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

MONITORING AND REPORTING PROGRAM NO. R3-2004-0122

NPDES PERMIT NO. CA0048143
Waste Discharger Identification No. 3 420108001
Proposed for Consideration at the October 22, 2004 Meeting

FOR

CITY OF SANTA BARBARA
EL ESTERO WASTEWATER TREATMENT FACILITY
SANTA BARBARA COUNTY

I. INFLUENT MONITORING

Sampling stations shall be established at each point of inflow to the treatment plant, and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. Composite samples may be taken by a proportional-sampling device approved by the Executive Officer or by composited grab samples. In compositing grab samples, the sampling interval shall not exceed one hour. The measurement of Ocean Plan Table B constituents, remaining priority toxic pollutants (except asbestos), and pretreatment requirement sampling in the influent is required under dry-weather conditions. Where specified, 24-hour composite samples shall be collected when appropriate for the constituent and the applicable approved laboratory analytical methods. The Discharger may otherwise employ grab samples. The influent monitoring program shall be in accordance with Table 1 below:

TABLE 1: Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling and Analysis Frequency
Daily Flow	Million Gallons per Day (MGD)	Calculated	Daily
Instantaneous Flow	MGD	Calculated	Daily
Maximum Daily Flow	MGD	Calculated	Daily
Mean Daily Flow	MGD	Calculated	Monthly
Rainfall	inches	Measured	Daily
Mean Daily pH	pH Units	Metered	Daily
Maximum Daily pH	pH Units	Metered	Daily
Minimum Daily pH	pH Units	Metered	Daily
CBOD, 5-day	mg/L	24-hr Composite	Monthly
Total Suspended Solids	mg/L	24-hr Composite	Monthly
Ocean Plan Table B Constituents and Remaining Priority Toxic Pollutants [3]	Units per Table B	24-hr Composite	March 2009 [1]

TABLE 1: Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling and Analysis Frequency
Pretreatment Requirements [2]	as appropriate	as appropriate	Annually [1]

[1] Influent sampling shall be coordinated with effluent sampling as scheduled in MRP Section II.

[2] See Section X of this MRP, *Pretreatment Program Reporting*, Item 1

[3] See Table 6 of this MRP for Remaining Priority Toxic Pollutants

II. EFFLUENT MONITORING

Representative samples of the effluent shall be collected at the specified frequencies after the last point of treatment.

When the desalination facility is not operating, effluent samples shall be collected from the outfall line at a location beyond the last point where effluent from the wastewater treatment plant enters the line, but before the point of entry of the desalination facility waste brine. When the desalination facility is operating, the Discharger shall also sample the combined effluent from a location approved by the Executive Officer where the separate waste streams are completely mixed.

Composite samples may be taken by a proportional-sampling device approved by the Executive Officer or by grab samples composited in proportion to the flow. In compositing grab samples, the sampling interval shall not exceed one hour. Where specified in Table 3, 4, 5, and 6, 24-hour composite samples shall be collected when appropriate for the constituent and the applicable approved laboratory analytical methods. The Discharger may otherwise employ grab samples.

The Regional Board may require monitoring of bioaccumulation of toxicants in the discharge zone. Organisms and techniques for such monitoring shall be chosen by the Regional Board on the basis of demonstrated value in waste discharge monitoring.

The measurement of Ocean Plan Table B constituents and the remaining priority toxic pollutants, except asbestos, in the effluent will be required under dry-weather conditions. The effluent monitoring program shall be in accordance with Tables 2, 3, 4, 5, and 6 below.

Annual effluent sampling per Tables 3, 4, 5, and 6 shall be collected during dry-weather conditions according to the following schedule: July 2005, June 2006, May 2007, April 2008, and March 2009. Where influent and effluent sampling are concurrently scheduled (e.g., March 2003), effluent samples will be collected with consideration of the facility's hydraulic detention time and the timing of the influent sampling. In such cases, the time of the respective samples should also be recorded.

If any constituents as listed in Tables 2, 3, 4, 5, or 6 of this MRP are detected at levels exceeding the limits of Order No. R3-2004-0122, a new sample shall be collected and analyzed within one month for those constituents exceeding the applicable limit. Samples shall continue to be collected and analyzed monthly until the constituents no longer exceed the limit for two consecutive months.

TABLE 2: Major Constituents and Properties of Wastewater

Parameter	Units	Sample Type	Minimum Sampling and Analysis Frequency
Daily Flow [6]	Million Gallons per Day (MGD)	Metered	Daily
Instantaneous Flow [6]	MGD	Metered	Daily
Maximum Daily Flow [6]	MGD	Metered	Daily
Mean Daily Flow [6]	MGD	Calculated	Monthly
CBOD, 5-Day [6]	mg/L	24-hr Composite	Once Every 6 Days
Total Suspended Solids [6]	mg/L	24-hr Composite	Daily
Settleable Solids [6]	mL/L	Grab	Daily
Temperature [6]	°F	Grab	Once Every 6 Days
Total Coliform Organisms [1, 2, 3, 6]	#/100 mL	Grab	Daily
Fecal Coliform Organisms [1, 2, 6]	#/100 mL	Grab	Daily
Total Chlorine Residual [3, 4, 6]	mg/L	Metered (after dechlorination)	Continuous
Total Chlorine Used	Lbs/Day	Recorded	Daily
pH [6]	pH units	Grab	Daily
Salinity	mg/L	Grab	Weekly [7]
Oil & Grease [6]	mg/L	Grab	Once Every 6 Days
Turbidity [6]	NTU	Grab	Daily
Ammonia (as N) [6]	mg/L	Grab	Monthly
Phenolic Compounds (non-chlorinated)	ug/L	Grab	Quarterly (Mar, June, Sept, Dec) [8]
Chlorinated Phenolic Compounds	ug/L	Grab	Quarterly (Mar, June, Sept, Dec) [8]
Total Sulfides	mg/L	Grab	Quarterly (Mar, June, Sept, Dec)
Acute Toxicity [5, 9]	TUa	24-hr Composite	Quarterly (Mar, June, Sept, Dec) [8]
Chronic Toxicity [11]	TUc	24-hr Composite	Semi-annually (Mar, Dec) [8, 10]

[1] For all bacterial analyses, sample dilutions should be performed so the range of bacterial density values extends from 2 to 16,000 /100 mL. The detection methods used for each analysis shall be reported with the results of the analysis.

