

**ENVIRONMENTAL PROTECTION AGENCY - REGION IX  
AND  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM NO. R3-2004-0129**

**NPDES PERMIT NO. CA0048160**

Waste Discharger Identification No. 3 420102001  
Proposed for Consideration at the October 22, 2004 Meeting

**FOR**

**GOLETA SANITARY DISTRICT  
WASTEWATER TREATMENT FACILITY  
SANTA BARBARA COUNTY**

Under 40 CFR 125.62, the monitoring program for a discharger receiving a 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit shall:

- Document short and long-term effects of the discharge on receiving waters, sediments, biota, and on beneficial uses of the receiving water;
- Determine compliance with NPDES permit items and conditions; and
- Assess the effectiveness of industrial pretreatment and toxics control programs.

The Regional Water Quality Control Board (Regional Board) and the U.S. Environmental Protection Agency, Region IX (EPA) may revise the monitoring program presented herein, within the specified order and permit period. The program will be reviewed at annual intervals to assess its effectiveness at meeting the objectives stated above. If predictable relationships among effluent, water quality, and biological monitoring variables can be clearly demonstrated, it may be appropriate to decrease certain elements of the monitoring program. Conversely, the monitoring program may be intensified if it appears that the above objectives cannot be achieved through the existing monitoring program.

All monitoring program samples and measurements should be collected and analyzed according to procedures detailed in Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987). Analytical procedures found in Analytical Methods for U.S. EPA Priority Pollutants and 301(h) Pesticides in Estuarine and Marine Sediments (EPA 503/6-90-004, 1986), and

Bioaccumulation Monitoring Guidance: 4. Analytical Methods for U.S. EPA Priority Pollutants and 301(h) Pesticides in Tissues from Estuarine and Marine Organisms (Tetra Tech, Inc., 1986) should be used to measure priority pollutants in marine sediment and tissue samples, respectively. The Discharger shall use the most current edition of each document referenced above.

After collection and analysis of the first year's data, the Discharger shall submit a detailed annual report evaluating program scope and methodologies. Subjects to address include:

- Priority pollutant analyses and method detection limits;
- Sampling methodologies and QA/QC procedures;
- Monitoring program cost effectiveness; and
- Achievement of monitoring program objectives.

Recommendations and scientific rationale for modifications which may increase the effectiveness of the program should be presented in the first annual report. Subsequent annual reports may include such analyses, if appropriate. These monitoring data will be used by EPA to assess whether the 301(h) modified NPDES permit should be terminated or renewed. The Regional Board will use the monitoring data to determine compliance with Water Quality Control Plan, Ocean Waters of California (Ocean Plan) and Water Quality Control Plan, Central Coast Basin (Basin Plan) requirements.

To the extent practicable, all components of the monitoring program (e.g., water column, benthic sediment and biota, etc.) with the same monitoring schedule should be sampled concurrently.

### I. INFLUENT MONITORING

For Influent Monitoring endnotes, see Section XIV.

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards;

- Assess treatment plant performance; and
- Assess pretreatment program effectiveness.

Sampling stations shall be established at a feasible location at the headworks of the wastewater treatment plant where representative samples can be obtained. The date and time of sampling (as appropriate) shall be reported with the determined analytical values. Reported values shall be in units consistent with Ocean Plan units. The influent monitoring program is as follows:

### MISCELLANEOUS PARAMETERS

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
Inflow	Recorder	Continuous
Mean Daily Flow	Recorder	Calculated
Maximum Daily Flow	Recorder	Calculated
Rainfall	Measured	Daily
BOD <sub>5</sub> (20°C)	24-hr Composite	3 days/week <sup>(2)</sup>

### TABLE A - MAJOR WASTEWATER CONSTITUENTS AND PROPERTIES

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
Grease and Oil	Grab	Bi-Weekly <sup>(2)</sup>
Suspended Solids	24-hr Composite	5 days/week <sup>(2)</sup>
pH	Grab	Weekly <sup>(2)</sup>

### TABLE B - OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
Arsenic	24-hr Composite	Monthly
Cadmium	24-hr Composite	"
Chromium (Hexavalent) <sup>(3)</sup>	24-hr Composite	"
Copper	24-hr Composite	"
Lead	24-hr Composite	"
Mercury	24-hr Composite	"
Nickel	24-hr Composite	"
Selenium	24-hr Composite	Annually (Oct)
Silver	24-hr Composite	Monthly
Zinc	24-hr Composite	"
Cyanide	Grab	Annually (Oct)
Phenolic Compounds (non-chlorinated)	Grab	"
Chlorinated Phenolics	Grab	"

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
Endosulfan <sup>(4)</sup>	24-hr Composite	“
Endrin	24-hr Composite	”
HCH <sup>(5)</sup>	24-hr Composite	”
Radioactivity	24-hr Composite	”

**TABLE B - OBJECTIVES FOR THE PROTECTION OF HUMAN HEALTH – NON-CARCINOGENS**

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
acrolein	Grab	Annually (Oct)
antimony	24-hr Composite	”
bis(2-chloroethoxy)methane	24-hr Composite	Annually <sup>(17)</sup> (Oct)
bis(2-chloroisopropyl)ether	24-hr Composite	”
chlorobenzene	Grab	”
chromium (III) <sup>(3)</sup>	24-hr Composite	”
di-n-butyl phthalate	24-hr Composite	”
dichlorobenzenes <sup>(6)</sup>	24-hr Composite	”
diethyl phthalate	24-hr Composite	”
dimethyl phthalate	24-hr Composite	”
4,6-dinitro-2-methylphenol	24-hr Composite	”
2,4-dinitrophenol	24-hr Composite	”
ethylbenzene	Grab	”
fluoranthene	24-hr Composite	”
hexachlorocyclopentadiene	24-hr Composite	”
nitrobenzene	24-hr Composite	”
thallium	24-hr Composite	”
toluene	Grab	”
tributyltin	24-hr Composite	”
1,1,1-trichloroethane	Grab	“

**TABLE B - OBJECTIVES FOR THE PROTECTION OF HUMAN HEALTH -- CARCINOGENS**

Parameter	Sample Type <sup>(1)</sup>	Minimum Frequency Sampling/Analysis
acrylonitrile	Grab	Annually (Oct)
aldrin	24-hr Composite	”
benzene	Grab	”
benzidine	24-hr Composite	”
beryllium	24-hr Composite	”
bis(2-chloroethyl)ether	24-hr Composite	”
bis(2-ethylhexyl)phthalate	24-hr Composite	”
carbon tetrachloride	Grab	Annually <sup>(17)</sup> (Oct)
chlordanes <sup>(7)</sup>	24-hr Composite	”
chlorodibromomethane	24-hr Composite	”
chloroform	Grab	”
DDT <sup>(8)</sup>	24-hr Composite	”
1,4-dichlorobenzene	24-hr Composite	”

**Minimum Frequency**

Parameter	Sample Type <sup>(1)</sup>	Sampling/Analysis
3,3-dichlorobenzidine	24-hr Composite	Annually <sup>(17)</sup> (Oct)
1,2-dichloroethane	Grab	"
1,1-dichloroethylene	Grab	"
dichlorobromomethane	24-hr Composite	"
dichloromethane	Grab	"
1,3-dichloropropene	Grab	"
dieldrin	24-hr Composite	"
2,4-dinitrotoluene	24-hr Composite	"
1,2-diphenylhydrazine	24-hr Composite	"
halomethanes <sup>(9)</sup>	Grab	"
heptachlor <sup>(10)</sup>	24-hr Composite	"
heptachlor epoxide	24-hr Composite	"
hexachlorobenzene	24-hr Composite	"
hexachlorobutadiene	24-hr Composite	"
hexachloroethane	24-hr Composite	"
isophorone	24-hr Composite	"
N-nitrosodimethylamine	24-hr Composite	"
N-nitrosodi-N-propylamine	24-hr Composite	"
N-nitrosodiphenylamine	24-hr Composite	"
PAHs <sup>(11)</sup>	24-hr Composite	"
PCBs <sup>(12)</sup>	24-hr Composite	"
TCDD equivalents <sup>(13, 14)</sup>	24-hr Composite	"
1,1,2,2-tetrachloroethane	Grab	"
tetrachloroethylene	Grab	"
toxaphene	24-hr Composite	"
trichloroethylene	Grab	"
1,1,2-trichloroethane	Grab	"
2,4,6-trichlorophenol	24-hr Composite	"
vinyl chloride	Grab	"
Remaining Priority Pollutants <sup>(15)</sup>	Grab/24-hr Composite <sup>(16)</sup>	"
(excluding asbestos)		

## II. EFFLUENT MONITORING

For Effluent Monitoring endnotes, see Section XIV.

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards;
- Identify operational problems and improve plant performance; and
- Provide information on waste characteristics and flows for use in interpreting water quality and biological data.

An effluent sampling station shall be located downstream of any in-plant return flows or disinfection units, where representative samples of the effluent can be obtained. The date and time of sampling (as appropriate) shall be reported with the determined analytical values. Reported values shall be in units consistent with Ocean Plan units. As required by the Ocean Plan, discharges between 1 and 10 million gallons per day (MGD) must scan Chapter II, Table B toxic materials annually (minimum). The effluent monitoring program is as follows:

**MISCELLANEOUS PARAMETERS**

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
Flow	Recorder	Continuous
Mean Daily Flow	Recorder	Calculated
Maximum Daily Flow	Recorder	Calculated
Temperature	Grab	5 days/week <sup>(2)</sup>
BOD <sub>5</sub> (20°C)	24-hr Composite	5 days/week <sup>(2)</sup>
Total Coliform	Grab	5 days/week <sup>(2)</sup>
Fecal Coliform	Grab	5 days/week <sup>(2)</sup>
Enterococcus	Grab	5 days/week <sup>(2)</sup>
Chlorine Usage	Calculated	Daily
Total Chlorine Residual (Chlorine Contact Tank)	Grab	Daily

**TABLE A - MAJOR WASTEWATER CONSTITUENTS AND PROPERTIES**

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
Grease and Oil	Grab	Weekly <sup>(2)</sup>
Suspended Solids	24-hr Composite	5 days/week <sup>(2)</sup>
Settleable Solids	Grab	5 days/week <sup>(2)</sup>
Turbidity	Grab	5 days/week <sup>(2)</sup>
pH	Grab	5 days/week <sup>(2)</sup>

**TABLE B - OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE**

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
Arsenic	24-hr Composite	Monthly
Cadmium		24-hr Composite "
Chromium (Hexavalent) <sup>(3)</sup>	24-hr Composite	"
Copper	24-hr Composite	"
Lead	24-hr Composite	"
Mercury	24-hr Composite	"
Nickel	24-hr Composite	"
Selenium	24-hr Composite	Annually (Oct)
Silver	24-hr Composite	Monthly
Zinc	24-hr Composite	"
Cyanide	Grab	Annually (Oct)
Total Chlorine Residual (Final Effluent)	Continuous	Continually
Ammonia (expressed as nitrogen)	Grab	Monthly
Acute toxicity <sup>(18)</sup>	24-hr Composite	Quarterly (Jan/Apr/Jul/Oct)
Chronic toxicity <sup>(18)</sup>	24-hr Composite	"

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
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Phenolic Compounds (non-chlorinated)	Grab	Annually (Oct)
Chlorinated Phenolics	Grab	"
Endosulfan <sup>(4)</sup>	24-hr Composite	"
Endrin	24-hr Composite	"
HCH <sup>(5)</sup>	24-hr Composite	"
Radioactivity	24-hr Composite	"

