APPENDIX A

ANALYSIS OF PRIORITY POLLUTANTS

A. DETERMINATION OF AMBIENT BACKGROUND CONCENTRATIONS

The permittee must analyze the effluent and the receiving water for all of the priority pollutants listed in Table A1-A4 of this Appendix and submit the data with the Report of Waste Discharge. The following 126 priority pollutants should be sampled concurrently with the other applicable compounds as described in Part C. Report of Waste Discharge, items 3.d and 3.e.

If **New Dischargers** discover pollutants in the effluent that would disqualify them from coverage under this general permit, but still wish to apply for coverage under this general permit, they must make the necessary system modifications to meet the terms of this Order before they shall be permitted to discharge. If **Existing Dischargers** still wish to apply for coverage under this general permit, they must submit proposed system modifications to the Regional Water Board within 60 calendar days from the date that the detection was found. The **Existing Discharger** then must make the necessary system modifications and submit a new complete round of analytical data (for the compounds listed in Tables A1-A4 of this Appendix) within 60 calendar days of Regional Water Board approval. If the system cannot be modified to meet the terms of this Order, the discharge must cease upon this determination by the Regional Water Board and an individual permit or an approved alternative disposal method must be developed. In any case, if the Regional Water Board deems it necessary to cease the discharge for any reason, the permittee shall immediately cease the discharge.

B. ANALYTICAL REPORTING

The permittee shall report the analytical results as follows:

1. Sample results that are greater or equal to the minimum reporting limit (MRL) (listed in Tables A1-A4 of this Appendix) shall be reported as quantified, including any data qualifiers and definitions;
2. Sample results that are less than the MRL but greater than the minimum detection limit (MDL), shall be reported as estimated. This data must also be qualified as an estimated value.
3. Sample results that are less than the MDL are to be reported as "Not Detected" or "ND" with the MDL also reported.

The MRLs listed in Tables A1-A4 represent the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. However, during sample preparation common analytical practices sometimes require dilution, extraction, or concentration of samples. This will create an additional "method-specific factor", some of which are listed in the following table:

Substance or Grouping	Method-Specified Treatment	Most Common Method Specific Factor(s)
Volatile Organics	No differential treatment	1.0
Semi-Volatile Organics	Samples concentrated by extraction	1,000.0
Metals	Samples diluted or concentrated	0.5, 2.0, and 4.0
Pesticides	Samples concentrated by extraction	100.0

Reference: "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", March 2, 2000. Page 23.

Other factors may be applied to the MRL, depending on the specific sample preparation steps employed (e.g. matrix effects, high levels of pollutants). In such cases, this additional factor must be applied in the computation of the MRL.

Permittees are to instruct laboratories to establish calibration standards so the MRL value (or it's equivalent if adjusted with a method specific factor), is the lowest calibration standard. At no time is the permittee to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. The laboratory may employ a calibration standard lower than the MRL values listed in Tables A1-A4 (or the value as adjusted for method specific factors).

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

TABLE A1: VOLATILE SUBSTANCES			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
1,1-Dichloroethane	75-34-3	0.5	EPA 8260
1,1-Dichloroethene	75-35-4	0.5	EPA 8260
1,1,1-Trichloroethane	71-55-6	0.5	EPA 8260
1,1,2-Trichloroethane	79-00-5	0.5	EPA 8260
1,1,2,2-Tetrachloroethane	79-34-5	0.5	EPA 8260
1,2-Dichlorobenzene	95-50-1	0.5	EPA 8260
1,2-Dichloroethane	107-06-2	0.5	EPA 8260
1,2-Dichloropropane	78-87-5	0.5	EPA 8260
1,3-Dichlorobenzene	541-73-1	0.5	EPA 8260
1,3-Dichloropropene	542-75-6	0.5	EPA 8260
1,4-Dichlorobenzene	106-46-7	0.5	EPA 8260
Acrolein	107-02-8	2	EPA 8260
Acrylonitrile	107-13-1	2	EPA 8260
Benzene	71-43-2	0.5	EPA 8260
Bromoform	75-25-2	0.5	EPA 8260
Bromomethane	74-83-9	1	EPA 8260
Carbon Tetrachloride	56-23-5	0.5	EPA 8260
Chlorobenzene	108-90-7	0.5	EPA 8260
Chlorodibromomethane	124-48-1	0.5	EPA 8260