[2] Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR PART 136 (revised edition of July 1, 2003, or later), unless alternate methods have been approved in advance by US EPA pursuant to 40 CFR PART 136.

[3] Report daily maximum and daily mean values for chlorine residual. Discharger shall notify the Regional Board (telephone: 805-549-3147), Department of Health Services (telephone: 510-540-3423), and any Mariculture Grower as soon as possible when there is a loss of disinfection or if three consecutive total effluent coliform bacteria tests exceed 16,000 per 100 mL.

[4] The City shall review continuous monitoring data and submit a summary (chlorine residual daily range, and daily average) to the Regional Board with monthly monitoring reports. Grab samples for compliance with effluent limits may be collected at the last accessible measurement location before discharge to the ocean.

[5] The minimum initial dilution for the City of Santa Barbara Ocean Outfall is currently calculated as 120:1 without desalination facility brine discharge, and 44:1 with brine discharge. Acute and chronic toxicity testing is required for ratios above 100:1. If the desalination facility is utilized and the minimum initial dilution ratio falls below 100:1, then only chronic toxicity testing is required for those periods [B].

[6] When the desalination plant is operating, these constituents shall be monitored in samples taken from the wastewater treatment plant effluent sampling point upstream of the point where the desalination plant waste brine is combined into the effluent discharge.

[7] When desalination plant is operating.

[8] Samples shall be collected simultaneously with sampling of desalination plant effluent for like constituents. If toxicity is detected, effluent shall be resampled within 24 hours of completing the analysis.

[9] Compliance with acute toxicity objective (TUa) shall be determined using a USEPA approved protocol as provided in 40 CFR PART 136 (USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters 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 (TUa) = 100/96-hr LC 50. LC 50 (percent waste giving 50% survival of test organisms) shall be determined by 96-hour static renewal tests. The Discharger shall use one of the approved marine test species identified in EPA-821-R-02-012, preferably using Silversides (Menidia beryllina); however, other approved marine test species in EPA-821-R-02-012 may be used with sufficient justification by the Discharger and approval by the Executive Officer.

Reference toxicant tests shall be conducted concurrently with the effluent sample tests. Both tests must satisfy the test acceptability criteria specified in the reference cited above. If the test acceptability criteria are not achieved or if toxicity is detected, the sample shall be retaken and retested within 14 days of the failed sampling event. The retest results shall be reported in accordance with the chapter on report preparation and in the reference cited above, and the results shall be attached to the next monitoring report.

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:

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

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

[10] Effluent samples shall also be obtained immediately after commencing discharge of desalination brine. Desalination brine dilutions shall represent the entire range of possible dilutions by effluent from the wastewater treatment plant. Test species shall represent locally indigenous benthic infauna, epilbenthic macroinvertibrates, and demersal fish.

[11] Chronic Toxicity (TUc) = 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 TUc. 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 TUc. 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 of no fewer than three tests, 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.

Approved Tests – Chronic Toxicity TUc
(Table III-1 from Appendix III of the Ocean Plan)

Species	Effect	Tier	Reference
giant kelp, *Macrocystis pyrifera*	percent germination; germ tube length	1	1,3
red abalone, *Haliotis rufescens*	Abnormal shell development	1	1,3
oyster, *Crassostrea gigas*; mussels, *Mytilus spp.*	Abnormal shell development; percent survival	1	1,3

Approved Tests – Chronic Toxicity TUc (Table III-1 from Appendix III of the Ocean Plan)			
Species	**Effect**	**Tier**	**Reference**
urchin, *Strongylocentrotus purpuratus*; sand dollar, *Dendraster excentricus*	Percent normal development	1	1,3
urchin, *Strongylocentrotus purpuratus*; sand dollar, *Dendraster excentricus*	Percent fertilization	1	1,3
shrimp, *Holmesimysis costata*	Percent survival; growth	1	1,3
shrimp, *Mysidopsis bahia*	Percent survival; growth; fecundity	2	2,4
topsmelt, *Atherinops affinis*	Larval growth rate; percent survival	1	1,3
Silversides, *Menidia beryllina*	Larval growth rate; percent survival	2	2,4

Approved Tests – Chronic Toxicity TUc Table 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 from the Approved Tests – Chronic Toxicity TUc Table

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.

TABLE 3: Ocean Plan Table B Pollutants – Protection of Marine Aquatic Life [2]

(For applicable effluent limitations, see Table B-1 of Order No. R3-2004-0122, or Table B-1b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
Arsenic	ug/L	24-hr Composite	Annually*
Cadmium	ug/L	24-hr Composite	Annually*
Chromium Total	ug/L	24-hr Composite	Annually*
Chromium (Hexavalent)	ug/L	24-hr Composite	Annually*
Copper	ug/L	24-hr Composite	Annually*
Iron	ug/L	24-hr Composite	Annually*
Lead	ug/L	24-hr Composite	Annually*
Mercury	ug/L	24-hr Composite	Annually*
Nickel	ug/L	24-hr Composite	Annually*

TABLE 3: Ocean Plan Table B Pollutants – Protection of Marine Aquatic Life [2]

(For applicable effluent limitations, see Table B-1 of Order No. R3-2004-0122, or Table B-1b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
Selenium	ug/L	24-hr Composite	Annually*
Silver	ug/L	24-hr Composite	Annually*
Zinc	ug/L	24-hr Composite	Annually*
Cyanide	ug/L	24-hr Composite	Annually*
Phenolic Compounds (non-chlorinated)	ug/L	24-hr Composite	Annually*
Chlorinated Phenolics	ug/L	24-hr Composite	Annually*
Endosulfan [1]	ug/L	24-hr Composite	Annually*
Endrin	ug/L	24-hr Composite	Annually*
HCH [1]	ug/L	24-hr Composite	Annually*
Radioactivity	pci/L	24-hr Composite	Annually*

* Annual effluent sampling shall be conducted during dry-weather conditions according the following schedule: July 2005, June 2006, May 2007, April 2008, and March 2009.

