

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
HYPERION TREATMENT PLANT (OUTFALL 002)  
(CA0109991, CI-1492)

Constituent	Unit	Jan-99	Apr-99	Jul-99	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Apr-02
<b>Water Quality Objectives</b>															
<b>Marine Aquatic Life Protection</b>															
Phenolic Compounds (non-chlorinated)	µg/L	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
PHENOL	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-NITROPHENOL	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
2,4-DIMETHYLPHENOL	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
2,4-DINITROPHENOL	µg/L	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31
4-NITROPHENOL	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4,6-DINITRO-2-METHYLPHENOL	µg/L	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
Phenolic Compounds (chlorinated)	µg/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
2-CHLOROPHENOL	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2,4-DICHLOROPHENOL	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-CHLORO-3-METHYLPHENOL	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2,4,6-TRICHLOROPHENOL	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PENTACHLOROPHENOL	µg/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
ENDOSULFAN	µg/L	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
ENDOSULFAN - ALPHA	µg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
ENDOSULFAN - BETA	µg/L	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
ENDOSULFAN SULFATE	µg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
ENDRIN	µg/L	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
HCH	µg/L	<b>0.014</b>	<b>0.024</b>	<b>0.022</b>	<b>0.01</b>	<b>0.01</b>	<b>0.017</b>	<b>0.013</b>	<b>0.016</b>	<b>0.031</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>
ALPHA-BHC	µg/L	<0.001	<0.001	0.002	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BETA-BHC	µg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
GAMMA-BHC	µg/L	0.014	0.024	0.022	0.01	0.01	0.017	0.013	0.012	0.031	<0.001	<0.001	<0.001	<0.001	<0.001
DELTA-BHC	µg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
<b>Human Health Protection (noncarcinogens)</b>															
ACROLEIN	µg/L	<4.46	<4.46	<4.46	<4.46	<4.46	<4.46	<4.46	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40
ANTIMONY	µg/L	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>	<b>10</b>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>
BIS(2-CL-ETHOXY)METHANE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit												
		Jul-02	Oct-02	Jan-03	Apr-03	Jun-03	Jul-03	Oct-03	January 1, 2004	January 27, 2004	Apr-04	Jun-04	
<b>Water Quality Objectives</b>													
<b>Marine Aquatic Life Protection</b>													
Phenolic Compounds (non-chlorinated)	µg/L	<1	<4	<4	<4		<4	1.9	<4	0.3	<4	<4	
PHENOL	µg/L	<1	<1	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
2-NITROPHENOL	µg/L	<1	<2	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
2,4-DIMETHYLPHENOL	µg/L	<1	<2	<0.17	<0.17		<0.17	1.9	<0.17	0.3	<0.17	<0.17	
2,4-DINITROPHENOL	µg/L	<1	<2	<0.21	<0.21		<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	
4-NITROPHENOL	µg/L	<1	<4	<0.06	<0.06		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	
4,6-DINITRO-2-METHYLPHENOL	µg/L	<1	<2	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
Phenolic Compounds (chlorinated)	µg/L	<1	<2	<0.4	0.46		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
2-CHLOROPHENOL	µg/L	<1	<1	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
2,4-DICHLOROPHENOL	µg/L	<1	<1	<0.09	0.46		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
4-CHLORO-3-METHYLPHENOL	µg/L	<1	<2	<0.18	<0.18		<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
2,4,6-TRICHLOROPHENOL	µg/L	<1	<1	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
PENTACHLOROPHENOL	µg/L	<1	<1	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
ENDOSULFAN	µg/L	<0.002	<0.002	<0.0011	<0.004		<0.004	<0.004	<0.004	<0.003	<0.004	<0.004	
ENDOSULFAN - ALPHA	µg/L	<0.001	<0.001	<0.0014	<0.0014		<0.0014	<0.0014	<0.0014	<0.001	<0.0014	<0.0014	
ENDOSULFAN - BETA	µg/L	<0.001	<0.001	<0.0011	<0.0011		0.002	<0.0011	<0.001	<0.002	<0.001	<0.001	
ENDOSULFAN SULFATE	µg/L	<0.002	<0.002	<0.004	<0.004		<0.004	<0.004	<0.004	<0.003	<0.004	<0.004	
ENDRIN	µg/L	<0.001	<0.001	<0.007	<0.007		<0.007	0.009	<0.007	<0.005	<0.007	<0.007	
HCH	µg/L	<u>0.0005</u>	<u>0.0045</u>	<u>0.00115</u>	<u>0.00115</u>		<u>0.006</u>	<u>0.005</u>	<u>0.00115</u>	<u>0.003</u>	<u>0.00115</u>	<u>0.00115</u>	
ALPHA-BHC	µg/L	<0.001	<0.001	<0.0023	<0.0023		<0.0023	<0.0023	<0.0023	<0.001	<0.0023	<0.0023	
BETA-BHC	µg/L	<0.001	<0.001	<0.0019	<0.0019		<0.0019	<0.0019	<0.0019	<0.002	<0.0019	<0.0019	
GAMMA-BHC	µg/L	<0.001	0.0045	<0.0020	<0.0020		0.006	0.005	<0.002	0.003	<0.002	<0.002	
DELTA-BHC	µg/L	<0.001	<0.001	<0.0007	<0.0007		<0.0007	<0.0007	<0.0007	<0.001	<0.0007	<0.0007	
<b>Human Health Protection (noncarcinogens)</b>													
ACROLEIN	µg/L	<0.9	<0.9	<0.76	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
ANTIMONY	µg/L	<u>2.5</u>	<u>2.5</u>	<u>0.65</u>	<u>0.65</u>		<u>2</u>	<u>1.24</u>	<u>1.88</u>		<u>0.96</u>	<u>0.91</u>	
BIS(2-CL-ETHOXY)METHANE	µg/L	<1	<1	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Number of Nondetect	Number of Samples	Percent of Nondetect	Maximum Detected Effluent Concentration	Maximum Reported Effluent Concentration (max MDL if 100% ND or max MDL > max detect)	Standard Deviation	Mean	CV (set as 0.6 if nondetect >80%)	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Seawater Concentration	Projected Maximum Receiving Water Concentration
<b>Water Quality Objectives</b>														
<b>Marine Aquatic Life Protection</b>														
Phenolic Compounds (non-chlorinated)	µg/L	22	24	92%	1.9	31			0.6	2.16166	67.0113398	84		0.788369
PHENOL	µg/L													
2-NITROPHENOL	µg/L													
2,4-DIMETHYLPHENOL	µg/L													
2,4-DINITROPHENOL	µg/L													
4-NITROPHENOL	µg/L													
4,6-DINITRO-2-METHYLPHENOL	µg/L													
Phenolic Compounds (chlorinated)	µg/L	23	24	96%	0.46	8			0.6	2.16166	17.293249	84		0.20345
2-CHLOROPHENOL	µg/L													
2,4-DICHLOROPHENOL	µg/L													
4-CHLORO-3-METHYLPHENOL	µg/L													
2,4,6-TRICHLOROPHENOL	µg/L													
PENTACHLOROPHENOL	µg/L													
ENDOSULFAN	µg/L	24	24	100%		0.004			0.6	2.16166	0.00864662	84		0.000102
ENDOSULFAN - ALPHA	µg/L													
ENDOSULFAN - BETA	µg/L													
ENDOSULFAN SULFATE	µg/L													
ENDRIN	µg/L	23	24	96%	0.009	0.009			0.6	2.16166	0.01945491	84		0.000229
HCH	µg/L	11	24	46%	0.031	0.031	0.0088	0.0078	1.1306	3.53052	0.10944627	84		0.001288
ALPHA-BHC	µg/L													
BETA-BHC	µg/L													
GAMMA-BHC	µg/L													
DELTA-BHC	µg/L													
<b>Human Health Protection (noncarcinogens)</b>														
ACROLEIN	µg/L	25	25	100%		4.46			0.6	2.1319	9.50825851	84		0.111862
ANTIMONY	µg/L	17	23	74%	10	10	2.0475	2.8604	0.7158	2.48695	24.869546	84		0.292583
BIS(2-CL-ETHOXY)METHANE	µg/L	24	24	100%		1			0.6	2.16166	2.16165612	84		0.025431