TABLE A1: VOLATILE SUBSTANCES			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
Chloroethane	75-00-3	0.5	EPA 8260
Chloroform	67-66-3	0.5	EPA 8260
Chloromethane	74-87-3	0.5	EPA 8260
Dichlorobromomethane	75-27-4	0.5	EPA 8260
Dichloromethane	75-09-2	0.5	EPA 8260
Ethylbenzene	100-41-4	0.5	EPA 8260
Tetrachloroethene	127-18-4	0.5	EPA 8260
Toluene	108-88-3	0.5	EPA 8260
trans-1,2-Dichloroethylene	156-60-5	0.5	EPA 8260
Trichloroethene	79-01-6	0.5	EPA 8260
Vinyl Chloride	75-01-4	0.5	EPA 8260

a. Source of listed MRLs is the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", March 2, 2000. Appendix 4, Table 2a.

TABLE A2: SEMI-VOLATILE SUBSTANCES			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
1,2-Benzanthracene	56-55-3	5	EPA 8270
1,2-Dichlorobenzene	95-50-1	2	EPA 8270
1,2-Diphenylhydrazine	122-66-7	1	EPA 8270
1,2,4-Trichlorobenzene	120-82-1	5	EPA 8270
1,3-Dichlorobenzene	541-73-1	1	EPA 8270
1,4-Dichlorobenzene	106-46-7	1	EPA 8270
2-Chlorophenol	95-57-8	5	EPA 8270
2,4-Dichlorophenol	120-83-2	5	EPA 8270
2,4-Dimethylphenol	105-67-9	2	EPA 8270
2,4-Dinitrophenol	51-28-5	5	EPA 8270
2,4-Dinitrotoluene	121-14-2	5	EPA 8270
2,4,6-Trichlorophenol	88-06-2	10	EPA 8270
2,6-Dinitrotoluene	606-20-2	5	EPA 8270
2-Nitrophenol	88-75-5	10	EPA 8270
2-Chloroethyl vinyl ether	110-7-58	1	EPA 8270
2-Chloronaphthalene	91-58-7	10	EPA 8270
3,3-Dichlorobenzidine	91-94-1	5	EPA 8270
3,4-Benzofluoranthene	205-99-2	10	EPA 8270
4-Chloro-3-methylphenol	59-50-7	1	EPA 8270
4,6-Dinitro-2-methylphenol	534-52-1	5	EPA 8270
4-Nitrophenol	100-02-7	10	EPA 8270
4-Bromophenyl phenyl ether	101-55-3	5	EPA 8270
4-Chlorophenyl phenyl ether	7005-72-3	5	EPA 8270

TABLE A2: SEMI-VOLATILE SUBSTANCES			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
Acenaphthene	83-32-9	1	EPA 8270
Acenaphthylene	208-96-8	10	EPA 8270
Anthracene	120-12-7	10	EPA 8270
Benzidine	92-87-5	5	EPA 8270
Benzo(a)pyrene	50-32-8	10	EPA 8270
Benzo(g,h,i)perylene	191-24-2	5	EPA 8270
Benzo(k)fluoranthene	207-08-9	10	EPA 8270
Bis(2-chloroethoxy)methane	111-91-1	5	EPA 8270
bis(2-chloroethyl)ether	111-44-4	1	EPA 8270
bis(2-Chloroisopropyl)ether	108-60-1	2	EPA 8270
bis(2-Ethylhexyl)phthalate	117-81-7	5	EPA 8270
Butyl benzyl phthalate	85-68-7	10	EPA 8270
Chrysene	218-01-9	10	EPA 8270
Di-n-Butyl phthalate	84-74-2	10	EPA 8270
Di-n-Octyl phthalate	117-84-0	10	EPA 8270
Dibenzo(a,h)-anthracene	53-70-3	10	EPA 8270
Diethyl phthalate	84-66-2	2	EPA 8270
Dimethyl phthalate	131-11-3	2	EPA 8270
Fluoranthene	206-44-0	1	EPA 8270
Fluorene	86-73-7	10	EPA 8270
Hexachloro-cyclopentadiene	77-47-4	5	EPA 8270
Hexachlorobenzene	118-74-1	1	EPA 8270
Hexachlorobutadiene	87-68-3	1	EPA 8270
Hexachloroethane	67-72-1	1	EPA 8270
Indeno(1,2,3,cd)-pyrene	193-39-5	10	EPA 8270
Isophorone	78-59-1	1	EPA 8270
N-Nitroso-diphenyl amine	86-30-6	1	EPA 8270
N-Nitroso-dimethyl amine	62-75-9	5	EPA 8270
N-Nitroso-di n-propyl amine	621-64-7	5	EPA 8270
Naphthalene	91-20-3	1	EPA 8270
Nitrobenzene	98-95-3	1	EPA 8270
Pentachlorophenol	87-86-5	5	EPA 8270
Phenanthrene	85-01-8	5	EPA 8270
Phenol	108-95-2	1	EPA 8270
Pyrene	129-00-0	10	EPA 8270