[1] Refer to Appendix I of the Ocean Plan, *Definition of Terms*. Report: 1) the sum of the components, and; 2) the individual component concentrations.

[2] Please note that Total Chlorine Residual, Ammonia (as nitrogen), acute toxicity, and chronic toxicity are listed in Table 2 of this MRP due to their increased frequency of monitoring.

TABLE 4: Ocean Plan Table B Pollutants – Protection of Human Health – Non-Carcinogens

(For applicable effluent limitations, see Table B-2 of Order No. R3-2004-0122, or Table B-2b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
Acrolein	ug/L	24-hr Composite	Annually*
Antimony	ug/L	24-hr Composite	Annually*
Bis (2-chloroethoxy) methane	ug/L	24-hr Composite	Annually*
Bis (2-chloroisopropyl) ether	ug/L	24-hr Composite	Annually*
Chlorobenzene	ug/L	24-hr Composite	Annually*
Chromium (III)	ug/L	24-hr Composite	Annually*
Di-n-butyl phthalate	ug/L	24-hr Composite	Annually*
Dichlorobenzenes [1]	ug/L	24-hr Composite	Annually*
Diethyl phthalate	ug/L	24-hr Composite	Annually*
Dimethyl phthalate	ug/L	24-hr Composite	Annually*
4,6-Dinitro-2-methylphenol	ug/L	24-hr Composite	Annually*
2,4-Dinitrophenol	ug/L	24-hr Composite	Annually*
Ethylbenzene	ug/L	24-hr Composite	Annually*
Fluoranthene	ug/L	24-hr Composite	Annually*
Hexachlorocyclopentadiene	ug/L	24-hr Composite	Annually*
Nitrobenzene	ug/L	24-hr Composite	Annually*
Thallium	ug/L	24-hr Composite	Annually*
Toluene	ug/L	24-hr Composite	Annually*

TABLE 4: Ocean Plan Table B Pollutants – Protection of Human Health – Non-Carcinogens

(For applicable effluent limitations, see Table B-2 of Order No. R3-2004-0122, or Table B-2b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
Tributyltin	ug/L	24-hr Composite	Annually*
1,1,1-Trichloroethane	ug/L	24-hr Composite	Annually*

* Annual effluent sampling shall be conducted during dry-weather conditions according the following schedule: July 2005, June 2006, May 2007, April 2008, and March 2009.

[1] Refer to Appendix I of the Ocean Plan, *Definition of Terms*. Report: 1) the sum of the components, and; 2) the individual component concentrations.

TABLE 5: Ocean Plan Table B Pollutants – Protection of Human Health – Carcinogens

(For applicable effluent limitations, see Table B-3 of Order No. R3-2004-0122, or Table B-3b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
Acrylonitrile	ug/L	24-hr Composite	Annually*
Aldrin	ug/L	24-hr Composite	Annually*
Benzene	ug/L	24-hr Composite	Annually*
Benzidine	ug/L	24-hr Composite	Annually*
Beryllium	ug/L	24-hr Composite	Annually*
Bis (2-Chloroethyl) ether	ug/L	24-hr Composite	Annually*
Bis (2-ethylhexyl) phthalate	ug/L	24-hr Composite	Annually*
Carbon tetrachloride	ug/L	24-hr Composite	Annually*
Chlordane [1]	ug/L	24-hr Composite	Annually*
Chlorodibromomethane	ug/L	24-hr Composite	Annually*
Chloroform	ug/L	24-hr Composite	Annually*
DDT [1]	ug/L	24-hr Composite	Annually*
1,4-Dichlorobenzene	ug/L	24-hr Composite	Annually*
3,3'-Dichlorobenzidine	ug/L	24-hr Composite	Annually*
1,2-Dichloroethane	ug/L	24-hr Composite	Annually*
1,1,-Dichloroethylene	ug/L	24-hr Composite	Annually*
Dichlorobromomethane	ug/L	24-hr Composite	Annually*
Dichloromethane	ug/L	24-hr Composite	Annually*
1,3-Dichloropropene	ug/L	24-hr Composite	Annually*
Dieldrin	ug/L	24-hr Composite	Annually*
2,4-Dinitrotoluene	ug/L	24-hr Composite	Annually*
1,2-Diphenylhydrazine	ug/L	24-hr Composite	Annually*
Halomethanes [1]	ug/L	24-hr Composite	Annually*
Heptachlor	ug/L	24-hr Composite	Annually*
Heptachlor Epoxide	ug/L	24-hr Composite	Annually*
Hexachlorobenzene	ug/L	24-hr Composite	Annually*
Hexachlorobutadiene	ug/L	24-hr Composite	Annually*
Hexachloroethane	ug/L	24-hr Composite	Annually*
Isophorone	ug/L	24-hr Composite	Annually*
N-Nitrosodimethylamine	ug/L	24-hr Composite	Annually*

TABLE 5: Ocean Plan Table B Pollutants – Protection of Human Health – Carcinogens

(For applicable effluent limitations, see Table B-3 of Order No. R3-2004-0122, or Table B-3b of Attachment B to the Order if municipal wastewater and desalination facility brine are discharged)

Parameter	Units	Sample Type	Min. Analysis Frequency
N-nitrosodi-N-propylamine	ug/L	24-hr Composite	Annually*
N-Nitrosodiphenylamine	ug/L	24-hr Composite	Annually*
Polynuclear Aromatic Hydrocarbons (PAHs) [1]	ug/L	24-hr Composite	Annually*
Polychlorinated Biphenyls (PCBs) [1]	ug/L	24-hr Composite	Annually*
TCDD Equivalents [1]	ug/L	24-hr Composite	Annually*
1,1,2,2,-Tetrachloroethane	ug/L	24-hr Composite	Annually*
Tetrachloroethylene	ug/L	24-hr Composite	Annually*
Toxaphene	ug/L	24-hr Composite	Annually*
Trichloroethylene	ug/L	24-hr Composite	Annually*
1,1,2-Trichloroethane	ug/L	24-hr Composite	Annually*
2,4,6-Trichlorophenol	ug/L	24-hr Composite	Annually*
Vinyl chloride	ug/L	24-hr Composite	Annually*

* Annual effluent sampling shall be conducted during dry-weather conditions according the following schedule: July 2005, June 2006, May 2007, April 2008, and March 2009.

