. STRATEGIC PROCESS STUDIES

Special studies are intended to be short-term and designed to address specific research or management issues that are not addressed by the routine core monitoring program. The discharger shall implement special studies as directed by the Executive Officer.

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 December 10, 2003.

JOHN H. ROBERTUS
Executive Officer