**TABLE B - OBJECTIVES FOR THE PROTECTION OF HUMAN HEALTH – NONCARCINOGENS**

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
acrolein	Grab	Annually (Oct)
antimony	24-hr Composite	"
bis(2-chloroethoxy)methane	24-hr Composite	"
bis(2-chloroisopropyl)ether	24-hr Composite	"
chlorobenzene	Grab	"
chromium (III) <sup>(3)</sup>	24-hr Composite	"
di-n-butyl phthalate	24-hr Composite	"
dichlorobenzenes <sup>(6)</sup>	24-hr Composite	"
diethyl phthalate	24-hr Composite	"
dimethyl phthalate	24-hr Composite	"
4,6-dinitro-2-methylphenol	24-hr Composite	"
2,4-dinitrophenol	24-hr Composite	"
ethylbenzene	Grab	"
fluoranthene	24-hr Composite	"
hexachlorocyclopentadiene	24-hr Composite	"
nitrobenzene	24-hr Composite	"
thallium	24-hr Composite	"
toluene	Grab	"
tributyltin	24-hr Composite	"
1,1,1-trichloroethane	Grab	"

**TABLE B - OBJECTIVES FOR THE PROTECTION OF HUMAN HEALTH -- CARCINOGENS**

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
acrylonitrile	Grab	Annually (Oct)
aldrin	24-hr Composite	"
benzene	Grab	"
benzidine	24-hr Composite	"
beryllium	24-hr Composite	"
bis(2-chloroethyl)ether	24-hr Composite	"
bis(2-ethylhexyl)phthalate	24-hr Composite	"
carbon tetrachloride	Grab	"
chlordane <sup>(7)</sup>	24-hr Composite	"
chlorodibromomethane	24-hr Composite	"

  

<b>Parameter</b>	<b>Sample Type <sup>(1)</sup></b>	<b>Minimum Frequency Sampling/Analysis</b>
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chloroform	Grab	Annually (Oct)
DDT <sup>(8)</sup>	24-hr Composite	"
1,4-dichlorobenzene	24-hr Composite	"
3,3-dichlorobenzidine	24-hr Composite	"
1,2-dichloroethane	Grab	"
1,1-dichloroethylene	Grab	"
dichlorobromomethane	Grab	"
dichloromethane	Grab	"
1,3-dichloropropene	Grab	"
dieldrin	24-hr Composite	"
2,4-dinitrotoluene	24-hr Composite	"
1,2-diphenylhydrazine	24-hr Composite	"
halomethanes <sup>(9)</sup>	Grab	"
heptachlor <sup>(10)</sup>	24-hr Composite	"
heptachlor epoxide	24-hr Composite	"
hexachlorobenzene	24-hr Composite	"
hexachlorobutadiene	24-hr Composite	"
hexachloroethane	24-hr Composite	"
isophorone	24-hr Composite	"
N-nitrosodimethylamine	24-hr Composite	"
N-nitrosodi-N-propylamine	24-hr composite	"
N-nitrosodiphenylamine	24-hr Composite	"
PAHs <sup>(11)</sup>	24-hr Composite	"
PCBs <sup>(12)</sup>	24-hr Composite	"
TCDD equivalents <sup>(13, 14)</sup>	24-hr Composite	"
1,1,2,2-tetrachloroethane	24-hr Composite	"
tetrachloroethylene	Grab	"
toxaphene	24-hr Composite	"
trichloroethylene	Grab	"
1,1,2-trichloroethane	Grab	"
2,4,6-trichlorophenol	24-hr Composite	"
vinyl chloride	Grab	"
Remaining Priority Pollutants <sup>(15)</sup>		"
(excluding asbestos)	24-hr Composite <sup>(16)</sup>	"

### MINIMUM\* LEVELS

The Minimum Levels identified in the 2001 California Ocean Plan (Ocean Plan) represent the lowest concentration of a pollutant that can be quantitatively measured in a sample given the current state of performance in analytical chemistry methods in California. These Minimum Levels were derived from data provided by state-certified analytical laboratories in 1997 and 1998 for pollutants regulated by the California Ocean Plan and shall be used until new values are adopted by the State Water Resources Control Board.

The Ocean Plan establishes Minimum Levels (and their associated analytical methods) for discharger reporting. Minimum Levels 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 are given below:

<u>Substance or Grouping</u>	<u>Method-Specific Treatment</u>	<u>Most Common Factor</u>
Volatile Organics	No differential treatment	1

Semi-Volatile Organics	Samples concentrated by extraction	1000
Metals	Samples diluted or concentrated	½, 2, and 4
Pesticides	Samples concentrated by extraction	100

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.

In accordance with the Ocean Plan, all Minimum Levels that are below the effluent limitations of Order No. R3-2004-0129 are included herein (see Tables II-1 through II-4 of this MRP). In instances where effluent limitations were lower than all of the Ocean Plan Minimum Levels, the lowest Minimum Level was included. In the latter case, the Minimum Levels above the lowest level were omitted to prevent their mistaken application (indicated by "N/A" within Tables II-1 through II-4 of this MRP). The Minimum Levels prescribed herein were transcribed from Appendix II of the Ocean Plan. The reported Minimum Level is the Minimum Level (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the Minimum Levels included herein.

Dischargers are to instruct their 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. The discharger's laboratory may employ a calibration standard lower than the Minimum Level in accordance with the Ocean Plan, Section C.4.b, *Deviations from Minimum Levels in Appendix II* (included below).

**Deviations from Minimum Levels in Appendix II of the Ocean Plan**

The Regional Board, in consultation with the State Water Board's Quality Assurance Program, must establish a Minimum Level to be included in the permit in any of the following situations:

1. A pollutant is not listed in Appendix II of the Ocean Plan.
2. The discharger agrees to use a test method that is more sensitive than those described in 40 CFR 136 (revised May 14, 1999).
3. The discharger agrees to use a Minimum Level lower than those listed in Appendix II of the Ocean Plan.
4. The discharger demonstrates that their calibration standard matrix is sufficiently different from that used to establish the Minimum Level in Appendix II of the Ocean Plan and proposes an appropriate Minimum Level for their matrix.
5. A discharger uses an analytical method having a quantification practice that is not consistent with the definition of Minimum Level (e.g., US EPA methods 1613, 1624, 1625).

The Minimum\* Levels identified in this table represent the lowest concentration of a pollutant that can be quantitatively measured in a sample given the current state of performance in analytical chemistry methods in California. These Minimum\* Levels were derived from data provided by state-certified analytical laboratories in 1997 and 1998 for pollutants regulated by the California Ocean Plan and shall be used until new values are adopted by the SWRCB. There are four major chemical groupings: volatile chemicals, semi-volatile chemicals, inorganics, pesticides & PCB's. "No Data" is indicated by "----".



**TABLE II-1  
MINIMUM LEVELS VOLATILE CHEMICALS**

Volatile Chemicals	CAS Number	Minimum* Level (µg/L)	
		GC Method <sup>a</sup>	GCMS Method <sup>b</sup>
Acrolein	107028	2.	5
Acrylonitrile	107131	2.	2
Benzene	71432	0.5	2
Bromoform	75252	0.5	2
Carbon Tetrachloride	56235	0.5	2
Chlorobenzene	108907	0.5	2
Chlorodibromomethane	124481	0.5	2
Chloroform	67663	0.5	2
1,2-Dichlorobenzene (volatile)	95501	0.5	2
1,3-Dichlorobenzene (volatile)	541731	0.5	
1,4-Dichlorobenzene (volatile)	106467	0.5	
Dichlorobromomethane	75274	0.5	
1,1-Dichloroethane	75343	0.5	
1,2-Dichloroethane	107062	0.5	
1,1-Dichloroethylene	75354	0.5	
Dichloromethane	75092	0.5	
1,3-Dichloropropene (volatile)	542756	0.5	
Ethyl benzene	100414	0.5	
Methyl Bromide	74839	1.	
Methyl Chloride	74873	0.5	
1,1,2,2-Tetrachloroethane	79345	0.5	
Tetrachloroethylene	127184	0.5	
Toluene	108883	0.5	
1,1,1-Trichloroethane	71556	0.5	
1,1,2-Trichloroethane	79005	0.5	
Trichloroethylene	79016	0.5	
Vinyl Chloride	75014	0.5	

**Table II-1 Notes:**

a) GC Method = Gas Chromatography

b) GCMS Method = Gas Chromatography / Mass Spectrometry

\* To determine the lowest standard concentration in an instrument calibration curve for these techniques, use the given ML (see Ocean Plan Chapter III, "Use of Minimum\* Levels").

**TABLE II-2  
MINIMUM\* LEVELS - SEMI VOLATILE CHEMICALS.**

Semi-Volatile Chemicals	CAS Number	GC Method <sup>a,*</sup>	Minimum* Level (µg/L)			COLOR Method <sup>d</sup>
			GCMS Method <sup>b,*</sup>	HPLC Method <sup>c,*</sup>		
Acenaphthylene	208968	--	N/A	0.2	--	
Anthracene	120127	--	N/A	2	--	
Benzidine	92875	--	5	--	--	
Benzo(a)anthracene	56553	--	N/A	2	-	
Benzo(a)pyrene	50328	--	10	2	-	
Benzo(b)fluoranthene	205992	--	10	10	-	
Benzo(g,h,i)perylene	191242	--	5	0.1	-	
Benzo(k)floranthene	207089	--	N/A	2	-	
Bis 2-(1-Chloroethoxy) methane	111911	--	5	--	-	
Bis(2-Chloroethyl)ether	111444	N/A	1	--	-	
Bis(2-Chloroisopropyl)ether	39638329	10	2	--	-	
Bis(2-Ethylhexyl) phthalate	117817	10	5	--	-	
2-Chlorophenol	95578	2	5	--	-	
Chrysene	218019	--	N/A	5	-	
Di-n-butyl phthalate	84742	--	10	--	-	
Dibenzo(a,h)anthracene	53703	--	N/A	0.1	-	
1,2-Dichlorobenzene (semivolatile)	95504	2	2	--	-	
1,3-Dichlorobenzene (semivolatile)	541731	2	1	--	-	
1,4-Dichlorobenzene (semivolatile)	106467	2	1	--	-	
3,3-Dichlorobenzidine	91941	--	5	--	-	
2,4-Dichlorophenol	120832	1	5	--	-	
1,3-Dichloropropene	542756	--	5	-	-	
Diethyl phthalate	84662	10	2	--	-	
Dimethyl phthalate	131113	10	2	--	-	
2,4-Dimethylphenol	105679	1	2	--	-	
2,4-Dinitrophenol	51285	5	5	--	-	
2,4-Dinitrotoluene	121142	10	5	--	-	
1,2-Diphenylhydrazine	122667	--	1	--	-	
Fluoranthene	206440	10	1	0.05	-	
Fluorene	86737	--	N/A	0.1	-	
Hexachlorobenzene	118741	N/A	1	--	-	
Hexachlorobutadiene	87683	5	1	--	-	
Hexachlorocyclopentadiene	77474	5	5	--	-	
Hexachloroethane	67721	5	1	--	-	
Indeno(1,2,3-cd)pyrene	193395	--	N/A	0.05	-	
Isophorone	78591	10	1	--	-	
2-methyl-4,6-dinitrophenol	534521	10	5	--	-	
3-methyl-4-chlorophenol	59507	5	1	--	-	
N-nitrosodi-n-propylamine	621647	10	5	--	-	
N-nitrosodimethylamine	62759	10	5	--	-	
N-nitrosodiphenylamine	86306	10	1	--	-	
Nitrobenzene	98953	10	1	--	-	
2-Nitrophenol	88755	--	10	--	-	
4-Nitrophenol	100027	5	10	--	-	
Pentachlorophenol	87865	1	5	--	-	
Phenanthrene	85018	--	N/A	0.05	--	

**TABLE II-2**

**MINIMUM\* LEVELS - SEMI VOLATILE CHEMICALS.**

<b>Semi-Volatile Chemicals</b>	<b><u>Minimum* Level (µg/L)</u></b>				
	<b>CAS Number</b>	<b>GC Method<sup>a,*</sup></b>	<b>GCMS Method<sup>b,*</sup></b>	<b>HPLC Method<sup>c,*</sup></b>	<b>COLOR Method<sup>d</sup></b>
Phenol	108952	1	1	--	50
Pyrene	129000	--	N/A	0.05	--
2,4,6-Trichlorophenol	8806	10	10	--	--

**Table II-2 Notes:**

- a) GC Method = Gas Chromatography
- b) GCMS Method = Gas Chromatography / Mass Spectrometry
- c) HPLC Method = High Pressure Liquid Chromatography
- d) COLOR Method = Colorimetric

\* To determine the lowest standard concentration in an instrument calibration curve for this technique, multiply the given ML by 1000 (see Ocean Plan Chapter III, "Use of Minimum\* Levels").