[1] Refer to Appendix I of the Ocean Plan, *Definition of Terms*. Report: 1) the sum of the components, and; 2) the individual component concentrations.

TABLE 6: Remaining Priority Toxic Pollutants

From 40 CFR 131.36 (7-1-03 Edition), and EPA Application Form 3510-2A (Rev. 1-99)

Parameter	Units	Sample Type	Min. Analysis Frequency
Acenapthene	ug/L	24-hr Composite	Annually*
1,2,4,-Trichlorobenzene	ug/L	24-hr Composite	Annually*
2-Chloronapthalene	ug/L	24-hr Composite	Annually*
2,6-Dinitrotoluene	ug/L	24-hr Composite	Annually*
4-Chlorophenyl Phenyl Ether	ug/L	24-hr Composite	Annually*
4-Bromophenyl Phenyl Ether	ug/L	24-hr Composite	Annually*
Naphthalene	ug/L	24-hr Composite	Annually*
Butylbenzyl Phthalate	ug/L	24-hr Composite	Annually*
Di-N-Octyl Phthalate	ug/L	24-hr Composite	Annually*
Benzo(a)Anthracene	ug/L	24-hr Composite	Annually*
Benzo(ghi)Perylene	ug/L	24-hr Composite	Annually*
P-Chloro-M-Cresol	ug/L	24-hr Composite	Annually*
2-Chlorophenol	ug/L	24-hr Composite	Annually*
2,4-Dichlorophenol	ug/L	24-hr Composite	Annually*
2,4-Dimethylphenol	ug/L	24-hr Composite	Annually*
4,6-Dinitro-O-Cresol	ug/L	24-hr Composite	Annually*
2-Nitrophenol	ug/L	24-hr Composite	Annually*
4-Nitrophenol	ug/L	24-hr Composite	Annually*
Pentachlorophenol	ug/L	24-hr Composite	Annually*
Phenol	ug/L	24-hr Composite	Annually*

TABLE 6: Remaining Priority Toxic Pollutants

From 40 CFR 131.36 (7-1-03 Edition), and EPA Application Form 3510-2A (Rev. 1-99)

Parameter	Units	Sample Type	Min. Analysis Frequency
1,1-Dichloroethane	ug/L	24-hr Composite	Annually*
Chloroethane	ug/L	24-hr Composite	Annually*
Endrin Aldehyde	ug/L	24-hr Composite	Annually*
Trans-1,2-Dichloroethylene	ug/L	24-hr Composite	Annually*
1,2-Dichloropropane	ug/L	24-hr Composite	Annually*
1,3-Dichloropropylene	ug/L	24-hr Composite	Annually*
Methylene Chloride	ug/L	24-hr Composite	Annually*
2-Chloroethyl Vinyl Ether	ug/L	24-hr Composite	Annually*

* Annual effluent sampling shall be conducted during dry-weather conditions according the following schedule: July 2005, June 2006, May 2007, April 2008, and March 2009.

III. RECEIVING WATER MONITORING

Receiving water monitoring is conducted to verify compliance with the California Ocean Plan. Monitoring in the vicinity of the City of Santa Barbara Ocean Outfall must document water and sediment quality and biological communities at the "Zone of Initial Dilution" (ZID) boundary, at reference stations, and at areas beyond the ZID where discharge impacts might reasonably be expected.

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.

The Receiving Water Monitoring Program consists of the following components:

A. Shoreline Monitoring
B. Ocean Outfall and Diffuser Monitoring
C. Bottom Sediment Sampling
D. Benthic Biota Sampling
E. Chemical Analysis of Biota

A. Shoreline Monitoring

Bacteriological monitoring is conducted to assess bacterial conditions in areas used for body-contact sports (e.g., swimming) and where shellfish may be harvested for human consumption (see permit Findings 20-22), and to assess aesthetic conditions for general recreational use (e.g., picnicking, boating).

TABLE 7: Shore Sampling Station Locations

Station Name	Location
A	Surf at Leadbetter Beach
C	Surf at Stearns Wharf Pier
D	Surf at the end of Santa Barbara Street
F	Surf opposite Palm Park restroom
H	Surf opposite bird refuge

TABLE 8: Ocean Sampling Station Locations

Station Name	Location
1	Near new outfall diffuser
2	1,400 feet north from the end of new outfall
3	Near end of old outfall
4	6,500 feet west of new outfall, at the same depth contour as Ocean Station 1
5	1,400 feet east of the new outfall
6	1,400 feet south of the new outfall
7	1,400 feet west of the new outfall
8	8,000 feet east of the new outfall, at the same depth contour as Ocean Station 1

Latitude and Longitude coordinates shall be provided for all stations when reporting. Stations may be added, deleted, or relocated by the Regional Board, with EPA concurrence.

If three consecutive effluent total or fecal coliform bacteria tests, in any combination, exceed 16,000 per 100 mL or 3,200 per 100 mL, respectively, samples shall be collected at shore stations A, C, D, F, and H and analyzed for total and fecal coliform organisms, and enterococcus organisms. The Discharger shall collect no fewer than five samples from each station over any 30-day period, with the sampling frequency evenly spaced throughout the period. Sampling will continue until the effluent bacteria concentrations return to compliance.

Monitoring shall also include observations of wind (direction and speed), weather (e.g., cloudy, sunny, rainy), whether rainfall occurred over the preceding seven days, sea conditions, longshore currents (e.g., direction), and tidal conditions (e.g., high, slack, or low tide). Observations of water discoloration, floating oil and grease, turbidity, odor, materials of sewage origin in the water or on the beach, and temperature (°C) shall be recorded and reported.

For all bacterial analyses, sample dilutions shall be performed so the range of values extends from 20 to 160,000 / 100 mL. The detection methods used for each analysis shall be reported with the results of the analysis.

Detection methods used for total and fecal coliform shall be those presented in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*, or any improved method determined appropriate by the Regional Board (and approved by EPA).

Detection methods used for enterococcus shall be those presented in EPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure*, or any improved method determined appropriate by the Regional Board (and approved by EPA).