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Ocean Plan Water Quality Objectives	REASONABLE POTENTIAL (RP)	Calculated Effluent Limitations (EffL)	Maximum MDL Reported (Jan 2003 - Jun 2004)	Performance Goals (PG) = MDLx 5 (for carcinogens) or 10 (for noncarcinogens)	PG = 95th Percentile (if nondetect < 80%)	Maximum Detected Effluent Concentration	Proposed Effluent Limits	Possible PG	Proposed PG	Basis for PG
<b>Water Quality Objectives</b>												
<b>Marine Aquatic Life Protection</b>												
Phenolic Compounds (non-chlorinated)	µg/L	30	No	2550	<b>0.4</b>	2		1.9	No Limit	1.9	<b>1.9</b>	Max eff conc
PHENOL	µg/L											
2-NITROPHENOL	µg/L											
2,4-DIMETHYLPHENOL	µg/L											
2,4-DINITROPHENOL	µg/L											
4-NITROPHENOL	µg/L											
4,6-DINITRO-2-METHYLPHENOL	µg/L											
Phenolic Compounds (chlorinated)	µg/L	1	No	85	<b>0.4</b>	2		0.46	No Limit	0.46	<b>0.46</b>	Max eff conc
2-CHLOROPHENOL	µg/L											
2,4-DICHLOROPHENOL	µg/L											
4-CHLORO-3-METHYLPHENOL	µg/L											
2,4,6-TRICHLOROPHENOL	µg/L											
PENTACHLOROPHENOL	µg/L											
ENDOSULFAN	µg/L	0.009	No	0.765	<b>0.004</b>	0.02		ND	No Limit	0.02	<b>0.02</b>	from MDL
ENDOSULFAN - ALPHA	µg/L											
ENDOSULFAN - BETA	µg/L											
ENDOSULFAN SULFATE	µg/L											
ENDRIN	µg/L	0.002	No	0.17	0.007	0.035		0.009	No Limit	0.009	<b>0.009</b>	Max eff conc
HCH	µg/L	0.004	No	0.34	<b>0.0023</b>	0.0115	<b>0.026</b>	0.031	No Limit	0.026	<b>0.026</b>	95th percentile
ALPHA-BHC	µg/L											
BETA-BHC	µg/L											
GAMMA-BHC	µg/L											
DELTA-BHC	µg/L											
<b>Human Health Protection (noncarcinogens)</b>												
ACROLEIN	µg/L	220	No	18700	2	20		ND	No Limit	20	<b>20</b>	from MDL
ANTIMONY	µg/L	1200	No	102000	1.24	12.4	<b>5</b>	10	No Limit	5	<b>5</b>	95th percentile
BIS(2-CL-ETHOXY)METHANE	µg/L	4.4	No	374	0.05	0.5		ND	No Limit	0.5	<b>0.5</b>	from MDL

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit																
		Jan-99	Apr-99	Jul-99	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Apr-02		
BIS(2-CL-ISOPROPYL)ETHER	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
CHROMIUM (total)																	
CHLOROBENZENE	µg/L	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113		
DI-N-BUTYL PHTHALATE	µg/L	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>		
DICHLOROBENZENES (BNA)	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
1,2-DICHLOROBENZENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
1,3-DICHLOROBENZENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
DIETHYL PHTHALATE	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
DIMETHYL PHTHALATE	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
2-METHYL-4,6-DINITROPHENOL	µg/L	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6		
2,4-DINITROPHENOL	µg/L	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31	<31		
ETHYL BENZENE	µg/L	0.17	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062		
FLUORANTHENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
HEXACHLOROCYCLOPENTADIENE	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
NITROBENZENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
THALLIUM	µg/L	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	5	<u>2.5</u>	<u>2.5</u>	<u>2.5</u>	
TOLUENE	µg/L	<u>0.03</u>	<u>0.29</u>	<u>0.03</u>	<u>0.397</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.03</u>	<u>0.234</u>	<u>0.163</u>	<u>0.165</u>	<u>0.176</u>	<u>0.0305</u>		
Tributyltin*	ng/L	7	3	<u>1</u>	<u>1</u>	2	<u>1</u>	<u>1</u>	<u>1</u>	28	6	2	<u>1</u>	4	4		
1,1,1-TRICHLOROETHANE	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067		
<b>Human Health Protection (carcinogens)</b>																	
ACRYLONITRILE	µg/L	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<0.72	<2.21	<2.21	<2.21	<2.21	<2.21	<2.21	<2.21		
ALDRIN*	µg/L	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008		
BENZENE	µg/L	<0.064	<0.064	<0.064	<0.064	<0.064	0.36	<0.087	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090	<0.090		
BENZIDINE*	µg/L	<47	<47	<47	<47	<47	<47	<47	<47	<47	<47	<47	<47	<47	<47		
BERYLLIUM	µg/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
BIS(2-CHLOROETHYL)ETHER	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
BIS(2-ETHYLHEXYL) PHTHALATE	µg/L	<u>17.4</u>	<u>12.6</u>	<u>4.87</u>	<u>8.28</u>	<u>7.15</u>	<u>1.5</u>	<u>3.1</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>3.9</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	
CARBON TETRACHLORIDE	µg/L	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	1.289	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114		