**TABLE II-3  
MINIMUM\* LEVELS - INORGANICS**

Inorganic Substances	CAS Number	<u>Minimum* Level (µg/L)</u>								
		COLOR Method <sup>a</sup>	DCP Method <sup>b</sup>	FAA Method <sup>c</sup>	GFAA Method <sup>d</sup>	HYDRIDE Method <sup>e</sup>	ICP Method <sup>f</sup>	ICPMS Method <sup>g</sup>	SPGFAA Method <sup>h</sup>	CVAA Method <sup>i</sup>
Antimony	7440360	--	1000.	10.	5.	0.5	50.	0.5	5.	-
Arsenic	7440382	20.	N/A	--	2.	1.	10.	2.	2.	-
Beryllium	7440417	--	N/A	N/A	0.5	--	2.	0.5	1.	-
Cadmium	7440439	--	N/A	10.	0.5	--	10.	0.2	0.5	-
Chromium (total)	--	--	N/A	50.	2.	--	10.	0.5	1.	-
Chromium (VI)	18540299	10.	--	5.	--	--	--	--	--	-
Copper	7440508	--	N/A	20.	5.	--	10.	0.5	2.	-
Cyanide	57125	5.	--	--	--	--	--	--	--	-
Lead	7439921	--	N/A	20.	5.	--	5.	0.5	2.	-
Mercury	7439976	--	--	--	--	--	--	0.5	--	0.2
Nickel	7440020	--	N/A	50.	5.	--	20.	1.	5.	-
Selenium	7782492	--	1000.	--	5.	1.	10.	2.	5.	-
Silver	7440224	--	N/A	10.	1.	--	10.	0.2	2.	-
Thallium	7440280	--	N/A	10.	2.	--	10.	1.	5.	-
Zinc	7440666	--	1000.	20.	--	--	20.	1.	10.	-

**Table II-3 Notes:**

- a) COLOR Method = Colorimetric
- b) DCP Method = Direct Current Plasma
- c) FAA Method = Flame Atomic Absorption
- d) GFAA Method = Graphite Furnace Atomic Absorption
- e) HYDRIDE Method = Gaseous Hydride Atomic Absorption
- f) ICP Method = Inductively Coupled Plasma
- g) ICPMS Method = Inductively Coupled Plasma / Mass Spectrometry
- h) SPGFAA Method = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., US EPA 200.9)
- i) CVAA Method = Cold Vapor Atomic Absorption

**TABLE II-4  
MINIMUM\* LEVELS - PESTICIDES AND PCBs**

Pesticides - PCB's	CAS Number	Minimum* Level (µg/L)
		GC Method <sup>a, *</sup>
Aldrin	309002	0.005
Chlordane	57749	0.1
4,4'-DDD	72548	0.05
4,4'-DDE	72559	0.05
4,4'-DDT	50293	0.01
Dieldrin	60571	0.01
a-Endosulfan	959988	0.02
b-Endosulfan	33213659	0.01
Endosulfan Sulfate	1031078	0.05
Endrin	72208	0.01
Heptachlor	76448	0.01
Heptachlor Epoxide	1024573	0.01
a-Hexachlorocyclohexane	319846	0.01
b-Hexachlorocyclohexane	319857	0.005
d-Hexachlorocyclohexane	319868	0.005
g-Hexachlorocyclohexane (Lindane)	58899	0.02
PCB 1016	--	0.5
PCB 1221	--	0.5
PCB 1232	--	0.5
PCB 1242	--	0.5
PCB 1248	--	0.5
PCB 1254	--	0.5
PCB 1260	--	0.5
Toxaphene	8001352	0.5

**Table II-4 Notes:**

- a) GC Method = Gas Chromatography
- \* To determine the lowest standard concentration in an instrument calibration curve for this technique, multiply the given ML by 100 (see Chapter III, "Use of Minimum\* Levels").

**III. BIOSOLIDS MONITORING, REPORTING, AND NOTIFICATION**

**Biosolids Monitoring**

1. Biosolids resulting from the Discharger's treatment processes and ready for ultimate disposal/reuse shall be sampled and analyzed as specified below. If wet weather conditions do not allow for sample collection, the Discharger shall notify the Regional Board and EPA, and arrange for the implementation of an alternative sampling schedule at the earliest possible time.

A representative sample of residual biosolids as obtained from the last point in the handling process shall be analyzed for the constituents and at the frequencies discussed below. A minimum of twelve (12) discrete samples shall be collected at separate locations in the drying bed area that is next scheduled for disposal. These discrete samples shall be collected at approximately equal time intervals over a 24-hour period, and composited to form one (1) sample for parameter analysis. The sample shall be documented to show it is representative of biosolids from the facility.

Biosolids shall be tested for the metals referred to in 40 CFR 503.16 (for land application) or Section 503.26 (for surface disposal), using the methods in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (EPA Publication SW-846, all applicable editions and updates), as required in 503.8(b)(4), at the minimum frequencies established in those 40 CFR sections (current frequencies shown below).

Amount <sup>1</sup> (dry metric tons per 365-day period)	Frequency <sup>2</sup>
Greater than zero but less than 290	once per year
Equal to or greater than 290 but less than 1,500	once per quarter (four times per year)
Equal to or greater than 1,500 but less than 15,000	once per 60 days (six times per year)
Greater than 15,000	once per month (twelve times per year)

<sup>1</sup> For Land Application: Either the amount of bulk biosolids / sewage sludge applied to the land or the amount prepared for sale or give-away in a bag or other container for application to the land (dry weight basis). If the District's biosolids are directly land applied without further treatment by another preparer, biosolids to be land applied shall also be tested for organic-N, ammonium-N, and nitrate-N at the frequencies required above.

For Surface Disposal: Amount of biosolids / sewage sludge placed on an active sewage sludge unit (dry weight basis).

<sup>2</sup> Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

According to data presented in the Permittee's 2003 Annual Report, 614 dry metric tons of biosolids are generated per 365-day period. The Permittee will therefore conduct biosolids sampling once every quarter (four times per year). The Permittee shall maintain this minimum biosolids sampling schedule at least until data collected over a 365-day period establishes a new basis for monitoring frequency pursuant to 40 CFR 503.

The above-referenced metals are listed with the monitoring requirements below.

Parameter	Units	Minimum Frequency Sampling/Analysis
Quantity Removed	Tons or yd <sup>3</sup> and Monthly Disposal Location	(Jan/Apr/Jul/Oct)
Pathogen Density	--	per 40 CFR 503
Vector Attraction	--	"
Moisture	--	Quarterly
Arsenic	mg/kg	(Jan/Apr/Jul/Oct)
Cadmium	mg/kg	"
Chromium (Hexavalent) <sup>(3)</sup>	mg/kg	"
Copper	mg/kg	"
Lead	mg/kg	"
Mercury	mg/kg	"
Molybdenum	mg/kg	"
Nickel	mg/kg	"
Selenium	mg/kg	"
Zinc	mg/kg	"
Total Kjeldahl Nitrogen	mg/kg	"

Parameter	Units	Minimum Frequency Sampling/Analysis
Ammonia (expressed as nitrogen)	mg/kg	"
Nitrate (expressed as nitrogen)	mg/kg	"
Total Phosphorus	mg/kg	"
pH	mg/kg	Annually (Oct)
Grease and Oil	mg/kg	"
Priority Pollutants <sup>(15)</sup> (excluding asbestos)	mg/kg	"

For accumulated, previously untested biosolids, the permittee shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples.

All constituents shall be analyzed for total concentrations for comparison with Total Threshold Limit Concentration (TTLC) criteria. The Waste Extraction Test shall be performed on any constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Limit Concentration (STLC) limit for that substance. [California Code of Regulations, Title 22, Division 4.5, Chapter 11, Article 3]

2. Prior to land application, the permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 40 CFR 503.32 (unless transferred to another preparer who demonstrates pathogen reduction).

Prior to disposal in a surface disposal site, the permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.

If pathogen reduction is demonstrated using a “Process to Significantly/Further Reduce Pathogens”, the permittee shall maintain daily records of the operating parameters used to achieve this reduction.

The following applies when biosolids from the permittee are directly land applied as Class B, without further treatment by a second preparer: If the permittee demonstrates pathogen reduction by direct testing for fecal coliforms and/or pathogens, samples must be drawn at the frequency in the Amount/Frequency table above in No. 1. If the permittee demonstrates Class B pathogen reduction by testing for fecal coliform, at least seven grab samples must be drawn and analyzed during each monitoring event, and a geometric mean calculated from these seven samples. If the permittee demonstrates Class A pathogen reduction by testing for fecal coliform and/or salmonella, plus one of the PFRP processes or testing for enteric viruses and helminth ova, at least four samples of fecal coliform or salmonella must be drawn during each monitoring event. All four samples must meet the limits specified in 503.32(a).

3. For biosolids that are land applied or placed in a surface disposal site, the permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 40 CFR 503.33(b).
4. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with greater than five million gallons per day (MGD) influent flow shall sample biosolids for pollutants listed under Section 307(a) of the Clean Water Act (as required in the pretreatment section of the permit for POTW’s with pretreatment programs). Class 1 facilities and Federal facilities greater than five MGD shall test dioxins/dibenzofurans using a detection limit of less than one pg/g at the time of their next priority pollutant scan if they have not done so within the past five years, and once per five years thereafter.
5. The biosolids shall be tested annually, or more frequently if necessary, to determine hazardousness. All constituents regulated under CA Title 22, Division 4.5, Chapter 11, Article 3 shall be analyzed for comparison with Total Threshold Limit Concentration (TTLC) criteria. The Waste Extraction Test shall be performed on any

constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Limit Concentration (STLC) limit for that substance.

6. If Biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.
7. Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (EPA Method 9095) at the frequency in the Volume/Frequency table above in No. 1., or more often if necessary to demonstrate that there are no free liquids.

#### **Biosolids Notification**

8. The permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:
  - a. Notification of non-compliance: The permittee shall notify EPA Region 9, the Central Coast Regional Board, and the Regional Board located in the region where the biosolids are used or disposed, of any non-compliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the permittee shall notify EPA Region 9 and the affected Regional Boards of the non-compliance in writing within five working days of becoming aware of the non-compliance. The permittee shall require their biosolids management contractors to notify EPA Region 9 and the affected Regional Boards of any non-compliance within the same time frames. See Attachment C of this Order for California Regional Board contact information.
  - b. If biosolids are shipped to another State or to Indian Lands, the permittee must send notice at least 60 days prior to the shipment to the permitting authorities in the receiving State or Indian Land (the EPA Regional Office for that area and the State/Indian authorities).
  - c. For land application: (These notification requirements are intended for cases where Class B biosolids from the District are directly applied without further treatment) Prior to reuse of any biosolids from the Permittee's facility to a new or previously unreported site, the permittee shall notify EPA and Regional Board. The notification shall include a description and topographic map of the proposed site(s), names and addresses of the applier, and site owner and a listing of any state or local permits which must be obtained. The plan shall include a description of the crops or vegetation to be grown, proposed loading rates and determination of agronomic rates.