B. Ocean Outfall and Diffuser Monitoring

At least once per year (in the same month annually) the Discharger shall visually inspect the entire outfall and diffuser structure (e.g., divers, dye study) to note its structural integrity and any 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. The outfall and diffuser's state of repair and operation shall be reported to the Executive Officer in the applicable annual report. The month for inspection specified by the Discharger shall be a month of good underwater visibility.

C. Bottom Sediment Sampling

Bottom sediment sampling shall be conducted in 2007.

TABLE 9: Bottom Sediment Sampling

Parameter	Units	Ocean Sampling Stations
Sulfides (at pH 7)	mg/kg	1 through 8
Particle size distribution (incl. % retained on #200 sieve)	-----	1 through 8
Organic Matter (volatile solids or TOC)	mg/kg	1 through 8
Total Coliform Organisms	# / 100 g	1 through 8
Fecal Coliform Organisms	# / 100 g	1 through 8
BOD	mg/kg	1 through 8
Total Kjeldahl Nitrogen	mg/kg	1 through 8
Arsenic	mg/kg	1 through 8
Cadmium	mg/kg	1 through 8
Total Chromium	mg/kg	1 through 8
Hexavalent Chromium	mg/kg	1 through 8
Copper	mg/kg	1 through 8
Lead	mg/kg	1 through 8
Mercury	mg/kg	1 through 8
Nickel	mg/kg	1 through 8
Iron	mg/kg	1 through 8
Silver	mg/kg	1 through 8
Zinc	mg/kg	1 through 8

The following procedure shall be carried out for sampling and analyzing ocean bottom sediments:

1. Duplicate samples shall be taken at each station and shall be analyzed and reported separately. Samples may be taken either by divers using non-contaminating samplers or by a surface-operated grab sampler which will obtain a relatively undisturbed sample. If the surface-operated grab sampler is used, a sub-sample (uncontaminated by the sampler) should be taken from the grab. In either case, the top five centimeters of material shall be used for analyses. Enough cores shall be taken at each station to provide sufficient sediment material for the required duplicate analyses.

2. The contractor shall locate and mark the outfall terminus before beginning station locations and sampling. Reliance on charts or as-built plans will not suffice.

3. Control stations have been selected in areas that should provide similar sediments at similar depths to the outfall stations. If the contractor encounters rocks or gravel at a station, he shall reposition the station, as necessary, to obtain a usable sediment sample. Station location changes shall be described in the final report.

4. Samples shall be placed in airtight polyethylene containers. Care shall be taken to ensure the containers are completely filled by the samples and air bubbles are not trapped in the containers. A separate sub-sample for sulfide analysis shall be placed in small (100-200 mL), wide-mouth bottle and preserved with zinc acetate. The preservative must be carefully mixed with the sediment sample. The samples shall be stored immediately at 2 to 4 ºC and not frozen or dried. Total sample storage time shall not exceed two weeks. For bacterial analysis, storage time should not exceed 6 to 8 hours. Bacterial analysis should be performed prior to preservation.

5. When processing for analyses, macrofauna and remnants should be removed, taking care to avoid contamination.

6. Chemical extractions are to be run for 24 hours with dilute HCL (0.5N) using guidelines recommended by the State Water Resources Control Board. Subsequent analyses shall be conducted in accordance with the current edition of *Guidelines Establishing Test Procedures for Analysis of Pollutants*, promulgated by the United States Environmental Protection Agency. Any variations must be reported with the test results.

7. Results shall be expressed on a dry-weight basis.

8. Results shall be compared between outfall and reference areas using standard statistical techniques. Data shall be compared in its raw form, and chemical results are to be normalized to the clay fraction, which is the percent by weight passing the No. 200 sieve, as follows:

   Normalized Result = [raw result ÷ the % of clay as a decimal]

D. BENTHIC BIOTA SAMPLING

Benthic biota sampling shall be conducted at the same time as Section III.C, *Bottom Sediment Sampling*.

1. At least four (4) samples will be taken at each of the following four ocean sampling stations: 1, 4, 7, and 8. The samples shall be taken by mechanical grab or qualified diver biologists utilizing three-pound coffee cans (or similar) with both ends cut out. (The cans are to be pushed into the sediment full length, the top capped, surrounding sediment dug away, and the bottom capped). During collection, water temperature shall be recorded at three-meter depth intervals, and at the surface and bottom.

2. The sample shall be processed by washing it in a one-millimeter (1 mm) sieve.

3. The sample should then be preserved in 75 percent alcohol or other applicable preservative. The material may be stained with Rose Bengal.

4. Coelenterates, polychaetes, macrocrustaceans, mollusks, ectoprocts, echinoderms, and algae shall be identified to species or at least to genus. All others shall be identified to the lowest taxon possible. All specimens shall be counted to provide information on abundance. Species abundance lists shall be presented with data reduced to standard area (sq. meter) and standard volume (liter).

5. For data from each sampling period, the following basic statistical analyses shall, as a minimum, be performed and reported:

   a. The mean, median, range, standard deviation, and 95 percent confidence limits of the species abundance data reduced to standard area and volume.

   b. Information theory species diversity index value:

$$H = -\sum_{i=1}^{n} (n_1 / N) \log (n_i / N)$$

   for each replicate sample at each station and for the station as a whole (i.e., pooling data from all replicates for the station during one survey). In addition, the station mean, range, and standard deviation shall be calculated from the replicate index values.

c. The infaunal index, dominance index, and distributional statistics on "dominant" species as developed by the Southern California Coastal Water Research Project (SCCWRP) shall be calculated for each station. SCCWRP should be contacted for the latest species list and formula required.

6. The names and qualifications of persons identifying this material shall be indicated in all data reports. Furthermore, type collections shall be established for the various groups. All material shall be saved and stored for future reference. Material may be discharged after four years.

7. The final report on community analyses shall include a complete discussion of survey results and possible influence of the outfall on the marine communities in the study area. The discussion should be based on statistical evidence developed in Item 5, above, and on similarity analysis and cluster analysis of the data. It should include an analysis of natural community variation including the effects of different oceanic seasons and water temperatures, which could influence the validity of study results.

E. CHEMICAL ANALYSIS OF BIOTA

Chemical analysis of biota shall be conducted at the same time as Sections III.C and III.D, above.