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit												
		Jul-02	Oct-02	Jan-03	Apr-03	Jun-03	Jul-03	Oct-03	January 1, 2004	January 27, 2004	Apr-04	Jun-04	
BIS(2-CL-ISOPROPYL)ETHER	µg/L	<1	<1	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
CHROMIUM (total)													
CHLOROBENZENE	µg/L	<0.2	<0.2	<0.10	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	
DI-N-BUTYL PHTHALATE	µg/L	<u>1.5</u>	<u>1.5</u>	<u>0.25</u>	<u>0.035</u>		<u>0.035</u>	<b>0.77</b>	<b>0.65</b>	<b>0.22</b>	<b>0.35</b>	<b>0.18</b>	
DICHLOROBENZENES (BNA)	µg/L	<1	<1	<0.06	<0.06		0.15	0.17	<0.06	<0.06	<0.06	<0.06	
1,2-DICHLOROBENZENE	µg/L	<1	<1	<0.06	<0.06		0.15	0.17	<0.06	<0.06	<0.06	<0.06	
1,3-DICHLOROBENZENE	µg/L	<1	<1	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
DIETHYL PHTHALATE	µg/L	<0.3	<0.4	<0.06	<0.06		<0.06	<0.06	0.1	<0.06	<0.06	<0.06	
DIMETHYL PHTHALATE	µg/L	<0.1	<0.3	<0.27	<0.27		<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	
2-METHYL-4,6-DINITROPHENOL	µg/L	<1	<2	<0.4	<0.4		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	
2,4-DINITROPHENOL	µg/L	<1	<2	<0.21	<0.21		<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	
ETHYL BENZENE	µg/L	<0.06	<0.06	<0.12	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	
FLUORANTHENE	µg/L	<1	<1	<0.06	<0.06		<0.06	0.18	0.11	<0.06	<0.06	<0.06	
HEXACHLOROCYCLOPENTADIENE	µg/L	<1	<1	<2.9	<2.9		<2.9	<2.9	<2.9	<2.9	<2.9	<2.9	
NITROBENZENE	µg/L	<1	<2	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
THALLIUM	µg/L	<u>1</u>	<u>1</u>	<u>0.15</u>	<u>0.15</u>		<b>0.68</b>	<b>0.54</b>	<b>2.92</b>		<u>0.025</u>	<b>0.47</b>	
TOLUENE	µg/L	<u>0.1</u>	<u>0.1</u>	<u>0.04</u>	<b>0.23</b>	<b>0.78</b>	<b>0.21</b>	<b>0.32</b>	<b>0.04</b>	<b>0.22</b>	<b>0.18</b>	<b>0.6</b>	
Tributyltin*	ng/L	<u>1</u>	<u>1</u>	<u>1</u>	<u>1.6</u>		<u>1.65</u>	<b>10.0</b>	<u>0.5</u>		<u>0.5</u>		
1,1,1-TRICHLOROETHANE	µg/L	<0.07	<0.07	<0.09	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
<b>Human Health Protection (carcinogens)</b>													
ACRYLONITRILE	µg/L	<0.7	<0.7	<0.23	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	
ALDRIN*	µg/L	<0.001	<0.001	<0.0016	<0.0016		<0.0016	<0.0016	<0.0016	<0.001	<0.0016	<0.0016	
BENZENE	µg/L	<0.3	<0.3	<0.14	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	
BENZIDINE*	µg/L	<2	<2	<5	<5		<5	<5	<5	<5	<5	<5	
BERYLLIUM	µg/L	<1	<1	<0.01	<0.01		0.171	<0.006	<0.012		<0.006	0.162	
BIS(2-CHLOROETHYL)ETHER	µg/L	<1	<1	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
BIS(2-ETHYLHEXYL) PHTHALATE	µg/L	<b>3.04</b>	<b>2.02</b>	<b>6.42</b>	<b>1.86</b>		<b>0.88</b>	<b>2.51</b>	<b>1.1</b>	<b>1.8</b>	<b>1.2</b>	<b>1.7</b>	
CARBON TETRACHLORIDE	µg/L	<0.1	<0.1	<0.14	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Number of Nondetect	Number of Samples	Percent of Nondetect	Maximum Detected Effluent Concentration	Maximum Reported Effluent Concentration (max MDL if 100% ND or max MDL > max detect)	Standard Deviation	Mean	CV (set as 0.6 if nondetect >80%)	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Seawater Concentration	Projected Maximum Receiving Water Concentration
BIS(2-CL-ISOPROPYL)ETHER	µg/L	24	24	100%		3			0.6	2.16166	6.48496836	84		0.076294
CHROMIUM (total)														
CHLOROBENZENE	µg/L	25	25	100%		0.2			0.6	2.1319	0.42637931	84		0.005016
DI-N-BUTYL PHTHALATE	µg/L	18	24	75%	0.77	3	0.5914	1.1038	0.5358	2.01061	6.03182416	84		0.070963
DICHLOROBENZENES (BNA)	µg/L	22	24	92%	0.17	1.5			0.6	2.16166	3.24248418	84		0.038147
1,2-DICHLOROBENZENE	µg/L													
1,3-DICHLOROBENZENE	µg/L													
DIETHYL PHTHALATE	µg/L	23	24	96%	0.1	3			0.6	2.16166	6.48496836	84		0.076294
DIMETHYL PHTHALATE	µg/L	24	24	100%		3			0.6	2.16166	6.48496836	84		0.076294
2-METHYL-4,6-DINITROPHENOL	µg/L	24	24	100%		6			0.6	2.16166	12.9699367	84		0.152587
2,4-DINITROPHENOL	µg/L	24	24	100%		31			0.6	2.16166	67.0113398	84		0.788369
ETHYL BENZENE	µg/L	24	25	96%	0.17	0.17			0.6	2.1319	0.36242241	84		0.004264
FLUORANTHENE	µg/L	22	24	92%	0.18	1			0.6	2.16166	2.16165612	84		0.025431
HEXACHLOROCYCLOPENTADIENE	µg/L	24	24	100%		3			0.6	2.16166	6.48496836	84		0.076294
NITROBENZENE	µg/L	24	24	100%		2			0.6	2.16166	4.32331224	84		0.050862
THALLIUM	µg/L	18	23	78%	5	5	1.2051	1.9320	0.6238	2.25254	11.2626963	84		0.132502
TOLUENE	µg/L	12	25	48%	0.78	0.78	0.1888	0.1794	1.0523	3.24998	2.53498384	84		0.029823
Tributyltin*	ng/L	15	22	68%	28	28	5.9654	3.6023	1.6560	5.25491	147.13734	84		1.731028
1,1,1-TRICHLOROETHANE	µg/L	25	25	100%		0.18			0.6	2.1319	0.38374137	84		0.004515
<b>Human Health Protection (carcinogens)</b>														
ACRYLONITRILE	µg/L	25	25	100%		2.21			0.6	2.1319	4.71149132	84		0.055429
ALDRIN*	µg/L	24	24	100%		0.008			0.6	2.16166	0.01729325	84		0.000203
BENZENE	µg/L	24	25	96%	0.36	0.36			0.6	2.1319	0.76748275	84		0.009029
BENZIDINE*	µg/L	24	24	100%		47			0.6	2.16166	101.597838	84		1.195269
BERYLLIUM	µg/L	21	23	91%	0.171	1			0.6	2.19343	2.19343455	84		0.025805
BIS(2-CHLOROETHYL)ETHER	µg/L	24	24	100%		1			0.6	2.16166	2.16165612	84		0.025431
BIS(2-ETHYLHEXYL) PHTHALATE	µg/L	7	24	29%	17.4	17.4	4.0613	3.7638	1.0790	3.39247	59.0289893	84		0.694459
CARBON TETRACHLORIDE	µg/L	24	25	96%	1.289	1.289			0.6	2.1319	2.74801462	84		0.03233