If any biosolids within a given monitoring period do not meet 40 CFR 503.13 metals concentration limits, the permittee (or its contractor) must pre-notify EPA, and determine the cumulative metals loading at that site to date, as required in 40 CFR 503.12.

The permittee shall notify the applier of all the applier's requirements under 40 CFR 503, including the requirement that the applier certify that the management practices, site restrictions, and any applicable vector attraction reduction requirements have been met. The permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that the harvesting restrictions in effect for up to 38 months have been met.

- d. For surface disposal: Prior to disposal to a new or previously unreported site, the permittee shall notify EPA and the Regional Board. The notice shall include description and topographic map of the proposed site, depth to groundwater, whether the site is lined or unlined, site operator, site owner, and any state or local permits. The notice shall describe procedures for ensuring public access and grazing restrictions for three years following site closure. The notice shall include a groundwater monitoring plan or description of why groundwater monitoring is not required.

#### **Biosolids Reporting**



9. The permittee shall submit an annual biosolids report to the EPA Region 9 Biosolids Coordinator and Regional Board **by February 19<sup>th</sup> of each year** (per EPA guidance) for the period covering the previous calendar year. The report shall include:
- a. The amount of biosolids generated during the reporting period, in dry metric tons, and its percent solids, and the amount accumulated from previous years;
  - b. Results of all pollutant and pathogen monitoring required in this Order and Monitoring and Reporting Program, whether directly stated or included by reference. Results must be reported on a 100% dry weight basis for comparison with 40 CFR 503 limits;
  - c. Descriptions of pathogen reduction methods and vector attraction reduction methods, including supporting time and temperature data, and certifications, as required in 40 CFR 503.17 and 503.27;
  - d. Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and amounts delivered to each.
  - e. For land application sites, (These reporting requirements are for cases where Class B biosolids from the District are directly applied without further treatment): The following information must be submitted by the Permittee, unless the Permittee requires its biosolids management contractors to report this information directly to the EPA Region 9 Biosolids Coordinator:
    - Locations of land application sites (with field names and numbers) used that calendar year, size of each field applied to, applicator, and site owner;
    - Amounts applied to each field (in wet tons and dry metric tons), nitrogen applied, calculated plant available nitrogen;
    - The application rate in lbs/acre/year (specify wet or dry);
    - The Regional Board's Waste Discharge Requirements Order numbers that regulate the site(s) (including those in other regions which may receive biosolids from your facility);
    - Crop planted, dates of planting and harvesting;
    - For any biosolids exceeding 40 CFR 503.13 Table 3 metals concentrations: the locations of sites where applied and cumulative metals loading at that site to date;
    - Subsequent uses of the land;
    - Certifications of management practices in Section 503.14; and
    - Certifications of site restrictions in Section 503(b)(5);
  - f. For surface disposal sites:
    - The names and locations of the facilities receiving biosolids, site operator, site owner, size of parcel on which disposed;
    - Results of any required groundwater monitoring;
    - The Regional Board's Waste Discharge Requirements Order numbers that regulate the landfills used (including those in other regions which may receive biosolids from your facility);

- The present classifications of the landfills used;
  - Certifications of management practices in Section 503.24; and
  - For closed sites, date of site closure and certifications of management practices for the three years following site closure.
- g. For all biosolids used or disposed at the Permittee's facilities, the site and management practice information and certification required in Sections 503.17 and 503.27; and
- h. For all biosolids temporarily stored, the information required in Section 503.20 required to demonstrate temporary storage;
- i. A schematic diagram showing biosolids handling facilities (e.g., digesters, lagoons, drying beds, and incinerators) and a solids flow diagram;
- j. A narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if biosolids are digested, report average temperature and retention time of the digesters. If drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.

Reports shall be submitted to:

Regional Biosolids Coordinator  
US EPA (WTR-7)  
75 Hawthorne St.  
San Francisco, CA 94105-3901

Executive Officer  
Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93455-7906

#### **IV. RECEIVING WATER MONITORING**

Monitoring is conducted to verify predictions in the Technical Review Report (TRR) and Tentative Decision Document (TDD) and to assess compliance with 301(h) permit limitations and water quality standards. Receiving water monitoring must document water quality at the zone of initial dilution (ZID) boundary, reference stations, and areas beyond the ZID where discharge impacts might reasonably be expected. Monitoring must reflect conditions during all critical environmental periods.

At the time of this Order's consideration for adoption, the State Board proposed revisions to the Ocean Plan which may significantly affect this MRP section and Order Sections C.1 and C.2. Should such revisions occur, the Executive Officer will formally notify the Discharger of any applicable changes. The Executive Officer may defer the formal revision of this Order and MRP until the next scheduled renewal.

##### **A. MONITORING STATIONS AND LOCATIONS**

Monitoring stations (see Attachment "A") have been located to assess the short and long-term environmental impacts of the discharge on the receiving water, benthic sediment, and biota in the vicinity of the outfall. Results of the monitoring program indicate that net current movement in the outfall area is upcoast (i.e., west) of the outfall. Monitoring stations are located on the assumption of net upcoast current direction. The Discharger shall locate

nearshore, ocean, plume, and trawl stations using an accepted Global Positioning System capable of the required accuracy.

Surf Zone Stations

- A Surf, Goleta Point
- A1 Surf, 500 meters downcoast (NE) of Goleta Point
- A2 Surf, 1000 meters west of outfall line
- B Surf, 300 meters west of outfall line
- C Surf, outfall line
- D Surf, 300 meters east of outfall line
- E Surf, 1000 meters east of outfall line

Nearshore Stations

- K1 34°24'37" N 119°50'12" W 1200 meters west of outfall, at the contemporary and/or historical offshore edge of the kelp bed (defined as 60 ft depth contour)
- K2 34°24'55" N 119°49'49" W 200 meters west of outfall, at the offshore edge of the kelp bed
- K3 34°24'55" N 119°49'35" W Above outfall at the contemporary offshore edge of the kelp bed
- K4 34°24'54" N 119°49'24" W 200 meters east of outfall at the offshore edge of the kelp bed
- K5 34°24'50" N 119°48'56" W 1200 meters east of outfall, at the offshore edge of the kelp bed

Ocean Stations (Water Column and Benthic Stations)

- B1 34°24'17" N 119°50'31" W 1500 meters west and at the same depth as the diffuser mid-point; formerly station 1
- B2 34°24'25" N 119°49'72" W 500 meters west and at the same depth as the diffuser mid-point
- B3 34°24'27" N 119°49'55" W 250 meters west and at the same depth as the diffuser mid-point
- 2 100 meters west and at the same depth as the diffuser midpoint (inactive)
- B4 34°24'36" N 119°49'36" W 25 meters west and at the same depth as the diffuser mid-point (ZID boundary); formerly station 3
- 4 Less than 7 meters west and at the same depth as the diffuser mid-point (inactive)
- B5 34°24'40" N 119°49'29" W 25 meters east and at the same depth as the diffuser mid-point (ZID boundary); formerly station 5
- 6 100 meters east and at the same depth as the diffuser midpoint (inactive)
- 7 1500 meters east and at the same depth as the diffuser mid-point (inactive)
- B6 34°24'45" N 119°47'54" W 3000 meters east and at the same depth as the diffuser mid-point (reference)

Plume Stations (Water Column Stations)

WC-ZID 25 meters from the outfall in the wastewater plume

WC-100M In the plume, 100 meters from the outfall on the same heading as WC-ZID

Plume location shall be determined at the time of sampling by a combination of temperature-salinity profiles and light transmittance readings, and/or by drogue tracking. Drogue tracking is necessary where profiles fail to positively identify plume direction. The drogue shall be placed at the center of the diffuser, in the effluent plume and allowed to move with the wastewater field to the two plume stations. Plume thickness shall be determined and samples taken mid-depth in the plume. If plume depth/thickness cannot be determined, the plume sample shall be taken 3 meters

below the thermocline. Reference samples shall be obtained at the same depth at station B6. All plume locating data and thickness shall be reported and discussed in the quarterly reports.

Trawl Stations

- TB3 Begin trawl at ocean station B3, first trawl heading west (away from station) at depth (isobath) of diffuser mid-point (approximately 25 meters); formerly station T3
- TB6 Begin trawl at ocean station B6, first trawl heading east (away from station) at depth (isobath) of diffuser mid-point (approximately 25 meters) (reference); formerly station T7

**B. SURF ZONE MONITORING**

Surf zone monitoring is conducted at stations A, A1, A2, B, C, D, and E to determine compliance with water quality standards, to assess bacteriological conditions in areas used for water contact recreation (e.g., swimming) and where shellfish may be harvested for human consumption, and to assess aesthetic conditions for general recreational uses (e.g., picnicking).

Monitoring shall include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), sea state (height of swells and waves), longshore current (e.g., direction), tidal condition (high, slack, low), water discoloration, floating grease and oil, turbidity, odor, and materials of sewerage origin in the water or on the beach shall be recorded and reported. Surf zone samples shall be collected as far seaward as possible within the surf zone.

All surf zone stations shall be monitored as follows:

Parameter	Units	Sample Type <sup>(20)</sup>	Minimum Frequency Sampling/Analysis
Total Coliform	# / 100 mL	Surface Grab	Weekly
Fecal Coliform	# / 100 mL	Surface Grab	"
Enterococcus	# / 100 mL	Surface Grab	"
Temperature	°C	Surface Grab	"

Samples influenced by discharges from Goleta Slough, flood control channels, or samples collected on a rainy day and up to three days after a large rain are excluded from the calculation of compliance with receiving water limits.

**C. NEARSHORE MONITORING**

Nearshore monitoring is conducted at stations K1, K2, K3, K4, and K5 to determine compliance with water quality standards, to assess bacteriological conditions in areas used for water contact recreation (e.g., swimming, SCUBA diving) and where shellfish and/or kelp may be harvested for human consumption, and to assess aesthetic conditions for general recreational uses (e.g., boating).

Monitoring shall include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), sea state (height of swells and waves), longshore current (e.g., direction), tidal condition (high, slack, low), water discoloration, floating grease and oil, turbidity, odor, and materials of sewerage origin in the water shall be recorded and reported. Water samples shall be collected between the hours of 7 AM and 6 PM at stations K1, K2, K3, K4, and K5. The water column parameters to be monitored are:

Parameter	Units	Sample Location <sup>(20)</sup>	Minimum Frequency Sampling/Analysis
Total Coliform	# / 100 mL	1.0 m below surface, mid-depth, 1.0 m above bottom	Quarterly
Fecal Coliform	# / 100 mL	"	Quarterly
Enterococcus	# / 100 mL	"	Quarterly
Temperature	°C	"	Quarterly
Water Depth	m	"	Quarterly

#### D. OCEAN MONITORING

Offshore monitoring of the water column is conducted at ocean stations B1, B2, B3, B4, B5, and B6, and plume stations WC-ZID and WC-100m to determine compliance with water quality standards and to document any water quality impacts that might result from the waste discharge within the ZID and beyond the ZID, as compared to water quality at the reference station (B6).