a. Source of listed MRLs is the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", March 2, 2000. Appendix 4, Table 2b.

TABLE A3: INORGANICS			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
Antimony	7440-36-0	0.5	EPA 200.8
Arsenic	7440-38-2	2	EPA 200.8
Beryllium	7440-41-7	0.5	EPA 200.8
Cadmium	7440-43-9	0.25	EPA 200.8
Chromium (total)	7440-47-3	0.5	EPA 200.8
Chromium (VI)	18540-29-9	5.0	EPA 7196A
Copper	7440-50-8	0.5	EPA 200.8
Cyanide	57-12-5	10	EPA 335.2
Lead	7439-92-1	0.5	EPA 200.8
Mercury	7439-97-6	0.2	EPA 245.1
Nickel	7440-02-0	1	EPA 200.8
Selenium	7782-49-2	2	EPA 200.8
Silver	7440-22-4	0.25	EPA 200.8
Thallium	7440-28-0	1	EPA 200.8
Zinc	7440-66-6	1	EPA 200.8

a. Source of listed MRLs is the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", March 2, 2000. Appendix 4, Table 2c.

TABLE A4: PESTICIDES & PCBs			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
4,4'-DDD	72-54-8	0.05	EPA 8081A
4,4'-DDE	72-55-9	0.05	EPA 8081A
4,4'-DDT	50-29-3	0.01	EPA 8081A
a-Endosulfan	959-98-8	0.02	EPA 8081A
a-Hexachlorocyclohexane (alpha-BHC)	319-84-6	0.01	EPA 8081A
Aldrin	309-00-2	0.005	EPA 8081A
b-Endosulfan	33213-65-9	0.01	EPA 8081A
b-Hexachlorocyclohexane (beta-BHC)	319-85-7	0.005	EPA 8081A
Chlordane	12789-03-6	0.1	EPA 8081A
d-Hexachlorocyclohexane (delta-BHC)	319-86-8	0.005	EPA 8081A
Dieldrin	60-57-1	0.01	EPA 8081A
Endosulfan Sulfate	1031-07-8	0.05	EPA 8081A
Endrin	72-20-8	0.01	EPA 8081A
Endrin Aldehyde	7421-93-4	0.01	EPA 8081A
Heptachlor	76-44-8	0.01	EPA 8081A
Heptachlor Epoxide	1024-57-3	0.01	EPA 8081A
g-Hexachlorocyclohexane (gamma-BHC)	58-89-9	0.02	EPA 8081A
PCB 1016 (Aroclor)	12674-11-2	0.5	EPA 8082
PCB 1221 (Aroclor)	11104-28-2	0.5	EPA 8082

TABLE A4: PESTICIDES & PCBs			
Compound	Chemical Abstract Service (CAS) Number	Minimum Reporting Limit (MRL)[a] (ug/l)	Suggested Analytical Method
PCB 1232 (Aroclor)	11141-16-5	0.5	EPA 8082
PCB 1242 (Aroclor)	53469-21-9	0.5	EPA 8082
PCB 1248 (Aroclor)	12672-29-6	0.5	EPA 8082
PCB 1254 (Aroclor)	11097-69-1	0.5	EPA 8082
PCB 1260 (Aroclor)	11096-82-5	0.5	EPA 8082
Toxaphene	8001-35-2	0.5	EPA 8081A

a. Source of listed MRLs is the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", March 2, 2000. Appendix 4, Table 2d.