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Ocean Plan Water Quality Objectives	REASONABLE POTENTIAL (RP)	Calculated Effluent Limitations (EffL)	Maximum MDL Reported (Jan 2003 - Jun 2004)	Performance Goals (PG) = MDL x 5 (for carcinogens) or 10 (for noncarcinogens)	PG = 95th Percentile (if nondetect < 80%)	Maximum Detected Effluent Concentration	Proposed Effluent Limits	Possible PG	Proposed PG	Basis for PG
BIS(2-CL-ISOPROPYL)ETHER	µg/L	1200	No	102000	0.05	0.5		ND	No Limit	0.5	<b>0.5</b>	from MDL
CHROMIUM (total)												
CHLOROBENZENE	µg/L	570	No	48450	0.12	1.2		ND	No Limit	1.2	<b>1.2</b>	from MDL
DI-N-BUTYL PHTHALATE	µg/L	3500	No	297500	0.07	0.7	<b>3.9</b>	0.77	No Limit	0.77	<b>0.77</b>	Max eff conc
DICHLOROBENZENES (BNA)	µg/L	5100	No	433500	<b>0.06</b>	0.6		0.17	No Limit	0.17	<b>0.17</b>	Max eff conc
1,2-DICHLOROBENZENE	µg/L				0.06							
1,3-DICHLOROBENZENE	µg/L				0.05							
DIETHYL PHTHALATE	µg/L	33000	No	2805000	0.06	0.6		0.1	No Limit	0.1	<b>0.1</b>	Max eff conc
DIMETHYL PHTHALATE	µg/L	820000	No	69700000	0.27	2.7		ND	No Limit	2.7	<b>2.7</b>	from MDL
2-METHYL-4,6-DINITROPHENOL	µg/L	220	No	18700	0.4	4		ND	No Limit	4	<b>4</b>	from MDL
2,4-DINITROPHENOL	µg/L	4.0	No	340	0.21	2.1		ND	No Limit	2.1	<b>2.1</b>	from MDL
ETHYL BENZENE	µg/L	4100	No	348500	0.12	1.2		0.17	No Limit	0.17	<b>0.17</b>	Max eff conc
FLUORANTHENE	µg/L	15	No	1275	0.06	0.6		0.18	No Limit	0.18	<b>0.18</b>	Max eff conc
HEXACHLOROCYCLOPENTADIENE	µg/L	58	No	4930	2.9	29		ND	No Limit	29	<b>29</b>	from MDL
NITROBENZENE	µg/L	4.9	No	416.5	0.05	0.5		ND	No Limit	0.5	<b>0.5</b>	from MDL
THALLIUM	µg/L	2	No	170	0.3	3	<b>7.8</b>	5	No Limit	5	<b>5</b>	Max eff conc
TOLUENE	µg/L	85000	No	7225000	0.08	0.8	<b>0.46</b>	0.78	No Limit	0.46	<b>0.46</b>	95th percentile
Tributyltin*	ng/L	1.4	<b>Yes</b>	<b>119</b>	3.3	33	<b>7.2</b>	28	<b>119</b>	7.2	<b>7.2</b>	95th percentile
1,1,1-TRICHLOROETHANE	µg/L	540000	No	45900000	0.18	1.8		ND	No Limit	1.8	<b>1.8</b>	from MDL
<b>Human Health Protection (carcinogens)</b>												
ACRYLONITRILE	µg/L	0.10	No	8.5	0.31	1.55		ND	No Limit	1.55	<b>1.55</b>	from MDL
ALDRIN*	µg/L	0.000022	<b>Yes</b>	<b>0.00187</b>	0.0016	0.008		ND	<b>0.00187</b>	0.008	No PG	--
BENZENE	µg/L	5.9	No	501.5	0.22	1.1		0.36	No Limit	0.36	<b>0.36</b>	Max eff conc
BENZIDINE*	µg/L	0.000069	<b>Yes</b>	<b>0.005865</b>	5	25		ND	<b>0.005865</b>	25	No PG	--
BERYLLIUM	µg/L	0.033	No	2.805	0.01	0.05		0.171	No Limit	0.05	<b>0.05</b>	from MDL
BIS(2-CHLOROETHYL)ETHER	µg/L	0.045	No	3.825	0.09	0.45		ND	No Limit	0.45	<b>0.45</b>	from MDL
BIS(2-ETHYLHEXYL) PHTHALATE	µg/L	3.5	No	297.5	0.88	4.4	<b>6.9</b>	17.4	No Limit	6.9	<b>6.9</b>	95th percentile
CARBON TETRACHLORIDE	µg/L	0.90	No	76.5	0.15	0.75		1.289	No Limit	0.75	<b>0.75</b>	from MDL

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.



Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Jan-99	Apr-99	Jul-99	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Apr-02
Chlordane*	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHLORDANE - ALPHA	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHLORDANE - GAMA	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
NONACHLOR - ALPHA	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
NONACHLOR - GAMA	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001
OXYCHLORDANE	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHLORDENE - ALPHA	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005
CHLORDENE - GAMA	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CHLORODIBROMOMETHANE	µg/L	<b>0.11</b>	<b>0.89</b>	<b>0.46</b>	<b>7.03</b>	<b>1.74</b>	<b>0.11</b>	<b>2.43</b>	<b>1.80</b>	<b>2.26</b>	<b>1.93</b>	<b>1.00</b>	<b>1.00</b>	<b>2.69</b>	<b>2.98</b>
CHLOROFORM	µg/L	<b>7.34</b>	<b>5.77</b>	<b>5.75</b>	<b>5.45</b>	<b>5.3</b>	<b>7.26</b>	<b>6.58</b>	<b>6.61</b>	<b>5.33</b>	<b>5.02</b>	<b>6.19</b>	<b>5.52</b>	<b>4.59</b>	<b>4.97</b>
DDT, total*	ng/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4,4'-DDT	ng/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4,4'-DDE	ng/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
4,4'-DDD	ng/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2,4'-DDT	ng/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2,4'-DDE	ng/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2,4'-DDD	ng/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-DICHLOROBENZENE (BNA)	µg/L	<b>3.21</b>	<b>3.24</b>	<b>0.025</b>	<b>0.025</b>	<b>0.025</b>	<b>0.025</b>	<b>0.025</b>	<b>3.42</b>	<b>3.24</b>	<b>2.8</b>	<b>3.09</b>	<b>3.93</b>	<b>0.032</b>	<b>0.032</b>
3,3'-DICHLOROENZIDINE*	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,2-DICHLOROETHANE	µg/L	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<0.072	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104
1,1-DICHLOROETHYLENE	µg/L	<0.132	<0.132	<0.132	<0.132	<0.132	<0.132	<0.132	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076
DICHLOROBROMOMETHANE	µg/L	<b>0.75</b>	<b>0.90</b>	<b>0.59</b>	<b>0.69</b>	<b>1.25</b>	<b>1.52</b>	<b>1.22</b>	<b>1.57</b>	<b>1.67</b>	<b>1.42</b>	<b>1.39</b>	<b>0.92</b>	<b>1.64</b>	<b>1.2</b>
METHYLENE CHLORIDE	µg/L	<b>0.211</b>	<b>5.72</b>	<b>5.91</b>	<b>5.72</b>	<b>8.90</b>	<b>0.211</b>	<b>6.65</b>	<b>4.64</b>	<b>10.68</b>	<b>3.12</b>	<b>2.85</b>	<b>18.06</b>	<b>3.677</b>	<b>6.113</b>
1,3-DICHLOROPROPENE	µg/L	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099
CIS-1,3-DICHLOROPROPENE	µg/L	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099
TRANS-1,3-DICHLOROPROPENE	µg/L	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<0.088	<0.088	<0.088	<0.088	<0.088	<0.088	<0.088
DIELDRIN*	µg/L	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
2,4-DINITROTOLUENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
1,2-DIPHENYLHYDRAZINE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit												
		Jul-02	Oct-02	Jan-03	Apr-03	Jun-03	Jul-03	Oct-03	January 1, 2004	January 27, 2004	Apr-04	Jun-04	
<b>Chlordane*</b>	µg/L	<0.001	<0.001	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
CHLORDANE - ALPHA	µg/L	<0.001	<0.001	<0.07	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
CHLORDANE - GAMA	µg/L	<0.001	<0.001	<0.07	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
NONACHLOR - ALPHA	µg/L	<0.001	<0.001	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
NONACHLOR - GAMA	µg/L	<0.001	<0.001	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
OXYCHLORDANE	µg/L	<0.001	<0.001	<0.08	<0.08		<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	
CHLORDENE - ALPHA	µg/L	<0.001	<0.001	--	--		--	--	--	--	--	--	
CHLORDENE - GAMA	µg/L	<0.001	<0.001	--	--		--	--	--	--	--	--	
CHLORODIBROMOMETHANE	µg/L	<b>1.26</b>	<b>1.28</b>	<b>1.33</b>	<b>2.37</b>	<b>1.47</b>	<b>1.03</b>	<b>0.81</b>	<b>1.11</b>	<b>1.73</b>	<b>1.37</b>	<b>1.79</b>	
CHLOROFORM	µg/L	<b>4.99</b>	<b>5.76</b>	<b>3.71</b>	<b>5.92</b>	<b>7.09</b>	<b>6.49</b>	<b>5.72</b>	<b>4.32</b>	<b>5.23</b>	<b>5.34</b>	<b>7.94</b>	
<b>DDT, total*</b>	ng/L	<1	<1	<6	<6		<6	<6	<6	<3	<6	<6	
4,4'-DDT	ng/L	<1	<1	<6	<6		<6	<6	<6	<2	<6	<6	
4,4'-DDE	ng/L	<1	<1	<1.8	<1.8		<1.8	<1.8	3	<2	<1.8	<1.8	
4,4'-DDD	ng/L	<1	<1	<1.7	<1.7		<1.7	<1.7	<1.7	<1	<1.7	<1.7	
2,4'-DDT	ng/L	<1	<1	<5	<5		<5	<5	<5	<3	<5	<5	
2,4'-DDE	ng/L	<1	<1	<2.7	<2.7		<2.7	<2.7	<2.7	<1	<2.7	<2.7	
2,4'-DDD	ng/L	<1	<1	<3.0	<3.0		<3.0	<3.0	<3.0	<1	<3.0	<3.0	
1,4-DICHLOROBENZENE (BNA)	µg/L	<b>0.030</b>	<b>0.030</b>	<b>0.035</b>	<b>1.88</b>		<b>2.48</b>	<b>5.29</b>	<b>0.035</b>	<b>0.035</b>	<b>0.035</b>	<b>1.95</b>	
<b>3,3'-DICHLOROBENZIDINE*</b>	µg/L	<1	<1	<0.11	<0.11		<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
1,2-DICHLOROETHANE	µg/L	<0.2	<0.2	<0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
1,1-DICHLOROETHYLENE	µg/L	<0.05	<0.05	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
DICHLOROBROMOMETHANE	µg/L	<b>1.08</b>	<b>1.22</b>	<b>1.25</b>	<b>1.38</b>	<b>1.56</b>	<b>1.03</b>	<b>0.93</b>	<b>0.98</b>	<b>1.15</b>	<b>1.14</b>	<b>1.66</b>	
METHYLENE CHLORIDE	µg/L	<b>2.16</b>	<b>23.2</b>	<b>1.7</b>	<b>3.72</b>	<b>3.25</b>	<b>2.51</b>	<b>5.35</b>	<b>0.065</b>	<b>1.89</b>	<b>2.51</b>	<b>2.93</b>	
1,3-DICHLOROPROPENE	µg/L	<0.2	<0.2	<0.18	<0.11		<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
CIS-1,3-DICHLOROPROPENE	µg/L	<0.06	<0.06	<0.13	<0.11		<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
TRANS-1,3-DICHLOROPROPENE	µg/L	<0.2	<0.2	<0.18	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
<b>DIELDRIN*</b>	µg/L	<0.001	<0.001	<0.0009	<0.0009		<0.0009	<0.0009	<0.0009	<0.001	<0.0009	<0.0009	
2,4-DINITROTOLUENE	µg/L	<1	<1	<0.08	<0.08		<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	
1,2-DIPHENYLHYDRAZINE	µg/L	<1	<1	<0.06	<0.06		<0.06	<0.06	0.18	<0.06	<0.06	<0.06	