Six (6) specimens of each species for chemical analysis shall be collected per the following:

TABLE 10: Chemical Analysis of Biota

Species	Number of Specimens from Outfall Area (Ocean Stations 1, 2, 5, 6, and 7 combined)	Number of Specimens from Control Area*
Pink Surfperch (zalembius rocaceus)	6	6
Giant Red Sea Urchin (Stronglyocentrotus fimciscanus)	6 (attached to outfall or nearby substrate)	6

* A control area is to be selected by the Discharger near one of the Channel Islands. The site should provide similar habitats and species to the outfall area, and must be approved by the Executive Officer before sampling. Its location can be adjusted if necessary to obtain the required samples.

If one or both of the species listed above cannot be obtained as required, or the Discharger/contractor justifies another method to fulfill the requirements, the Executive Officer may approve an alternate sampling species and/or procedure. The standard and total length, wet weight, sex, and physiological condition of each specimen shall be recorded. Tissue shall be combined in a manner to produce sufficient material for two (2) separate analyses for each parameter from each sampling location. Each of these duplicate composite samples shall be separately analyzed for all toxic substances identified in the effluent and must include as a minimum: Cd, Total Cr, Cu, Pb, Hg, Ni, Ag, and Zn. Specimens shall be stored in polyethylene at –20 ºC prior to analysis.

Fish liver composites shall be analyzed for all trace metals except mercury. Fish flesh composites of dorsal muscle tissue shall be analyzed for mercury. Tissue for macro-invertebrate analysis to be approved by the Executive Officer.

IV. MINIMUM LEVELS

The Minimum Levels identified in the 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 2001 California Ocean Plan (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:

Substance or Grouping	Method-Specific Treatment	Most Common Factor
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 <u>below</u> the effluent limitations of Order No. R3-2004-0122 are included herein (see Tables 11 through 14 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" in the shaded areas within Tables 11 through 14 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.

[NOTE: If desalination facility brine discharge is active, refer to the applicable effluent limits listed in Order Attachment B. Compare those effluent limits with the Minimum Level tables in the Ocean Plan, and determine which Minimum Levels and associated analytical methods may not be applied.]

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).

<u>Deviations from Minimum Levels in Appendix II of the Ocean Plan</u>

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).

Tables 11 through 14 of this MRP list the applicable Minimum Levels in four major chemical groupings: volatile chemicals, semi-volatile chemicals, inorganics, pesticides & PCB's. "No Data" is indicated by "--".

TABLE 11: Minimum Levels – Volatile Chemicals
(Table II-1 from Appendix II of the Ocean Plan)

Volatile Chemicals	CAS Number	Minimum Level (ug/L)	
		GC Method [a, *]	GCMS Method [b, *]
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	2
1,4-Dichlorobenzene (volatile)	106467	0.5	2
Dichlorobromomethane	75274	0.5	2
1,1-Dichloroethane	75343	0.5	1
1,2-Dichloroethane	107062	0.5	2
1,1-Dichloroethylene	75354	0.5	2
Dichloromethane	75092	0.5	2
1,3-Dichloropropene (volatile)	542756	0.5	2
Ethyl benzene	100414	0.5	2
Methyl Bromide	74839	1	2
Methyl Chloride	74873	0.5	2
1,1,2,2-Tetrachloroethane	79345	0.5	2
Tetrachloroethylene	127184	0.5	2
Toluene	108883	0.5	2
1,1,1-Trichloroethane	71556	0.5	2
1,1,2-Trichloroethane	79005	0.5	2
Trichloroethylene	79016	0.5	2
Vinyl Chloride	75014	0.5	2

Table 11 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, Section C.5, *Use of Minimum Levels*).

TABLE 12: Minimum Levels – Semi Volatile Chemicals
(Table II-2 from Appendix II of the Ocean Plan)

Semi-Volatile Chemicals	CAS Number	Minimum Level (ug/L) GC Method [a, *]	GCMS Method [b, *]	HPLC Method [c, *]	COLOR Method [d]
Acenapthylene	208968	--	10	0.2	--
Anthracene	120127	--	10	2	--
Benzidine	92875	--	5	--	--
Benzo(a)anthracene	56553	--	10	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	--	10	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	--	10	5	--
Di-n-butyl phthalate	84742	--	10	--	--
Dibenzo(a,h)anthracene	53703	--	10	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	--	10	0.1	--
Hexachlorobenzene	118741	**N/A**	1	--	--
Hexachlorobutadiene	87683	5	1	--	--

TABLE 12: Minimum Levels – Semi Volatile Chemicals
(Table II-2 from Appendix II of the Ocean Plan)

		Minimum Level (ug/L)			
Semi-Volatile Chemicals	**CAS Number**	**GC Method [a, *]**	**GCMS Method [b, *]**	**HPLC Method [c, *]**	**COLOR Method [d]**
Hexachlorocyclopentadiene	77474	5	5	--	--
Hexachloroethane	67721	5	1	--	--
Indeno(1,2,3-cd)pyrene	193395	--	10	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	--	5	0.05	--
Phenol	108952	1	1	--	50
Pyrene	129000	--	10	0.05	--
2,4,6-Trichlorophenol	88062	10	10	--	--

Table 12 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, Section C.5, *Use of Minimum Levels*).

TABLE 13: Minimum Levels – Inorganics
(Table II-3 from Appendix II of the Ocean Plan)

		Minimum Level (ug/L)								
Inorganic Substances	**CAS Number**	**COLOR Method [a]**	**DCP Method [b]**	**FAA Method [c]**	**GFAA Method [d]**	**HYDRIDE Method [e]**	**ICP Method [f]**	**ICPMS Method [g]**	**SPGFAA Method [h]**	**CVAA Method [i]**
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)	--	--	1000	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 13 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
* To determine the lowest standard concentration in an instrument calibration curve for these techniques, use the given ML (see Ocean Plan, Chapter III, Section C.5, *Use of Minimum Levels*).

TABLE 14: Minimum Levels – Pesticides and PCB's
(Table II-4 from Appendix II of the Ocean Plan)

Pesticides – PCB's	CAS Number	Minimum Level (ug/L) GC Method [a],*
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 14 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 Ocean Plan, Chapter III, Section C.5, *Use of Minimum Levels*).