Data may be obtained using multiple electronic probes (as appropriate) to measure parameters (i.e., dissolved oxygen, pH, salinity, temperature, and natural light) through the entire water column, or by measurement of discrete samples collected at 1.0 meter below the surface, 3 meter intervals within the water column, and 1.0 meter above the bottom.

Water samples shall be collected between the hours of 7 AM and 6 PM at stations B1, B2, B3, B4, B5, B6, WC-ZID, and WC-100M. The water column parameters to be monitored are:

Parameter	Units	Sample Location <sup>(20)</sup>	Minimum Frequency Sampling/Analysis
Total Coliform	#/100 mL	1.0 m below surface, mid-depth and 1.0 m above bottom	Quarterly
Fecal Coliform	#/100 mL	"	Quarterly
Enterococcus	#/100 mL	"	Quarterly
Floating Particulates	Visual	Surface	Quarterly
Grease and Oil	Visual	"	Quarterly
Discoloration	Visual	"	Quarterly
Natural light <sup>(21)</sup>	light transmissivity and/or total irradiance	Entire water column	Quarterly
Dissolved Oxygen	mg/L	"	Quarterly
pH	units	"	Quarterly
Salinity	ppt	"	Quarterly
Temperature	°C	"	Quarterly

#### E. NOTIFICATION AND MONITORING PROCEDURES IN THE EVENT OF DISINFECTION FAILURE

The Discharger shall notify (i) the State Department of Health Services Preharvest Shellfish Sanitation Unit (DHS), (ii) the Regional Water Quality Control Board (RWQCB), and (iii) each certified commercial shellfish grower located in the Santa Barbara Nearshore Aquaculture Area as set forth in a list to be provided by DHS, in the event of a malfunction of the Discharger's wastewater treatment facility's disinfection process which results in a potential or

actual discharge of inadequately disinfected effluent into the Santa Barbara Channel (an "Event"). Such notification by the Discharger shall be by facsimile transmission to the numbers provided to the Discharger by DHS. If the Discharger becomes aware of the Event between the hours of 6:00 a.m. and 5:00 p.m., notification shall be given within four (4) hours of the time that the Discharger becomes aware of the Event. If the Discharger becomes aware of the Event after 5:00 p.m., notification shall be given by 10:00 a.m. the next day.

By providing notification of an Event as specified above, the Discharger shall not be deemed to have concluded that the Event will or may impact any commercial shellfish growing areas or require the closure of any growing areas. Any decision or recommendation to close a growing area in response to a notification of an Event by the Discharger shall be made by DHS and/or the affected or potentially affected certified commercial shellfish grower(s). The Discharger shall have no liability (including but not limited to liability for lost sales, profits or interruption of business operations) arising from a decision by DHS or a shellfish grower to close a growing area in response to a notification of an Event where no actual adverse impact on the growing area from the Event has been established. Each certified commercial shellfish grower located in the Santa Barbara Nearshore Aquaculture Area shall execute a written document acknowledging the foregoing limitation on the Discharger's liability in connection with its Event notification obligations set forth above, and the Discharger shall not be required to provide any notification of an Event to any shellfish grower who fails to execute such written acknowledgement.

## V. BENTHIC MONITORING

### A. BENTHIC SEDIMENT MONITORING

Annually (October), sediment monitoring shall be conducted at stations B1, B2, B3, B4, B5, and B6 to assess the temporal and spatial occurrence of pollutants in local marine sediments and to evaluate the physical and chemical quality of the sediments in relation to the outfall. At stations B1, B2, B3, B4, B5, and B6, one (1) grab sample shall be collected using a 0.1 m<sup>2</sup> modified Van Veen grab sampler; the top 2 cm of materials from each grab sample shall be analyzed individually for the following parameters:

#### MISCELLANEOUS PARAMETERS

Parameter	Units
Sediment particle size <sup>(22)</sup>	phi size (% volume)
Grease and Oil	µg/g
Total Kjeldahl Nitrogen	µg/g
Total Organic Carbon	µg/g
Acid Volatile Sulfide <sup>(23)</sup>	µg/g

#### ELEMENTS

Parameter	Units
Aluminum	µg/g
Antimony	µg/g
Arsenic	µg/g
Cadmium	µg/g
Chromium <sup>(3)</sup>	µg/g
Copper	µg/g
Iron	µg/g
Lead	µg/g
Mercury	µg/g
Nickel	µg/g
Selenium	µg/g

Silver	μg/g
Tin	μg/g
Zinc	μg/g

#### CHLORINATED ORGANIC PESTICIDES

Parameter	Units
Aldrin	ng/g
Chlordane <sup>(7)</sup>	ng/g
DDT <sup>(8)</sup>	ng/g
Dieldrin	ng/g
Heptachlor <sup>(10)</sup>	ng/g
Heptachlor <sup>(10)</sup> epoxide	ng/g
Hexachlorobenzene	ng/g
HCH <sup>(5)</sup>	ng/g
Mirex	ng/g

#### POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

Parameter	Units
PAHs <sup>(11)</sup>	ng/g
1-methylnaphthalene	ng/g
1-methylphenanthrene	ng/g
2-methylnaphthalene	ng/g
2,6-dimethylnaphthalene	ng/g
1,6,7-trimethylnaphthalene	ng/g
Acenaphthene	ng/g
Biphenyl	ng/g
Naphthalene	ng/g
Benzo(a)anthracene	ng/g
Benzo(b)fluoranthene	ng/g
Benzo(e)pyrene	ng/g
Benzo(ghi)perylene	ng/g
Fluoranthene	ng/g
Perylene	ng/g

#### POLYCHLORINATED BIPHENYLS (PCBs)

Parameter	Units
PCBs <sup>(12)</sup>	ng/g

Sediment samples analyzed for parameters other than organic priority pollutants shall be placed in air-tight polyethylene or glass containers. Separate subsamples for dissolved sulfides analysis <sup>(23)</sup> shall be placed in small (100-200 mL) wide-mouth bottles and preserved with zinc acetate. The preservative must be carefully mixed with the sediment sample. Sediment samples collected for organic priority pollutant analysis should be placed in air-tight glass containers. All containers should be completely filled by the sediment sample and air bubbles should not be trapped in the containers. Samples shall be stored immediately at 2 to 4°C and not frozen or dried. Total sample storage time shall not exceed two (2) weeks.

When processing samples for analysis, macrofauna and large remnants greater than 0.25 inches (0.64 cm) should be removed, taking care to avoid contamination.

Sediment samples shall be analyzed according to Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987) and Analytical Methods for EPA Priority Pollutants and 301(h) Pesticides in Estuarine and Marine Sediments (EPA 503-6-90-004, 1986), or the most recent editions.

All sediment results shall be reported in the raw form and expressed on a dry weight basis. For all non-detect results, parameter detection limits shall be reported. Dry weight concentration target detection levels are indicated for National Oceanic and Atmospheric Administration (NOAA) National Status and Trends Program analyses.

Chemical results normalized to the percent fine sediment fraction (i.e., phi 4), total organic carbon (TOC), etc., for analytical comparison are calculated as follows:

$$\text{normalized result} = \frac{\text{raw result}}{\% \text{ X (as a decimal)}}$$

The annual report on benthic monitoring shall include a complete discussion of benthic sediment survey results and (possible) influence of the discharge on sediment conditions in the study area. The discussion should be based on graphical, tabular, and/or appropriate<sup>(24)</sup> statistical analyses (see section VIII, Data Analysis) of spatial and temporal patterns observed for raw and normalized sediment parameters. The annual report should also present an analysis of natural variation in sediment conditions, etc., which could influence the validity of study results. The Discharger's sediment results may also be compared with the results of other applicable studies, numeric protective levels, etc., as appropriate. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

## B. BENTHIC INFAUNA MONITORING

For Benthic Infauna Monitoring endnotes, see Section XIV.

Annually (October), benthic infauna monitoring is conducted at stations B1, B2, B3, B4, B5, and B6 to assess the temporal and spatial status of local benthic communities in relation to the outfall. Sampling shall be conducted as follows:

1. Collection: Five (5) replicate samples shall be collected at each ocean monitoring station using a 0.1 m<sup>2</sup> modified Van Veen grab sampler. Diver-employed coring devices can only be used if the Discharger can statistically demonstrate to the Regional Board and EPA that the results are equivalent to a 0.1 m<sup>2</sup> modified Van Veen sampler.
2. For benthic infauna analyses, each replicate sample shall be passed through a 1 mm screen, and the organisms retained and preserved as appropriate for subsequent identification. It is recommended that sample preservation, sample processing, and data analyses be conducted according to Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987), or most recent edition.
3. Benthic infauna from each replicate sample shall be counted and identified to the lowest possible taxon. For each replicate sample, number of individuals, number of species, number of individuals per species, and wet weight of each major taxonomic group (polychaetes, molluscs, crustaceans, echinoderms, and all other macroinvertebrates) shall be recorded.
4. The names and qualifications of persons handling and identifying benthic fauna shall be given in all data reports. A voucher collection shall be established containing a sample of each taxon identified to species. These vouchers will be maintained by the Discharger during this permit period and deposited in archival institutions at permit termination. All remaining organisms from infaunal samples will be stored as separate replicate samples by the Discharger for ten (10) years after the effective date of this permit.



5. The annual report on benthic monitoring shall include a complete discussion of benthic infauna survey results and (possible) influence of the outfall on benthic infauna communities in the study area. The discussion should be based on graphical, tabular, and/or appropriate <sup>(24)</sup> statistical analyses (see section VIII, Data Analysis) of spatial and temporal patterns observed for number of individuals, number of species, number of individuals per species, and community structure indices <sup>(25)</sup>: species richness (S), Shannon-Wiener index (H'), Schwartz's dominance, and Infaunal Trophic Index (ITI). Classification analyses, using the Bray-Curtis similarity index, and the group average clustering strategy (i.e., the unweighted pair-group method using arithmetic averages), or the flexible sorting strategy, should be conducted. The annual report should also present an analysis of natural community variation including the effects of different sediment conditions, oceanic seasons, and water temperatures, etc., that could influence the validity of study results. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

## VI. TRAWL SURVEY

For Trawl Survey endnotes, see Section XIV.

Annually (October), duplicate trawl sampling is conducted at stations TB3 and TB6 to assess fish and epibenthic macroinvertebrate populations, to determine whether significant differences exist between populations at the outfall area (station TB3) and at the reference area (station TB6), and to assess bioaccumulation of toxic pollutants.

A standardized trawl shall be a Marinovich 25 ft head rope otter trawl, towed along the diffuser mid-point depth (approximately 25 m isobath) for a minimum duration of ten minutes at a uniform speed of between 2.0 and 2.5 knots. Necessary steps shall be taken to ensure that both trawls at each station do not sweep the stations sampled for sediments and benthic biota and that the second trawl at each station covers the same distance but does not sweep the same path as the first trawl. Trawling distance, duration, and direction shall be reported.

Fish and epibenthic macroinvertebrates collected by each trawl shall be identified to the lowest possible taxon. The following data shall be collected and reported for each duplicate trawl at each station: number of individuals (fish), number of individuals (epibenthic macroinvertebrates), number of species (fish), number of species (epibenthic macroinvertebrates), number of individuals per species, wet weight of each species, number per size class per species (fish), standard length of each individual (fish), and abnormalities and disease symptoms (e.g., fin erosion, external and internal lesions, and tumors).

The names and qualifications of persons handling and identifying fish and epibenthic macroinvertebrates shall be given in all data reports. A voucher collection shall be established containing a sample of each taxon identified to species. These vouchers will be maintained by the Discharger during this permit period and deposited in archival institutions at permit termination. After selection of vouchers, trawl materials shall be returned to the sea during the field survey.

