

**ATTACHMENT B - SCREENING LEVELS FOR
 TOXIC POLLUTANTS REASONABLE POTENTIAL ANALYSIS**

I. INSTRUCTIONS

This Attachment contains listings of the parameters Dischargers are to analyze as part of their application for coverage under this General Order. The sampling requirements that are applicable to all discharges are presented in section II below, in Tables B-2 and B-3. Additional sampling requirements applicable to discharges to specific waterbodies follow in section III, in Tables B-4 through B-6. The Discharger shall compare the results of all analyses to the corresponding screening levels in Tables B-2 to B-6, where applicable, and submit them with the completed Notice of Intent (NOI). Any analyses performed for parameters without screening levels shall also be submitted to the Regional Water Board with the completed NOI.

Dischargers shall obtain and analyze a representative sample(s) of the upstream receiving water for hardness. If a representative sample cannot be obtained upstream of the discharge, the discharger shall obtain the sample downstream within 100 feet of the discharge location. If the receiving water is comprised entirely of effluent, the discharger may analyze the effluent for hardness in lieu of the receiving water. The analytical method(s) used shall be capable of achieving a detection limit at or below the minimum level, otherwise, a written explanation shall be provided.

The rationale for the screening levels in Tables B-2 through B-6 is provided in section IV.C.3 of the Fact Sheet (Attachment F) of this General Order. The discharger shall conduct the initial monitoring and report the results in the "Sample Result" column of the applicable table. The discharger shall then compare the sample result to the corresponding screening level. If the sample result is greater than the screening level, the discharger shall indicate reasonable potential exists by entering "yes" into the "Reasonable Potential?" column. If the sample result is equal to or less than the screening level, the discharger shall indicate reasonable potential does not exist by entering "no" into the "Reasonable Potential?" column.

The Colorado River Basin Water Board reserves the right to re-evaluate reasonable potential with additional representative data or relevant information, pursuant to the specifications of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) and the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan).

The certification statement and statement of perjury are applicable to all attachments of the NOI, and are applicable to the monitoring results and analysis reported within this form. Table B-1 provides an overview of the parameters to be analyzed as part of the application package.

Table B-1. Overview of Sampling Requirements

Attachment B Table	Parameter(s) Covered ¹	Water to be Sampled
Sampling Requirements for All Discharges		
Table B-2	Priority Pollutants	EFF ²
Table B-3	Hardness-Dependent Priority Pollutants ³	EFF
None	Any 303(d) Listed Parameters ⁴	EFF

Additional Sampling Requirements for Discharges to Specific Waterbodies		
Tables B-4 and B-5	Total Dissolved Solids	EFF
Table B-6	Selenium	EFF
<ol style="list-style-type: none"> 1. The sampling requirements in terms of the parameters covered apply to all designated beneficial uses unless otherwise specified. MUN designated waters pertain to those receiving waters designated for municipal and domestic water supply, and Non-MUN designated waters pertain to those receiving waters designated for one or more of the other use categories. Consult section III.H of the Limitations and Discharge Requirements for further information concerning designated use categories. 2. EFF = effluent water 3. Several of the priority pollutant metals are hardness-dependent and require that a sample of the receiving water be analyzed for hardness. 4. If the proposed receiving water is listed as impaired by any parameter on California's latest 303(d) List, then the Discharger shall analyze for the listed parameter(s). Consult the following Web site for the latest 303(d) List: http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml . 		

Dischargers shall analyze all applicable pollutants in this Attachment in accordance with the analytical methods and other requirements specified in Part 136 of Title 40 of the Code of Federal Regulations (CFR) and in accordance with section I of the Monitoring and Reporting Program (Attachment E) of this General Order.

For priority pollutant constituents with applicable water quality criteria, detection limits shall be below the screening level. If the lowest minimum level (ML) published in Appendix 4 of the SIP is not below the screening level, the detection limit shall be the lowest ML. For priority pollutant constituents without applicable water quality criteria, the detection limits shall be equal to or less than the lowest ML published in Appendix 4 of the SIP or 40 C.F.R. Part 136.

Detection, for the purposes of the priority pollutants with applicable water quality criteria, means a sample result that is greater than or equal to the detection limit. Sample results less than the ML, but greater than or equal to the detection limit, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported, and shall be used to compare to the applicable screening level for purposes of determining whether effluent limitations are necessary.

Detection, for the purposes of the priority pollutants without applicable water quality criteria, means a sample result that is greater than or equal to the applicable screening level (i.e., the lowest ML specified in the SIP).