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Number of Nondetect	Number of Samples	Percent of Nondetect	Maximum Detected Effluent Concentration	Maximum Reported Effluent Concentration (max MDL if 100% ND or max MDL > max detect)	Standard Deviation	Mean	CV (set as 0.6 if nondetect >80%)	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Seawater Concentration	Projected Maximum Receiving Water Concentration
<b>Chlordane*</b>	µg/L	24	24	100%		0.09			0.6	2.16166	0.19454905	84		0.002289
CHLORDANE - ALPHA	µg/L													
CHLORDANE - GAMA	µg/L													
NONACHLOR - ALPHA	µg/L													
NONACHLOR - GAMA	µg/L													
OXYCHLORDANE	µg/L													
CHLORDENE - ALPHA	µg/L													
CHLORDENE - GAMA	µg/L													
CHLORODIBROMOMETHANE	µg/L	2	25	8%	7.03	7.03	1.3365	1.6793	0.7959	2.60205	18.2923942	84		0.215205
CHLOROFORM	µg/L	0	25	0%	7.94	7.94	0.9963	5.7676	0.1727	1.26376	10.0342915	84		0.11805
<b>DDT, total*</b>	ng/L	24	24	100%		10			0.6	2.16166	21.6165612	84		0.254312
4,4'-DDT	ng/L													
4,4'-DDE	ng/L													
4,4'-DDD	ng/L													
2,4'-DDT	ng/L													
2,4'-DDE	ng/L													
2,4'-DDD	ng/L													
1,4-DICHLOROBENZENE (BNA)	µg/L	13	24	54%	5.29	5.29	1.7005	5.2566	0.3235	1.5505	8.20212718	84		0.096496
<b>3,3'-DICHLOROBENZIDINE*</b>	µg/L	24	24	100%		2			0.6	2.16166	4.32331224	84		0.050862
1,2-DICHLOROETHANE	µg/L	25	25	100%		0.2			0.6	2.1319	0.42637931	84		0.005016
1,1-DICHLOROETHYLENE	µg/L	25	25	100%		0.132			0.6	2.1319	0.28141034	84		0.003311
DICHLOROBROMOMETHANE	µg/L	0	25	0%	1.67	1.67	0.3086	4.6876	0.0658	1.09393	1.82686307	84		0.021493
METHYLENE CHLORIDE	µg/L	3	25	12%	23.2	23.2	5.3373	6.4281	0.8303	2.68742	62.348187	84		0.733508
1,3-DICHLOROPROPENE	µg/L	24	24	100%		0.2			0.6	2.16166	0.43233122	84		0.005086
CIS-1,3-DICHLOROPROPENE	µg/L													
TRANS-1,3-DICHLOROPROPENE	µg/L													
<b>DIELDRIN*</b>	µg/L	24	24	100%		0.006			0.6	2.16166	0.01296994	84		0.000153
2,4-DINITROTOLUENE	µg/L	24	24	100%		1.5			0.6	2.16166	3.24248418	84		0.038147
1,2-DIPHENYLHYDRAZINE	µg/L	23	24	96%	0.18	1			0.6	2.16166	2.16165612	84		0.025431