The annual report on fish and epibenthic macroinvertebrate monitoring shall include a complete discussion of trawl survey results and (possible) influence of the outfall on fish and epibenthic macroinvertebrate communities in the study area. The discussion should be based on graphical, tabular, and/or appropriate <sup>(24)</sup> statistical analyses (see section VIII, Data Analysis) of spatial and temporal patterns observed for number of individuals, number of species, number of individuals per species, etc., and community structure indices <sup>(25)</sup>: species richness (S), Margalef index (d), Shannon-Wiener index (H'), Brillouin index (h), Simpson's Index (SI), and Swartz's dominance. Classification analyses, using the Bray-Curtis similarity index, and the group average clustering strategy (i.e., the unweighted pair-group method using arithmetic averages), or the flexible sorting strategy, should be conducted. The annual report should also present an analysis of natural variation in fish and epibenthic macroinvertebrate communities including the effects of different sediment conditions, oceanic seasons, and water temperatures, etc., that could influence the validity of study results. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

## VII. BIOACCUMULATION MONITORING

### A. FISH

Annually (October), tissues of commercially and/or ecologically important fish species common to both trawl stations shall be analyzed for specified parameters (see section VII.C, Chemical Analysis1) at stations TB3 and TB6. For tissue analyses, three (3) composite samples shall be taken from the combined catch of duplicate trawls at station TB3 and three (3) composite samples shall be taken from the combined catch of duplicate trawls at station TB6. If duplicate trawls do not yield sufficient amounts of organisms to allow for tissue analyses, fish may be caught using lines and/or traps.

Fish tissues analyzed shall be dorsal muscle and liver. Three composite samples shall be prepared for both of these tissues at stations TB3 and TB6. Each composite sample shall consist of tissues taken from at least six (6) individuals representing one species. When feasible, tissues from organisms of the same species should be analyzed from year to year.

The following commercially and/or ecologically important fish are suggested for bioaccumulation analysis:

- Pacific sand dab (Citharichthys sordidus);
- Speckled sand dab (Citharichthys stigmaeus);
- Yellowchin sculpin (Icelinus quadreseriatus)
- Bigmouth sole (Hippoglossina stomata);
- Dover sole (Microstomus pacificus); and
- Hornyhead turbot (Pleuronichthys verticalis).

Depending on distribution and abundance, other fish species may also be approved by the Regional Board and EPA.

#### **B. CAGED MUSSELS (MYTILUS CALIFORNIANUS)**

Annually (October), tissues of the California mussel, Mytilus californianus, shall be analyzed for specified parameters (see section VII.C, Chemical Analysis) to assess whether organisms in the vicinity of the discharge are bioaccumulating/bioconcentrating toxic pollutants [40 CFR 125.62(b)(1)(ii)]. This assessment shall be made according to methods and techniques approved by the Regional Board and EPA, and should be based primarily on techniques developed by the National Mussel Watch Program and the State Mussel Watch Program. The program may be adjusted to effectively fulfill the objective of assessing whether the discharge is causing sublethal adverse biological effects, or otherwise altering the natural environment. All changes are subject to review and approval by the Regional Board and EPA.

Mussels to be used for offshore bioaccumulation monitoring should be collected as high in the intertidal zone as possible to minimize variability in the condition of individuals. All individuals should be approximately the same size (i.e., 5 - 8 cm). Prior to deployment, 70 individuals representing the "time zero" (T<sub>0</sub>) population shall be composited and analyzed as outlined below. At stations B3, B4, and B6, mussels shall be deployed at a depth of 16 meters, for a period of 90 to 100 days. At least 70 individuals shall be deployed at each station; it is recommended that more than 70 individuals be deployed at each station to meet all sampling requirements. Mussels may be cleaned during the deployment period to minimize mortality due to biofouling and predation.

At each station, 70 mussels shall be divided into four (4) composite samples for analysis. One (1) composite sample comprised of 25 individuals shall be used to assess the biological effects of exposure (e.g., incidence of disease/parasitism, and shell length). Three (3) composite samples each comprised of 15 individuals shall be analyzed for the specified parameters (see section VII.C, Chemical Analysis). All analyses shall be conducted on undepurated individuals.

#### **C. CHEMICAL ANALYSIS**

For Chemical Analysis endnotes, see Section XIV.

Annually (October), the following parameters shall be measured in fish and California mussel (Mytilus californianus) tissues, as specified below. Reported results shall be based on wet weight concentrations. For all non-detect results,

detection limits must be reported. Dry weight concentration target detection levels are indicated for NOAA National Status and Trends Program analyses.

**MISCELLANEOUS PARAMETERS**

Parameter	Units
Number of Individuals per Composite Sample	--
Survival <sup>(26)</sup>	--
Shell Length <sup>(27)</sup>	mm
Shell Cavity Weight <sup>(27)</sup>	g
Condition Factor <sup>(27)</sup>	--
Gonadal Index <sup>(27)</sup>	--

**TRACE ELEMENTS**

Parameter <sup>(28)</sup>	Units
Arsenic	µg/g
Cadmium	µg/g
Chromium <sup>(3)</sup>	µg/g
Copper	µg/g
Lead	µg/g
Mercury	µg/g
Nickel	µg/g
Selenium	µg/g
Silver	µg/g
Zinc	µg/g

**CHLORINATED ORGANIC PESTICIDES**

Parameter <sup>(28)</sup>	Units
Aldrin	ng/g
Chlordane <sup>(7)</sup>	ng/g
DDT <sup>(8)</sup>	ng/g
Dieldrin	ng/g
Heptachlor <sup>(10)</sup>	ng/g
Hexachlorobenzene	ng/g
HCH <sup>(5)</sup>	ng/g
Mirex	ng/g

**POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)**

Parameter <sup>(28)</sup>	Units
PAHs <sup>(11)</sup>	ng/g
1-methylnaphthalene	ng/g
1-methylphenanthrene	ng/g
2-methylnaphthalene	ng/g
2,6-dimethylnaphthalene	ng/g
1,6,7-trimethylnaphthalene	ng/g
Acenaphthene	ng/g
Biphenyl	ng/g

Naphthalene	ng/g
Benzo(a)anthracene	ng/g
Benzo(b)fluoranthene	ng/g
Benzo(e)pyrene	ng/g
Benzo(ghi)perylene	ng/g
Fluoranthene	ng/g
Perylene	ng/g

#### POLYCHLORINATED BIPHENYLS (PCBs)

Parameter <sup>(28)</sup>	Units
PCBs <sup>(12)</sup>	ng/g

The annual report on bioaccumulation monitoring shall include a complete discussion of bioaccumulation results and (possible) influence of the outfall on fish and M. californianus tissue concentrations in the study area. The discussion should be based on graphical, tabular, and/or appropriate <sup>(24)</sup> statistical analyses (see section VIII, Data Analysis) of spatial and temporal patterns observed in tissue concentrations. The annual report should also present an analysis of natural variation in tissue concentrations that could influence the validity of study results. The Discharger's bioaccumulation results may also be compared with the results of other applicable studies, numeric protective levels (e.g., U.S. Food and Drug Administration Action Limits and Warning Levels, National Academy of Sciences Predator Protection Levels for Aquatic Wildlife and Marine Wildlife, Medians of International Standards), etc., as appropriate. Survey results shall be compared to pre-discharge and/or historical data using appropriate statistical methods.

### VIII. DATA ANALYSIS

Data analyses which may be required to determine temporal and spatial trends (within and between stations) in the marine environment include:

- A. Graphical and/or Tabular Analyses - station means, ranges, standard deviations, and 95% confidence limits
- B. Univariate Statistical Analyses
  - 1. Analysis of Variance (ANOVA) - parametric test
  - 2. Kruskal-Wallis test - nonparametric test
  - 3. Other test methods as appropriate
- C. Multivariate Statistical Analyses
  - 1. Classification analyses - similarity and cluster analyses
  - 2. Other test methods as appropriate
- D. Biological Indices
  - 1. Species richness (S) - species number
  - 2. Margalef's species richness (d) - measure of species number
  - 3. Shannon-Wiener diversity (H) - combined measure of species and evenness
  - 4. Brillouin diversity (H) - combined measure of species and evenness
  - 5. Simpson's Index (SI) - measure of dominance
  - 6. Swartz's dominance - measure of dominance
  - 7. Infaunal Trophic Index (ITI) - Southern California Bight benthic infauna only

### IX. OUTFALL AND DIFFUSER INSPECTION

Annually (October), the Discharger shall conduct an inspection of the sewage outfall pipe/diffuser system to ensure the proper operation and structural integrity of the system (e.g., cracks, breaks, leaks, plugged ports, or other actual or potential malfunctions). The outfall inspection will also check for possible external blockage of ports by sand and/or silt deposition. This inspection shall include general observations and photographic records of the outfall pipe/diffuser system and the surrounding ocean bottom in the vicinity of the outfall/diffuser. The inspection shall be conducted along the outfall pipe/diffuser system from landfall to its ocean terminus. A report detailing inspection results shall be submitted to the Regional Board and EPA with the annual report (see "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985). The inspection shall be conducted during a time of good underwater visibility.

## X. PRETREATMENT REQUIREMENTS

The Permittee shall comply, and ensure affected "**indirect dischargers**" comply, with Paragraph D.1 of the Standard Provisions.

A. The Discharger shall submit an annual report to the State and EPA describing its pretreatment activities over the previous year. In the event that the Permittee is not in compliance with any conditions or requirements of this permit affected by the pretreatment program, including any noncompliance with pretreatment audit or compliance inspection requirements, then the Permittee shall also include the reasons for noncompliance and state how and when the Permittee shall comply with such conditions and requirements. This annual report shall cover operations from January 1<sup>st</sup> through December 31<sup>st</sup> and is **due on March 1<sup>st</sup> of each year**. The report shall contain, but not be limited to, the following information:

1. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the Discharger's influent and effluent for those pollutants USEPA has identified in Section 307(a) of the CWA. This will consist of an annual full priority pollutant scan. The Discharger is not required to sample and analyze for asbestos.

A summary of analytical results from representative samples of the treatment facility's biosolids shall also be provided. The biosolids analyzed shall be a composite sample of a minimum of twelve discrete sub-samples (grab samples) taken at equal time intervals over a typical dewatering operational period up to 24 hours, and from the last representative point in the solids handling process before disposal (e.g., from drying beds, dewatered biosolids conveyor belt, etc). Biosolids shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling and analysis. Wastewater and biosolids sampling and analysis shall be performed a minimum of annually and not less than the frequency otherwise specified in this monitoring program. The Permittee shall also provide any influent, effluent, or biosolids monitoring data for non-priority pollutants which the Permittee believes may be causing or contributing to interference, pass-through, or adversely impacting biosolids quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Biosolids results shall be expressed in mg/kg dry biosolids.

2. A discussion of Upset, Interference, or Pass-Through incidents, if any, at the treatment plant which the Discharger knows or suspects was caused by industrial users of the POTW system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Pass-Through, Interference, or noncompliance with biosolids disposal/reuse requirements.
3. An updated list of the Discharger's significant industrial users (SIUs) including their names and addresses, and a list of deletions, additions, and SIU name changes keyed to the previously submitted list. The Discharger shall provide a brief explanation for each deletion. The SIU list shall identify the SIUs subject to Federal Categorical Standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations.