Procedures, calibration techniques, and instrument/reagent specifications used to determine compliance with Ocean Plan Table B shall conform to the requirements of federal regulations (40 CFR PART 136, revised edition of July 1, 2003, or later). All methods are specified in Tables 11 through 14 of this MRP.

Laboratories analyzing monitoring data shall be certified by the California Department of Health Services, in accordance with the provisions of California Water Code, Section 13176, and must include quality assurance / quality control data with their reports.

V. SAMPLE REPORTING PROTOCOLS

Dischargers must report with each sample result the reported Minimum Level (selected by the discharger in accordance with Section III, *Minimum Levels*, and Tables 11 through 14 of this Monitoring and Reporting Program) and the laboratory's current Method Detection Limit (MDL).

Dischargers must also report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

1. Sample results greater than or equal to the reported Minimum Level must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample).

2. Sample results less than the reported Minimum Level, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.").

3. Sample results less than the laboratory's MDL must be reported as "Not Detected", or ND.

VI. COMPLIANCE DETERMINATION

Sufficient sampling and analysis is required to determine compliance with the effluent limitations.

1. Compliance with Single-Constituent Effluent Limitations

   Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section 3 below) in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level.

2. Compliance with Effluent Limitations expressed as a Sum of Several Constituents

   Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

3. Multiple Sample Data Reduction

   The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported Minimum Level). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

VII. POLLUTANT MINIMIZATION PROGRAM

The 2001 California Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of Order No. R3-2004-0122, no known evidence was available that would require the discharger to immediately develop and conduct a PMP. The Regional Board will notify the discharger in writing if such a program becomes necessary. The Ocean Plan PMP language is included herein to provide guidance in the event that a PMP must be developed and implemented by the discharger. The discharger must notify the Regional Board in writing within 30 days of its awareness that a PMP is necessary.

1. Pollutant Minimization Program Goal

   The goal of the Pollutant Minimization Program is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures, in order to maintain the effluent concentration at or below the effluent limitation.

   Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The completion and implementation of a Pollution Prevention Plan, required in accordance with California Water Code Section 13263.3 (d), will fulfill the Pollution Minimization Program requirements.

2. Determining the Need for a Pollutant Minimization Program

   a. The discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:

      (i) The calculated effluent limitation is less than the reported Minimum Level.

      (ii) The concentration of the pollutant is reported as DNQ.

      (iii) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

   b. Alternatively, the discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:

      (i) The calculated effluent limitation is less than the Method Detection Limit (MDL).

      (ii) The concentration of the pollutant is reported as ND.

      (iii) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.

3. Regional Boards may include special provisions in the discharge requirements to require the gathering of evidence to determine whether the pollutant is present in the effluent at levels above the calculated effluent limitation. Examples of evidence may include:

   a. Health advisories for fish consumption;

   b. Presence of whole effluent toxicity;

   c. Results of benthic or aquatic organism tissue sampling;

   d. Sample results from analytical methods more sensitive than methods included in the permit (in accordance with the Ocean Plan, Chapter III, Section C.4.b, *Deviations from Minimum Levels in Appendix II* [included above in Section III, *Minimum Levels*]); or

   e. The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL.

4. Elements of a Pollutant Minimization Program

   The Regional Board may consider cost-effectiveness when establishing the requirements of a Pollutant Minimization Program. The program shall include actions and submittals acceptable to the Regional Board including, but not limited to, the following:

   a. An annual review and semi-annual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;

   b. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;

   c. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;

   d. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,

   e. An annual status report that shall be sent to the Regional Board including:

      (i) All Pollutant Minimization Program monitoring results for the previous year;

      (ii) A list of potential sources of the reportable pollutant;

      (iii) A summary of all action taken in accordance with the control strategy; and,

      (iv) A description of actions to be taken in the following year.

VIII. BIOSOLIDS MONITORING, REPORTING, AND NOTIFICATION

Biosolids Monitoring

1. 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. 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 the dewatered biosolids conveyor belt). The sample shall be documented to show it is representative of biosolids from the facility.

   Biosolids shall be tested for the metals required 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 [1] (dry metric tons per 365-day period)	Frequency [2]
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)

[1] 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 City's biosolids are directly land applied without further treatment by another preparer, biosolids 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).

[2] 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 March 11, 2004 Report of Waste Discharge / Application, 1,718 dry metric tons of biosolids are generated per 365-day period. The Permittee will therefore conduct biosolids sampling once every 60 days (six 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. Biosolids monitoring requirements are summarized in Table 15 below.

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]

TABLE 15: Minimum Biosolids Monitoring

Parameter	Units	Sample Type	Min. Analysis Frequency
Quantity	Tons (and yd^3)	Measured	As Transported
Disposal Location	--	--	As Transported
Moisture	%	Composite Sample	Once per 60 days (Feb, Apr, June, Aug, Oct, Dec)
pH	pH Units	"	"
Arsenic	mg/kg (dry weight)	"	"
Cadmium	"	"	"
Copper	"	"	"
Lead	"	"	"
Molybdenum	"	"	"
Mercury	"	"	"
Nickel	"	"	"
Selenium	"	"	"
Zinc	"	"	"
Silver	"	"	"
Chromium	"	"	"
Total Kjeldahl nitrogen [1]	"	"	"
Ammonia (as N) [1]	"	"	"
Nitrate (as N) [1]	"	"	"
Total Phosphorus [1]	"	"	"
Grease & Oil	"	"	Annually [2]
"Priority Pollutants" [3]	"	"	Annually [2]
Paint Filter Test (As per SW-846, Method 9095 - Required only if sludge is disposed in a landfill)	"	"	Once per 60 days (Feb, Apr, June, Aug, Oct, Dec)

[1] Once per 60 days if the City's biosolids are directly land applied without further treatment by another preparer; otherwise, annually.