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Ocean Plan Water Quality Objectives	REASONABLE POTENTIAL (RP)	Calculated Effluent Limitations (EffL)	Maximum MDL Reported (Jan 2003 - Jun 2004)	Performance Goals (PG) = MDLx 5 (for carcinogens) or 10 (for noncarcinogens)	PG = 95th Percentile (if nondetect < 80%)	Maximum Detected Effluent Concentration	Proposed Effluent Limits	Possible PG	Proposed PG	Basis for PG
<b>Chlordane*</b>	µg/L	0.000023	<b>Yes</b>	<b>0.001955</b>	<b>0.09</b>	0.45		ND	<b>0.001955</b>	0.45	<b>No PG</b>	--
CHLORDANE - ALPHA	µg/L											
CHLORDANE - GAMA	µg/L											
NONACHLOR - ALPHA	µg/L											
NONACHLOR - GAMA	µg/L											
OXYCHLORDANE	µg/L											
CHLORDENE - ALPHA	µg/L											
CHLORDENE - GAMA	µg/L											
CHLORODIBROMOMETHANE	µg/L	8.6	No	731	0.13	0.65	<b>3.9</b>	7.03	No Limit	3.9	<b>3.9</b>	95th percentile
CHLOROFORM	µg/L	130	No	11050	0.13	0.65	<b>6.6</b>	7.94	No Limit	6.6	<b>6.6</b>	95th percentile
<b>DDT, total*</b>	ng/L	0.17	<b>Yes</b>	<b>14.45</b>	<b>6</b>	30		ND	<b>14.45</b>	30	<b>No PG</b>	--
4,4'-DDT	ng/L											
4,4'-DDE	ng/L											
4,4'-DDD	ng/L											
2,4'-DDT	ng/L											
2,4'-DDE	ng/L											
2,4'-DDD	ng/L											
1,4-DICHLOROBENZENE (BNA)	µg/L	18	No	1530	0.07	0.35	<b>14</b>	5.29	No Limit	5.29	<b>5.29</b>	Max eff conc
<b>3,3'-DICHLOROBENZIDINE*</b>	µg/L	0.0081	<b>Yes</b>	<b>0.6885</b>	0.11	0.55		ND	<b>0.6885</b>	0.55	<b>0.55</b>	from MDL
1,2-DICHLOROETHANE	µg/L	28	No	2380	0.05	0.25		ND	No Limit	0.25	<b>0.25</b>	from MDL
1,1-DICHLOROETHYLENE	µg/L	0.9	No	76.5	0.13	0.65		ND	No Limit	0.65	<b>0.65</b>	from MDL
DICHLOROBROMOMETHANE	µg/L	6.2	No	527	0.16	0.8	<b>1.5</b>	1.67	No Limit	1.5	<b>1.5</b>	95th percentile
METHYLENE CHLORIDE	µg/L	450	No	38250	0.13	0.65	<b>22</b>	23.2	No Limit	22	<b>22</b>	95th percentile
1,3-DICHLOROPROPENE	µg/L	8.9	No	756.5	<b>0.18</b>	0.9		ND	No Limit	0.9	<b>0.9</b>	from MDL
CIS-1,3-DICHLOROPROPENE	µg/L											
TRANS-1,3-DICHLOROPROPENE	µg/L											
<b>DIELDRIN*</b>	µg/L	0.00004	<b>Yes</b>	<b>0.0034</b>	0.0009	0.0045		ND	<b>0.0034</b>	0.0045	<b>No PG</b>	--
2,4-DINITROTOLUENE	µg/L	2.6	No	221	0.08	0.4		ND	No Limit	0.4	<b>0.4</b>	from MDL
1,2-DIPHENYLHYDRAZINE	µg/L	0.16	No	13.6	0.06	0.3		0.18	No Limit	0.18	<b>0.18</b>	Max eff conc

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit																
		Jan-99	Apr-99	Jul-99	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Apr-02		
Halomethanes	µg/L	<u>0.15</u>	<u>0.42</u>	<u>0.17</u>	<u>0.23</u>	<u>0.52</u>	<u>0.15</u>	<u>0.29</u>	<u>0.64</u>	<u>0.72</u>	<u>0.89</u>	<u>0.18</u>	<u>0.53</u>	<u>1.49</u>	<u>3.81</u>		
CHLOROMETHANE	µg/L	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11		
BROMOMETHANE	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36		
BROMOFORM	µg/L	<0.15	0.42	0.17	0.23	0.52	<0.15	0.29	0.64	0.72	0.89	<0.145	0.53	1.49	3.81		
HEPTACHLOR*	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
HEPTACHLOR EPOXIDE*	µg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
HEXACHLOROBTADIENE*	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
HEXACHLOROBUTADIENE	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2		
HEXACHLOROETHANE	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2		
ISOPHORONE	µg/L	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>		
N-NITROSODIMETHYLAMINE	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
N-NITROSODI-N-PROPYLAMINE	µg/L	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5		
N-NITROSODIPHENYLAMINE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
PAHs*	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
ACENAPHTHYLENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
ANTHRACENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
BENZO(A) ANTHRACENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
BENZO(B) FLUORANTHENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
BENZO(K) FLUORANTHENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,12-BENZOPERYLENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
BENZO(A) PYRENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
CHRYSENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,2,5,6-DIBENZANTHRACENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
FLUORENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
INDENO (1,2,3-CD) PYRENE	µg/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5		
PHENANTHRENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
PYRENE	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit												
		Jul-02	Oct-02	Jan-03	Apr-03	Jun-03	Jul-03	Oct-03	January 1, 2004	January 27, 2004	Apr-04	Jun-04	
Halomethanes	µg/L	<b>0.6</b>	<b>0.51</b>	<b>0.09</b>	<b>1.12</b>		<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>1.11</b>	<b>0.61</b>	<b>0.14</b>	
CHLOROMETHANE	µg/L	<0.07	<0.07	<0.18	<0.14		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	
BROMOMETHANE	µg/L	<0.2	<0.2	<0.16	<0.28		<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	
BROMOFORM	µg/L	0.6	0.51	<0.08	1.12		<0.19	<0.19	<0.19	1.11	0.61	<0.19	
HEPTACHLOR*	µg/L	<0.001	<0.001	<0.0020	<0.0020		<0.0020	<0.0020	<0.0020	<0.001	<0.0020	<0.0020	
HEPTACHLOR EPOXIDE*	µg/L	<0.001	<0.001	<0.0018	<0.0018		<0.0018	<0.0018	<0.0018	<0.001	<0.0018	<0.0018	
HEXACHLOROBTADIENE*	µg/L	<1	<0.3	<0.07	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
HEXACHLOROETHANE	µg/L	<1	<1	<0.07	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
ISOPHORONE	µg/L	<b>0.5</b>	<b>0.1</b>	<b>0.12</b>	<b>0.17</b>		<b>0.035</b>	<b>0.21</b>	<b>0.23</b>	<b>0.035</b>	<b>0.3</b>	<b>0.33</b>	
N-NITROSODIMETHYLAMINE	µg/L	<3	<1	<0.17	<0.17		<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	
N-NITROSODI-N-PROPYLAMINE	µg/L	<3	<2	<0.13	<0.13		<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
N-NITROSODIPHENYLAMINE	µg/L	<1	<1	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
PAHs*	µg/L	<1	<2	<0.19	<0.19		<0.19	1.58	0.2	<0.19	<0.19	<0.19	
ACENAPHTHYLENE	µg/L	<1	<1	<0.06	<0.06		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	
ANTHRACENE	µg/L	<1	<1	<0.06	<0.06		<0.06	0.16	0.22	<0.06	<0.06	<0.06	
BENZO(A) ANTHRACENE	µg/L	<0.4	<2	<0.09	<0.09		<0.09	0.28	<0.09	<0.09	<0.09	<0.09	
BENZO(B) FLUORANTHENE	µg/L	<0.5	<1	<0.07	<0.07		<0.07	0.13	<0.07	<0.07	<0.07	<0.07	
BENZO(K) FLUORANTHENE	µg/L	<1	<2	<0.19	<0.19		<0.19	0.21	<0.19	<0.19	<0.19	<0.19	
1,12-BENZOPERYLENE	µg/L	<0.3	<1	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
BENZO(A) PYRENE	µg/L	<0.4	<1	<0.06	<0.06		<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	
CHRYSENE	µg/L	<1	<1	<0.05	<0.05		<0.05	0.19	<0.05	<0.05	<0.05	<0.05	
1,2:5,6-DIBENZANTHRACENE	µg/L	<0.3	<1	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
FLUORENE	µg/L	<1	<1	<0.05	<0.05		<0.05	0.18	<0.05	<0.05	<0.05	<0.05	
INDENO (1,2,3-CD) PYRENE	µg/L	<1	<1	<0.07	<0.07		<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	
PHENANTHRENE	µg/L	<1	<1	<0.08	<0.08		<0.08	0.23	0.2	<0.08	<0.08	<0.08	
PYRENE	µg/L	<1	<1	<0.07	<0.07		<0.07	0.2	<0.07	<0.07	<0.07	<0.07	