4. The Discharger shall characterize the industrial compliance status by providing a list or table which includes, for each SIU:
  - a. SIU name;
  - b. Industrial category;
  - c. The type (processes) of wastewater treatment in place;
  - d. Number of samples taken by the Discharger during the year;
  - e. Number of samples taken by the SIU during the year;
  - f. Whether, for facilities which have limits for total toxic organics, all needed certifications (if allowed) were provided;
  - g. Standards violated during the year (federal and local, reported separately);
  - h. Whether the facility was in Significant Noncompliance (SNC), as defined by 40 CFR 403.12(f)(2)(vii), at any time during the year [SNC is determined at the beginning of each quarter based on data of the previous six (6) months]; and
  - i. A summary of enforcement actions taken during the year, including the type of action, final compliance date, and amount of fines assessed/collected (if any). Proposed actions, if known, should be included.

(The list or table shall also characterize the compliance status of each industrial user by employing the following descriptions):

- j. In compliance with Baseline Monitoring Report requirements (where applicable);
  - h. Consistently achieving compliance;
  - i. Inconsistently achieving compliance;
  - j. Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);
  - k. On a schedule to achieve compliance (include the date final compliance is required);
  - l. Not achieving compliance and not on a compliance schedule; or
  - m. The Permittee does not know the industrial user's compliance status.
5. A summary of inspection and sampling activities conducted by the Permittee during the past year to gather information and data regarding industrial users. The summary shall include:
  - a. Names and addresses of the industrial users subject to surveillance by the Permittee and an explanation of whether the users were inspected, sampled, or both, and the frequency of these activities at each user facility; and
  - b. Conclusions or results from the inspection or sampling of each industrial user.
6. A summary of compliance and enforcement activities during the past year. The summary shall include names and addresses of the industrial users affected by the following actions:
  - a. Warning letters or notices of violation regarding the industrial users' apparent noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the Federal Categorical Standards or local discharge limitations;
  - b. Administrative Orders regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;
  - c. Civil actions regarding the industrial users' noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned the Federal Categorical Standards or local discharge limitations;

- d. Criminal actions regarding the industrial user's noncompliance with Federal Categorical Standards or local discharge limitations. For each industrial user, identify whether the violation concerned Federal Categorical Standards or local discharge limitations;
  - e. Assessment of monetary penalties. For each industrial user, identify the amount of the penalties;
  - f. Restriction of flow to the POTW; or
  - g. Disconnection from discharge to the POTW.
7. A short description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority or enforcement policy; funding mechanisms, resource requirements; or staffing levels.
  8. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
  9. A summary of public participation activities to involve and inform the public.
  10. A description of any changes in biosolids disposal/reuse methods and a discussion of any concerns not described elsewhere in the report.
- B. Quarterly reports describing the compliance status of any industrial user characterized by descriptions in Items 4(i) through (m) above shall be submitted to the Regional Board, State Board, and EPA. The reports shall cover the periods January 1<sup>st</sup> – March 31<sup>st</sup>, April 1<sup>st</sup> – June 30<sup>th</sup>, July 1<sup>st</sup> – September 30<sup>th</sup>, and October 1<sup>st</sup> – December 31<sup>st</sup>. Each report shall be submitted by the first of the second month following the previous quarter (May 1<sup>st</sup>, August 1<sup>st</sup>, November 1<sup>st</sup>, and February 1<sup>st</sup> of each year), except that the report for October 1 – December 31 may be included in the annual report.

The report shall identify the specific compliance status of each applicable industrial user, all SIUs which violated any standards or reporting requirements during that quarter, what the violations were (distinguish between categorical and local limits), what enforcement actions were taken, and the status of active enforcement actions from previous periods, including closeouts (facilities under previous enforcement actions which attained compliance during the previous quarter). Quarterly reports shall briefly describe POTW compliance with pretreatment audit or compliance inspection requirements. If none of the aforementioned conditions exist, then only a letter indicating that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted to the Regional Board. This quarterly reporting requirement shall commence upon issuance of this Order and Permit.

Reports shall be signed by a principal executive officer, ranking elected official, or other duly authorized employee if such employee is responsible for overall operation of the POTW. Signed copies of these reports shall be submitted to the USEPA and the State at the following addresses:

California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Lane, Suite 101  
San Luis Obispo, CA 93401-7906

State Water Resources Control Board  
Regulation Unit  
P.O. Box 100  
Sacramento, CA 95812-0100

US EPA, Region 9  
Clean Water Act Compliance Office  
75 Hawthorne Street  
(WTR-7)  
San Francisco, CA 94105-3901

## **XI. INFLOW / INFILTRATION AND SPILL PREVENTION REPORTING**

The District shall provide annual reports no later than February 1<sup>st</sup>, in accordance with Order No. R3-2004-0129, Section D17, *Wastewater Collection System Requirements*, **Infiltration/Inflow and Spill Prevention Measures – Requirements D.11 through D.17.**

## **XII. WASTEWATER COLLECTION SYSTEM SPILL / OVERFLOW RECORDKEEPING REQUIREMENTS**

1. The Permittee shall retain applicable records of all overflows, including, but not limited to:
  - a. All original strip chart recordings for continuous monitoring instrumentation;
  - b. Service call records and complaint logs of calls received by the Permittee;
  - c. Spill calls;
  - d. Spill records;
  - e. Copies of all reports required by this Order;
  - f. The location of the sewage overflow and respective receiving waters, if any (nearest street address and Global Positioning System (GPS) coordinates);
  - g. An estimate of the volume of the overflow;
  - h. A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe, etc);
  - i. The estimated date and time when the overflow began, when it stopped, and when the cleanup was completed;
  - j. The cause or suspected cause of the overflow;
  - k. Steps that have been and will be taken to prevent the overflow from recurring, and a schedule to implement those steps;
  - l. Documentation from the previous three years which are associated with responses and investigations of system problems related to sanitary sewer overflows at the overflow location;
  - m. A list and description of complaints from customers or others from the previous three years; and
  - n. Documentation of performance and implementation measures for the previous three years.
  - o. Observations of affected waterbodies for evidence of adverse impacts to water quality such as fish kills or materials of sewage origin.
2. If sampling and monitoring are conducted of any overflow, records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses performed;
  - d. The individual(s) who performed the analyses;
  - e. The laboratory that conducted the analyses;
  - f. The analytical technique or method used; and,
  - g. The results of such analysis.
3. If samples are collected, monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.
4. Records shall be maintained by the Permittee 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 a discharge or when requested by the Regional Board Executive Officer.



5. All monitoring instruments and devices that are used by the Permittee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

### **XIII. WASTEWATER COLLECTION SYSTEM SPILL / OVERFLOW REPORTING**

#### **Reporting to the Regional Board**

1. Per the Regional Board's July 26, 1995 Sewage Spill Reporting Policy, sewage spills greater than 1,000 gallons and/or all sewage spills that enter a waterbody of the State, or occur where public contact is likely, regardless of the size, shall be reported to the Regional Board by telephone as soon as notification is possible and can be provided without substantially impeding cleanup or other emergency measures, and no later than 24 hours from the time that the Permittee has knowledge of the overflow.
2. Unless fully contained, overflows to storm drains or other conveyances tributary to Waters of the State shall be reported as discharges to surface waters.
3. A written report of all relevant information shall be submitted to the Regional Board within five days of the spill, and shall include no less information than is required on the current spill reporting form (see MRP Attachment 2), or equivalent, as approved by the Regional Board Executive Officer. Attachments to the report should be used as appropriate, and incidents requiring more time than the five-day period must be followed by periodic written status reports until issue closure. Photographs taken during the overflow incident and cleanup shall be submitted to the Regional Board in color hard copy and electronic format.
4. Upstream and downstream sampling results shall be submitted to the Executive Officer within 30 days. When samples are collected, sampling points upstream and downstream of the point of discharge to the receiving water should be analyzed for total and fecal coliforms, enterococcus, Total Kjeldahl Nitrogen, and BOD<sub>5</sub>.
5. Spills under 1,000 gallons that do not enter a waterbody shall be reported to the Regional Board in writing and electronically (Excel spreadsheet preferred) within 30 days. Such reports shall include, at a minimum, a tabular summary of spill dates, locations, volumes, whether the spill discharged to surface waters (including conveyances thereto) or land, whether cleanup and/or disinfection was performed, the spill's cause, the number of spills at the location in the last three years, and weather conditions.

This policy is subject to revision by the Executive Officer.

#### **Contact Information:**

Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906  
Ph: (805) 549-3147  
FAX: (805) 543-0397

#### **Reporting to the Governor's Office of Emergency Services**

Per the Governor's Office of Emergency Services (OES) 2002 Fact Sheet regarding the reporting of sewage releases (as revised or updated), the California Water Code, commencing with Section 13271, requires that a discharge of sewage into or onto State waters must be reported to OES.

To report sewage releases of 1,000 gallons or more (currently the federal reportable quantity) to OES, **verbally notify the OES Warning Center at:**

**(800) 852-7550, or (916) 845-8911.**

The reportable quantity is subject to revision by the State of California. OES reporting requirements for sewage releases and hazardous materials can be located on the OES Website at [www.oes.ca.gov](http://www.oes.ca.gov) in the California Hazardous Material Spill/Release Notification Guidance. **The OES Hazardous Materials Unit staff is available for questions at (916) 845-8741.**

**OES Reporting Exceptions:** Notification to OES of an unauthorized discharge of sewage or hazardous substances is not required if: 1) the discharge to State waters is a result of a cleanup or emergency response by a public agency; 2) the discharge occurs on land only and does not affect State waters; or 3) the discharge is in compliance with applicable waste discharge requirements. These exceptions apply only to the Discharger's responsibility to report to OES, and **do not alter the Regional Board's reporting policies or waste discharge requirements.**

#### XIV. REPORTING SCHEDULE

All reports required in this monitoring and reporting program are required pursuant to Water Code § 13267.

Any noncompliance that may endanger health or the environment shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances, and reported in writing within five days in accordance with Standard Provision C.4.

Similarly, violation of the "**Instantaneous Maximum**" concentration or the daily "**Maximum Allowable Mass Emission Rate**" shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. Written reporting may be required at the discretion of the Executive Officer.

The annual summary report specified in Standard Provision C.16 (specified in Standard Provision C.16, and hereby due no later than March 31<sup>st</sup> rather than January 30<sup>th</sup>) shall include a summary of lift station and collection system overflows, their causes, corrective actions taken, and corrective actions planned.

Monitoring reports shall conform to the content and schedule requirements of Standard Provisions Section C, *General Reporting Requirements*, and specified below.

<u>Monitoring Frequency</u>	<u>Report Due</u>
Influent, effluent, biosolids, and receiving water monitoring	Last day of the month after sample collection
Annual Report (including benthic monitoring, trawl surveys and bioaccumulation monitoring, and outfall/diffuser inspection)	March 31 <sup>st</sup>

When multiple report types are submitted at the same time, please specify each report in the monitoring report submittal cover form. In reporting priority pollutants or Ocean Plan Table B toxic materials, the constituents must be listed in the same order as listed in the Effluent Monitoring Section of this Monitoring and Reporting Program. Data must be submitted for comparison with each applicable effluent limitation for a given constituent (e.g., effluent concentration limit, daily maximum, monthly average, etc).

All data and graphs shall be submitted to the Regional Board in both hard copy and electronic format (standard Excel spreadsheet). The electronic data submission shall conform to criteria approved by the Central Coast Regional Water Quality Control Board Executive Officer.