[2] Coordinated with effluent sampling each year

[3] Listed in MRP Tables 3, 4, 5, and 6

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" (PFRP), 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 City 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 of each year** (per USEPA guidance and 40 CFR 503) 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 City 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, applier, 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 93401-7906

IX. INFLOW / INFILTRATION AND SPILL PREVENTION REPORTING

The City shall provide annual reports no later than March 31st, in accordance with Order No. R3-2004-0122, Section D.17, *Wastewater Collection System Requirements,* **Infiltration/Inflow and Spill Prevention Measures – Requirements D.11 through D.17.**

X. PRETREATMENT PROGRAM REPORTING

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

Annual Reporting

By March 31st of each year, the Permittee shall submit an annual report to the Regional Board, State Board, and USEPA describing the Permittee's pretreatment activities over the previous calendar 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 samples of the treatment facility's influent and effluent for those pollutants USEPA has identified under Section 307(a) of the CWA which are known or suspected to be discharged by industrial users. The Discharger is not required to sample and analyze for asbestos until USEPA promulgates an applicable analytical technique under 40 CFR Part 136.

   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 the dewatered biosolids conveyor belt). 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 specified in the required monitoring program for the treatment facility. 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.

2. A discussion of upset, interference, or pass-through incidents, if any, at the POTW which the Permittee knows or suspects were caused by industrial users of the POTW system. The discussion shall include the cause(s) of the incidents, corrective actions taken, and the name and address of the industrial user(s) responsible. Discussions shall also include a review of applicable pollutant limitations to determine whether any additional limitations or changes to existing requirements may be necessary to prevent upset, pass-through, interference, or noncompliance with biosolids disposal requirements.

3. The cumulative number of industrial users that the Permittee has notified regarding Baseline Monitoring Reports, and the cumulative number of industrial user responses.

4. An updated list of the Permittee's industrial users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The Permittee shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to Federal Categorical Standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local discharge limitations that are more stringent than the Federal Categorical Standards. The Permittee shall also list the non-categorical industrial users that are subject only to local discharge limitations. The Permittee shall characterize the compliance status of each industrial user by employing the following descriptions:

    a. In compliance with Baseline Monitoring Report requirements (where applicable);

    b. Consistently achieving compliance;

    c. Inconsistently achieving compliance;

    d. Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);

    e. On a schedule to achieve compliance (include the date final compliance is required);

    f. Not achieving compliance and not on a compliance schedule; or

    g. 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 description of any significant changes in operating the pretreatment program which differ from the information in the Permittee's Approved POTW Pretreatment Program, including but not limited to changes concerning:

   a. the program's administrative structure;

   b. local industrial discharge limitations;

   c. monitoring program or monitoring frequencies;

   d. legal authority or enforcement policy;

   e. funding mechanisms;

   f. resource requirements; or,

   g. staffing levels.

8. A summary of the annual pretreatment budget, including the costs 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 methods and a discussion of any concerns not described elsewhere in the report.

11. 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.

Quarterly Reporting

By May 1st, August 1st, November 1st, and February 1st of each year, quarterly reports describing the compliance status of any industrial user characterized by descriptions in Items 4(c) through (g) above shall be submitted to the Regional Board, State Board, and USEPA. The report shall identify the specific compliance status of each applicable industrial user. Quarterly reports shall briefly describe POTW compliance with pretreatment audit or compliance inspection requirements. If none of the aforementioned conditions exist, at a minimum, 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 only. This quarterly reporting requirement shall commence upon issuance of this Order and Permit. Note that the fourth quarterly report may be incorporated in the annual report (each due no later than February 1st of each year).

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. 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.

XII. 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_5.

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** 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***.

XIII. 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, and hereby due no later than March 1 rather than January 30) shall include a summary of lift station and collection system overflows, their causes, corrective actions taken, and corrective actions planned.

Monitoring reports shall be submitted to the Regional Board in accordance with Table 16 below. The Discharger shall arrange data in tabular form so the date, constituents, concentrations, and all other required analytical data are readily discernible. The data shall be summarized to demonstrate the compliance status with Waste Discharge Requirements Order No. R3-2004-0122.

TABLE 16: Reporting Schedule Summary

Monitoring Report	Order / MRP Section	Report Due No Later Than
Continuous, Daily, Weekly, or Monthly influent / effluent monitoring data	MRP Tables 1 and 2	The first day of the second month following the month of sampling (e.g., reports for monitoring conducted in January are due no later than March 1)
Quarterly influent / effluent monitoring data	MRP Table 2	May 1, for January – March August 1, for April – June November 1, for July – September February 1, for October – December
Annual influent / effluent monitoring data	MRP Tables 1, 3, 4, 5, and 6	September 1, 2005; August 1, 2006; July 1, 2007; June 1, 2008; and May 1, 2009
Annual Summary Report	Standard Provision C.16	March 31
Receiving Water bacterial monitoring data	MRP Section III.A	14 days after each sampling event
Annual Ocean Outfall and Diffuser inspection	MRP Section III.B	60 days following the inspection, and; March 31 (as summary in the Annual Summary Report)
2007 Bottom Sediment and Benthic Biota Sampling	MRP Sections III.C, D, and E	March 31
Annual Biosolids Report	MRP Section VIII.9	February 19 (to USEPA) March 31 (optional date for copy submitted to Regional Board)
Annual Inflow / Infiltration and Spill Prevention Report	MRP Section IX, Order Section D.17	March 31

TABLE 16: Reporting Schedule Summary

Monitoring Report	Order / MRP Section	Report Due No Later Than
Quarterly Pretreatment Program Report	MRP Section X	May 1, for January – March August 1, for April – June November 1, for July – September February 1, for October – December
Annual Pretreatment Program Report	MRP Section X	March 31
Wastewater Collection System Overflow Cleanup Protocol Monitoring Program	Order Section D.6	March 1, 2005
Desalination Facility Brine Toxicity Testing	MRP Table 2, Footnote 10	45 days after commencing brine discharge
Final Wastewater Collection System Management Plan	Order Section D, and MRP Attachment 1	October 1, 2007 (please see MRP Attachment 1 for other milestone dates)
Report of Waste Discharge / Application	MRP Section XIII and Order Section H.4	April 22, 2009

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 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.

ORDERED BY:_____

Roger W. Briggs
Executive Officer

_____

Date

S:\NPDES\NPDES Facilities\Santa Barbara Co\Santa Barbara\2004 Permit\SB MRP R3-2004-0122.doc
Task: 102-01
File: Discharger Correspondence; Santa Barbara City PWD / El Estero WWTP