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Number of Nondetect	Number of Samples	Percent of Nondetect	Maximum Detected Effluent Concentration	Maximum Reported Effluent Concentration (max MDL if 100% ND or max MDL > max detect)	Standard Deviation	Mean	CV (set as 0.6 if nondetect >80%)	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Seawater Concentration	Projected Maximum Receiving Water Concentration
Halomethanes	µg/L	8	24	33%	3.81	3.81	0.7768	4.8988	0.1586	1.24492	4.74313795	84		0.055802
CHLOROMETHANE	µg/L													
BROMOMETHANE	µg/L													
BROMOFORM	µg/L													
HEPTACHLOR*	µg/L	24	24	100%		<u>0.005</u>			0.6	2.16166	0.01080828	84		0.000127
HEPTACHLOR EPOXIDE*	µg/L	24	24	100%		<u>0.0018</u>			0.6	2.16166	0.00389098	84		4.58E-05
HEXACHLOROBENZENE*	µg/L	24	24	100%		<u>1</u>			0.6	2.16166	2.16165612	84		0.025431
HEXACHLOROBUTADIENE	µg/L	24	24	100%		<u>2</u>			0.6	2.16166	4.32331224	84		0.050862
HEXACHLOROETHANE	µg/L	24	24	100%		<u>2</u>			0.6	2.16166	4.32331224	84		0.050862
ISOPHORONE	µg/L	18	24	75%	0.33	<u>4</u>	0.9095	5.6141	0.1620	1.25078	5.00310272	84		0.05886
N-NITROSODIMETHYLAMINE	µg/L	24	24	100%		<u>3</u>			0.6	2.16166	6.48496836	84		0.076294
N-NITROSODI-N-PROPYLAMINE	µg/L	24	24	100%		<u>4.5</u>			0.6	2.16166	9.72745254	84		0.114441
N-NITROSODIPHENYLAMINE	µg/L	24	24	100%		<u>1</u>			0.6	2.16166	2.16165612	84		0.025431
PAHs*	µg/L	22	24	92%	1.58	<u>2</u>			0.6	2.16166	4.32331224	84		0.050862
ACENAPHTHYLENE	µg/L													
ANTHRACENE	µg/L													
BENZO(A) ANTHRACENE	µg/L													
BENZO(B) FLUORANTHENE	µg/L													
BENZO(K) FLUORANTHENE	µg/L													
1,12-BENZOPERYLENE	µg/L													
BENZO(A) PYRENE	µg/L													
CHRYSENE	µg/L													
1,2:5,6-DIBENZANTHRACENE	µg/L													
FLUORENE	µg/L													
INDENO (1,2,3-CD) PYRENE	µg/L													
PHENANTHRENE	µg/L													
PYRENE	µg/L													

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Ocean Plan Water Quality Objectives	REASONABLE POTENTIAL (RP)	Calculated Effluent Limitations (EFLt)	Maximum MDL Reported (Jan 2003 - Jun 2004)	Performance Goals (PG) = MDLx 5 (for carcinogens) or 10 (for noncarcinogens)	PG = 95th Percentile (if nondetect < 80%)	Maximum Detected Effluent Concentration	Proposed Effluent Limits	Possible PG	Proposed PG	Basis for PG
Halomethanes	µg/L	130	No	11050	<b>0.28</b>	1.4	<b>1.3</b>	3.81	No Limit	1.3	<b>1.3</b>	95th percentile
CHLOROMETHANE	µg/L											
BROMOMETHANE	µg/L											
BROMOFORM	µg/L											
HEPTACHLOR*	µg/L	0.00005	Yes	<b>0.00425</b>	0.002	0.01		ND	<b>0.00425</b>	0.01	No PG	--
HEPTACHLOR EPOXIDE*	µg/L	0.00002	Yes	<b>0.0017</b>	0.0018	0.009		ND	<b>0.0017</b>	0.009	No PG	--
HEXACHLOROBENZENE*	µg/L	0.00021	Yes	<b>0.01785</b>	0.07	0.35		ND	<b>0.01785</b>	0.35	No PG	--
HEXACHLOROBUTADIENE	µg/L	14	No	1190	0.07	0.35		ND	No Limit	0.35	<b>0.35</b>	from MDL
HEXACHLOROETHANE	µg/L	2.5	No	212.5	0.07	0.35		ND	No Limit	0.35	<b>0.35</b>	from MDL
ISOPHORONE	µg/L	730	No	62050	0.07	0.35	<b>5.8</b>	0.33	No Limit	0.33	<b>0.33</b>	Max eff conc
N-NITROSODIMETHYLAMINE	µg/L	7.3	No	620.5	0.17	0.85		ND	No Limit	0.85	<b>0.85</b>	from MDL
N-NITROSODI-N-PROPYLAMINE	µg/L	0.38	No	32.3	0.13	0.65		ND	No Limit	0.65	<b>0.65</b>	from MDL
N-NITROSODIPHENYLAMINE	µg/L	2.5	No	212.5	0.09	0.45		ND	No Limit	0.45	<b>0.45</b>	from MDL
PAHs*	µg/L	0.0088	Yes	<b>0.748</b>	<b>0.19</b>	0.95		1.58	<b>0.748</b>	0.95	No PG	--
ACENAPHTHYLENE	µg/L											
ANTHRACENE	µg/L											
BENZO(A) ANTHRACENE	µg/L											
BENZO(B) FLUORANTHENE	µg/L											
BENZO(K) FLUORANTHENE	µg/L											
1,12-BENZOPERYLENE	µg/L											
BENZO(A) PYRENE	µg/L											
CHRYSENE	µg/L											
1,2:5,6-DIBENZANTHRACENE	µg/L											
FLUORENE	µg/L											
INDENO (1,2,3-CD) PYRENE	µg/L											
PHENANTHRENE	µg/L											
PYRENE	µg/L											

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.



Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit																
		Jan-99	Apr-99	Jul-99	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01	Jan-02	Apr-02		
<b>PCBs*</b>	ng/L	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65		
PCB 1016	ng/L	<46	<46	<46	<46	<46	<46	<46	<46	<46	<46	<46	<46	<46	<46		
PCB 1221	ng/L	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34	<34		
PCB 1232	ng/L	<33	<33	<33	<33	<33	<33	<33	<33	<33	<33	<33	<33	<33	<33		
PCB 1242	ng/L	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40		
PCB 1248	ng/L	<57	<57	<57	<57	<57	<57	<57	<57	<57	<57	<57	<57	<57	<57		
PCB 1254	ng/L	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
PCB 1260	ng/L	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65	<65		
<b>TCDD equivalents*</b>	ng/L	<0.87		<0.058		0.069		<0.140		<0.230		<0.500		<0.082			
1,1,2,2-TETRACHLOROETHANE	µg/L	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.129	<0.119	<0.119	<0.119	<0.119	<0.119	<0.119	<0.119		
TETRACHLOROETHENE	µg/L	<b>3.09</b>	<b>7.47</b>	<b>2.00</b>	<b>6.85</b>	<b>7.81</b>	<b>1.78</b>	<b>2.17</b>	<b>1.59</b>	<b>3.65</b>	<b>1.44</b>	<b>2.47</b>	<b>2.02</b>	<b>0.956</b>	<b>4.167</b>		
<b>TOXAPHENE*</b>	µg/L	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113	<0.113		
TRICHLOROETHENE	µg/L	<0.078	0.53	<0.078	0.333	<0.078	<0.078	<0.078	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106	<0.106		
1,1,2-TRICHLOROETHANE	µg/L	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085		
2,4,6-TRICHLOROPHENOL	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		
VINYL CHLORIDE	µg/L	<0.167	<0.167	<0.167	<0.167	<0.167	<0.167	<0.167	<0.154	<0.154	<0.154	<0.154	<0.154	<0.154	<0.154		

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit												
		Jul-02	Oct-02	Jan-03	Apr-03	Jun-03	Jul-03	Oct-03	January 1, 2004	January 27, 2004	Apr-04	Jun-04	
<b>PCBs*</b>	ng/L	<40	<40	<300	<300		<300	<300	<300	<490	<300	<300	
PCB 1016	ng/L	<20	<20	<80	<80		<80	<80	<80	<60	<80	<80	
PCB 1221	ng/L	<30	<30	<300	<300		<300	<300	<300	<490	<300	<300	
PCB 1232	ng/L	<20	<20	<40	<40		<40	<40	<40	<100	<40	<40	
PCB 1242	ng/L	<40	<40	<50	<50		<50	<50	<50	<200	<50	<50	
PCB 1248	ng/L	<20	<20	<120	<120		<120	<120	<120	<100	<120	<120	
PCB 1254	ng/L	<10	<10	<50	<50		<50	<50	<50	<20	<50	<50	
PCB 1260	ng/L	<30	<30	<100	<100		<100	<100	<100	<70	<100	<100	
<b>TCDD equivalents*</b>	ng/L		<0.46	<1.4	<0.070		<0.28	<0.1	<0.097		<0.36		
1,1,2,2-TETRACHLOROETHANE	µg/L	<0.2	<0.2	<0.12	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
TETRACHLOROETHENE	µg/L	<b>0.8</b>	<b>1.39</b>	<b>1.86</b>	<b>2.4</b>	<b>0.96</b>	<b>1</b>	<b>2.21</b>	<b>1.31</b>	<b>1.91</b>	<b>3.27</b>	<b>19.2</b>	
<b>TOXAPHENE*</b>	µg/L	<0.09	<0.09	<0.13	<0.13		<0.13	<0.13	<0.1	<0.1	<0.1	<0.1	
TRICHLOROETHENE	µg/L	<0.2	<0.2	<0.07	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	
1,1,2-TRICHLOROETHANE	µg/L	<0.2	<0.2	<0.17	<0.14		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	
2,4,6-TRICHLOROPHENOL	µg/L	<1	<1	<0.09	<0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
VINYL CHLORIDE	µg/L	<0.05	<0.05	<0.17	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Number of Nondetect	Number of Samples	Percent of Nondetect	Maximum Detected Effluent Concentration	Maximum Reported Effluent Concentration (max MDL if 100% ND or max MDL > max detect)	Standard Deviation	Mean	CV (set as 0.6 if nondetect >80%)	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Seawater Concentration	Projected Maximum Receiving Water Concentration
<b>PCBs*</b>	ng/L	24	24	100%		300			0.6	2.16166	648.496836	84		7.629375
PCB 1016	ng/L													
PCB 1221	ng/L													
PCB 1232	ng/L													
PCB 1242	ng/L													
PCB 1248	ng/L													
PCB 1254	ng/L													
PCB 1260	ng/L													
<b>TCDD equivalents*</b>	ng/L	13	14	93%	0.069	1.4			0.6	2.63086	3.68320532	84		0.043332
1,1,2,2-TETRACHLOROETHANE	µg/L	25	25	100%		0.2			0.6	2.1319	0.42637931	84		0.005016
TETRACHLOROETHENE	µg/L	0	25	0%	19.2	19.2	3.8411	5.7296	0.6704	2.2973	44.1080839	84		0.518919
<b>TOXAPHENE*</b>	µg/L	24	24	100%		0.13			0.6	2.16166	0.2810153	84		0.003306
TRICHLOROETHENE	µg/L	23	25	92%	0.53	0.53			0.6	2.1319	1.12990516	84		0.013293
1,1,2-TRICHLOROETHANE	µg/L	24	24	100%		0.2			0.6	2.16166	0.43233122	84		0.005086
2,4,6-TRICHLOROPHENOL	µg/L	24	24	100%		3			0.6	2.16166	6.48496836	84		0.076294
VINYL CHLORIDE	µg/L	25	25	100%		0.17			0.6	2.1319	0.36242241	84		0.004264

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.

Table R2-2

**REASONABLE POTENTIAL ANALYSIS**  
 HYPERION TREATMENT PLANT (OUTFALL 002)  
 (CA0109991, CI-1492)

Constituent	Unit	Ocean Plan Water Quality Objectives	REASONABLE POTENTIAL (RP)	Calculated Effluent Limitations (EFLt)	Maximum MDL Reported (Jan 2003 - Jun 2004)	Performance Goals (PG) = MDLx 5 (for carcinogens) or 10 (for noncarcinogens)	PG = 95th Percentile (if nondetect < 80%)	Maximum Detected Effluent Concentration	Proposed Effluent Limits	Possible PG	Proposed PG	Basis for PG
<b>PCBs*</b>	ng/L	0.019	<b>Yes</b>	<b>1.615</b>	<b>300</b>	1500		ND	<b>1.615</b>	1500	<b>No PG</b>	--
PCB 1016	ng/L											
PCB 1221	ng/L											
PCB 1232	ng/L											
PCB 1242	ng/L											
PCB 1248	ng/L											
PCB 1254	ng/L											
PCB 1260	ng/L											
<b>TCDD equivalents*</b>	ng/L	0.0000039	<b>Yes</b>	<b>0.0003315</b>	1.4	7		0.069	<b>0.00033</b>	0.069	<b>No PG</b>	--
1,1,2,2-TETRACHLOROETHANE	µg/L	2.3	No	195.5	0.2	1		ND	No Limit	1	<b>1</b>	from MDL
TETRACHLOROETHENE	µg/L	2.0	No	170	0.16	0.8	<b>5.8</b>	19.2	No Limit	5.8	<b>5.8</b>	95th percentile
<b>TOXAPHENE*</b>	µg/L	0.00021	<b>Yes</b>	<b>0.01785</b>	0.13	0.65		ND	<b>0.018</b>	0.65	<b>No PG</b>	--
TRICHLOROETHENE	µg/L	27	No	2295	0.17	0.85		0.53	No Limit	0.53	<b>0.53</b>	Max eff conc
1,1,2-TRICHLOROETHANE	µg/L	9.4	No	799	0.17	0.85		ND	No Limit	0.85	<b>0.85</b>	from MDL
2,4,6-TRICHLOROPHENOL	µg/L	0.29	No	24.65	0.09	0.45		ND	No Limit	0.45	<b>0.45</b>	from MDL
VINYL CHLORIDE	µg/L	36	No	3060	0.17	0.85		ND	No Limit	0.85	<b>0.85</b>	from MDL

Underlined numbers used in the calculation are one-half of detection limits for data showing less than MDL results.

\* These constituents showed RPs.