#### XV. ENDNOTES FOR MONITORING AND REPORTING PROGRAM

**ENDNOTES** (Monitoring and Reporting Program)

- [1] See section G, Definitions, contained in "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985.
- [2] Sampling shall be arranged so that each day of the 7-day week is represented, at least once, each month, or every two (2) months for weekly and biweekly sampling. For samples collected 5 times per month, at least one (1) sample shall be taken weekly, and sampling should be arranged so that each day of the 7-day week is represented, at least once, every two (2) months.
- [3] Dischargers may at their option meet this limitation as total chromium limitation.
- [4] ENDOSULFAN shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.
- [5] HCH shall mean the sum of the alpha, beta, gamma (lindane), and delta isomers of hexachlorocyclohexane.
- [6] DICHLOOROBENZENES shall mean the sum of 1,2- and 1,3-dichlorobenzene.
- [7] CHLORDANE shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.
- [8] DDT shall mean the sum of 4,4'-DDT, 2,4'-DDT, 4,4'DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.
- [9] HALOMETHANES shall mean the sum of bromoform, bromomethane (methyl bromide), chloromethane (methyl chloride).
- [10] HEPTACHLOR formerly meant the sum of heptachlor and heptachlor epoxide – each specie is now listed.
- [11] PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.
- [12] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.
- [13] TCDD EQUIVALENTS shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

Isomer Group      Toxicity Equivalence Factor

2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8-tetra CDF	0.1
1,2,3,7,8-penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

- [14] Influent, effluent, and biosolids will be analyzed for TCDD equivalents [13] annually. If TCDD equivalents are detected, then the Regional Board and EPA may increase the sampling frequency for TCDD equivalents and/or require analysis of fish liver and/or muscle tissues, and caged mussel tissues.
- [15] REMAINING PRIORITY POLLUTANTS are those pollutants listed as toxic under section 307(a)(1) of the CWA, 40 CFR 131.36, and/or USEPA Permit Application Form 3510-2A (rev 1-99 or later), and not regulated under the Ocean Plan as Table B toxic materials (current list shown in table below).

<b>Remaining Priority Pollutants</b> (excludes Ocean Plan) From 40 CFR 131.36 (7-1-03 Edition), and EPA Application Form 3510-2A (Rev. 1-99)		
<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>
Acenaphthene	ug/L	24-hr Composite
1,2,4,-Trichlorobenzene	ug/L	24-hr Composite
2-Chloronaphthalene	ug/L	24-hr Composite
2,6-Dinitrotoluene	ug/L	24-hr Composite
4-Chlorophenyl Phenyl Ether	ug/L	24-hr Composite
4-Bromophenyl Phenyl Ether	ug/L	24-hr Composite
Naphthalene	ug/L	24-hr Composite
Butylbenzyl Phthalate	ug/L	24-hr Composite
Di-N-Octyl Phthalate	ug/L	24-hr Composite
Benzo(a)Anthracene	ug/L	24-hr Composite
Benzo(ghi)Perylene	ug/L	24-hr Composite
P-Chloro-M-Cresol	ug/L	24-hr Composite
2-Chlorophenol	ug/L	24-hr Composite
2,4-Dichlorophenol	ug/L	24-hr Composite
2,4-Dimethylphenol	ug/L	24-hr Composite
4,6-Dinitro-O-Cresol	ug/L	24-hr Composite
2-Nitrophenol	ug/L	24-hr Composite
4-Nitrophenol	ug/L	24-hr Composite
Pentachlorophenol	ug/L	24-hr Composite
Phenol	ug/L	24-hr Composite
1,1-Dichloroethane	ug/L	24-hr Composite
Chloroethane	ug/L	24-hr Composite
Endrin Aldehyde	ug/L	24-hr Composite
Trans-1,2-Dichloroethylene	ug/L	24-hr Composite
1,2-Dichloropropane	ug/L	24-hr Composite
1,3-Dichloropropylene	ug/L	24-hr Composite
Methylene Chloride	ug/L	24-hr Composite
2-Chloroethyl Vinyl Ether	ug/L	24-hr Composite

- [16] Sample type shall be a grab, or 24-hr composite, as appropriate (see section G, Definitions, contained in "Standard Provisions and Reporting Requirements for National Pollutant Discharge Elimination System Permits," dated January 1985).
- [17] After results are reported, the Discharger may request to the Regional Board and EPA, that only those parameters detected during the first year of sampling be analyzed during the remainder of the permit.
- [18] EFFLUENT TOXICITY TESTING: The Discharger shall conduct toxicity tests on 24-hour composite effluent samples, employing test species in accordance with Table III-1 below. Samples shall be collected at the NPDES sampling location.

**[18] A. ACUTE TOXICITY TESTING**

The presence of acute toxicity will be determined as specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA-821-R-02-012, or subsequent editions). Acute toxicity monitoring shall be conducted using marine test species instead of freshwater species when measuring compliance (Ocean Plan, Appendix III, *Standard Monitoring Procedures*). Acute toxicity testing shall be limited to the most sensitive test species, as determined by the initial screening process required in Order No. 96-21 [*An initial screening shall be conducted (or equivalent data submitted to the Regional Board and EPA for approval) using the cladoceran, Ceriodaphnia dubia, and the fathead minnow, Pimephales promelas, and approved test protocols to determine the most sensitive species for acute toxicity testing. The initial screening process shall be conducted for three (3) months to account for potential effluent variability. After the initial screening period, monthly acute toxicity testing shall be limited to the most sensitive test species.*]. The Discharger shall use one of the approved marine test species identified in EPA-821-R-02-012.

The Discharger shall conduct monthly 96-hour static-renewal tests with the species outlined above. Tested effluent concentrations shall be 100%, 75%, 50%, 25%, 12.5%, and a control. Effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the acute methods manual. If all test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. All test results must be reported according to the acute methods manual chapter on Report Preparation, and shall be attached to the Discharge Monitoring Report (DMR).

Compliance with acute toxicity shall be expressed and reported as acute toxic units chronic (TU<sub>a</sub>), where: TU<sub>a</sub> = 100/96-hour LC50. The Lethal Concentration 50% (LC50) shall be determined by static-renewal bioassay techniques using standard test species.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TU_a = [\log(100 - S)]/1.7$$

where S = percentage survival in 100% waste. If S > 99, TU<sub>a</sub> shall be reported as zero.

**[18] B. CHRONIC TOXICITY TESTING**

Chronic Toxicity (TU<sub>c</sub>) = 100/NOEL. The No Observed Effect Level (NOEL) is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test to measure TU<sub>c</sub>. In accordance with the Ocean Plan, Appendix III, *Standard Monitoring Procedures*, the Discharger shall use the critical life stage toxicity tests specified in the table below to measure TU<sub>c</sub>. Other species or protocols will be added to the list after State Water Resources Control Board review and approval. A minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring can be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

**OCEAN PLAN TABLE III-1  
APPROVED TESTS - CHRONIC TOXICITY (TU<sub>c</sub>)**

Species	Effect	Tier	Reference
giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	1,3

red abalone, <i>Haliotis rufescens</i>	Abnormal shell development	1	1,3
oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	Abnormal shell development; percent survival	1	1,3
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	Percent normal development	1	1,3
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	Percent fertilization	1	1,3
shrimp, <i>Holmesimysis costata</i>	Percent survival; growth	1	1,3
shrimp, <i>Mysidopsis bahia</i>	Percent survival; growth; fecundity	2	2,4
topsmelt, <i>Atherinops affinis</i>	Larval growth rate; percent survival	1	1,3
Silversides, <i>Menidia beryllina</i>	Larval growth rate; percent survival	2	2,4

**Table III-1 Notes**

The first tier test methods are the preferred toxicity tests for compliance monitoring. A Regional Board can approve the use of a second tier test method for waste discharges if first tier organisms are not available.

Protocol References

1. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to west coast marine and estuarine organisms. U.S. EPA Report No. EPA/600/R-95/136.
2. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term methods for estimating the chronic toxicity of effluents and receiving water to marine and estuarine organisms. U.S. EPA Report No. EPA-600-4-91-003.
3. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.
4. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1988. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

Effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and effluent tests must meet all test acceptability criteria as specified in the chronic manuals. If all test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Test results must be reported according to the chronic methods manual chapter on Report Preparation, and shall be attached to the DMR. The Discharger shall submit all data in electronic format.

**[18] C. EXCEEDANCE EVALUATIONS**

The Discharger must submit to the Regional Board and EPA a Toxicity Reduction Evaluation (TRE) workplan (or any appropriate updates to the existing plan) within 60 days of Order and Permit issuance.

Whenever the acute or chronic toxicity effluent limitation is exceeded, the Discharger shall:

1. In accordance with the municipal TRE protocol manual (EPA/600/2-88/062) initiate a TRE within seven days of the exceedance to reduce the cause(s) of toxicity;
2. In accordance with acute and chronic Toxicity Identification Evaluation (TIE) manuals (Phase I, EPA/600/6-91/005F, May 1992; Phase II, EPA/600/R-92/080, September 1993; and Phase III, EPA/600/R-92/081, September 1993, initiate a TIE to identify the cause(s) of toxicity.

#### **[18] D. REPORTING EXCEEDANCE EVALUATION RESULTS**

The Discharger shall notify the Regional Board and EPA within 15 days of completion:

1. The finding of the TIE or other investigation(s) to identify the cause(s) of toxicity;
2. Actions the Discharger has taken or will take to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity; and where corrective actions, including a TRE or TIE, have not been completed, the Discharger shall propose an expeditious schedule under which corrective actions will be implemented.

#### **[18] E. TOXICITY REOPENER**

This Order and Permit may be modified, or alternatively, revoked and reissued, in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limitations to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State water quality standards applicable to whole effluent toxicity.

- [19] PRIORITY POLLUTANTS are those pollutants listed as toxic under section 307(a)(1) of the CWA, 40 CFR 131.36, USEPA Permit Application Form 3510-2A (rev 1-99 or later), and/or Table B toxic materials regulated under the Ocean Plan.
- [20] Refer to Design of 301(h) Monitoring Programs for Municipal Wastewater Discharges to Marine Waters (EPA 430/9-82-010, 1982, or latest version) and Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods (EPA 430/9-86-004, 1987, or latest version).
- [21] The reduction of NATURAL LIGHT may be determined by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.
- [22] Report percent (%) weight in relation to phi size.
- [23] If Acid Volatile Sulfide cannot be effectively characterized, the Discharger shall so notify the Regional Board and EPA. Upon concurrence by the Regional Board and EPA, the Discharger shall monitor for Dissolved Sulfides (at pH 7) in lieu of Acid Volatile Sulfide for the duration of this Order and Permit.
- [24] A calculated test statistic is only valid when the sample data set meets all statistical test assumptions.
- [25] Refer to Recommended Biological Indices for 301(h) Monitoring Programs (EPA 430/9-86-004, 1987, or latest version).
- [26] At each station, parameter shall be reported only for all deployed individuals of M. californianus.
- [27] At each station, parameter shall be analyzed and reported only for composite samples comprised of 25 individuals of M. californianus.

[28] At each station, parameter shall be analyzed and reported only for composite samples comprised of 15 individuals of M. californianus and composite samples of target fish species.

## XVI. IMPLEMENTATION

The Discharger shall implement the required influent, effluent, biosolids, and surf zone monitoring upon the effective date of this Order and Permit. Water column monitoring at nearshore, ocean, and plume stations shall begin in October 2005. Benthic sediment and infauna monitoring, trawl surveys, and bioaccumulation monitoring shall begin in October 2005. Annual outfall/diffuser inspection shall begin October 2005.

This certifies that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on November 19, 2004 and of a NPDES permit issued by the U.S. Environmental Protection Agency, Region IX, on \_\_\_\_\_.

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Roger W. Briggs, Executive Officer  
California Regional Water Quality Control Board  
Central Coast Region

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Alexis Strauss, Acting Director  
Water Management Division  
U.S. Environmental Protection Agency, Region IX  
For the Regional Administrator