II. ANALYSES REQUIRED OF ALL DISCHARGERS

- A. Priority Pollutants.** All Dischargers seeking authorization to discharge under this General Order shall sample and analyze the proposed effluent for the priority pollutants contained in Tables B-2 and B-3. The results of the analyses shall be compared to the corresponding screening levels and shall be submitted as part of the NOI.

Table B-2. Screening Levels for Priority Pollutants

Parameter	Sample Result (µg/L)	Screening Levels ¹		Minimum Levels (MLs) (µg/L)	Above Screening Level (yes/no)
		Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²		
<i>Volatile Organics</i>					
1,1-Dichloroethane		5	5	1	
1,1-Dichloroethylene		0.057	3.2	0.5	
1,1,1-Trichloroethane		200	200	2	
1,1,2-Trichloroethane		0.6	42	0.5	
1,1,2,2-Tetrachloroethane		0.17	1	0.5	
1,2-Dichlorobenzene		600	600	0.5	
1,2-Dichloroethane		0.38	99	0.5	
1,2-Dichloropropane		0.52	39	0.5	
1,2-Cis-Dichloroethylene		6	10	N/A	
1,2-Trans-Dichloroethylene		10	10	1	
1,3-Dichlorobenzene		400	2,600	2	
1,3-Dichloropropylene		0.5	0.5	0.5	
1,4-Dichlorobenzene		5	0.5	0.5	
2-Chloroethyl-vinyl-ether		1 ³	1 ³	1	
Acetone		700	700	N/A	
Acrolein		320	780	5	
Acrylonitrile		0.059	0.66	2	
Benzene		1.0	1.0	0.5	
Bromoform		4.3	360	0.5	
Carbon Tetrachloride		0.25	0.5	0.5	
Chlorobenzene		680	21,000	2	
Chlorodibromomethane		0.41	34	0.5	
Chloroethane		300	300	2	
Chloroform		100	100	2	
Dichlorobromomethane		0.56	46	0.5	
Di-isopropyl Ether		5	5	N/A	
Ethanol		760,000	760,000	N/A	
Ethylbenzene		700	700	2	
Ethylene Dibromide		0.05	0.05	N/A	
Hydrocarbons, Total Petroleum		100	100	N/A	
Methanol		3,500	740,000	N/A	
Methyl Bromide		10	4,000	2	
Methyl Chloride		3	3	0.5	
Methyl ethyl ketone		700	700	N/A	
Methyl tertiary-butyl ether		13	13	N/A	
Methylene Chloride		4.7	1,600	0.5	
Tertiary-amyl-methyl ether		5	5	N/A	
Tertiary Butyl Alcohol		12	12	N/A	
Tetrachloroethylene		0.8	8.85	0.5	
Toluene		150	150	2	
Trichloroethylene		2.7	5	0.5	
Trichlorofluoroethane		1,200	4,000	N/A	

Parameter	Sample Result (µg/L)	Screening Levels ¹		Minimum Levels (MLs) (µg/L)	Above Screening Level (yes/no)
		Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²		
Vinyl Chloride		0.5	0.5	0.5	
Xylenes		20	1,750	N/A	
Semi-Volatile Organics					
1,2-Diphenylhydrazine		0.04	0.54	1	
1,2,4-Trichlorobenzene		70	--	5	
2-Chlorophenol		120	400	5	
2,4-Dichlorophenol		93	790	5	
2,4-Dimethylphenol		540	2,300	2	
2,4-Dinitrophenol		70	14,000	5	
2,4-Dinitrotoluene		0.11	9.1	5	
2,4,6-Trichlorophenol		2.1	6.5	10	
2,6-Dinitrotoluene		5 ³	5 ³	5	
2-Nitrophenol		10 ³	10 ³	10	
2-Chloronaphthalene		1,700	4,300	10	
3,3'-Dichlorobenzene		0.04	0.077	5	
3-Methyl-4-Chlorophenol		1 ³	1 ³	1	
2-Methyl-4,6-Dinitrophenol		13	765	5	
4-Nitrophenol		5 ³	5 ³	5	
4-Bromophenyl phenyl ether		5 ³	5 ³	5	
4-Chlorophenyl phenyl ether		5 ³	5 ³	5	
Acenaphthene		1,200	2,700	1	
Acenaphthylene		10 ³	10 ³	10	
Anthracene		9,600	110,000	5	
Benzidine		0.00012	0.00054	5	
Benzo(a)Anthracene		0.0044	0.049	5	
Benzo(a)Pyrene		0.0044	0.049	2	
Benzo(b)Fluoranthene		0.0044	0.049	10	
Benzo(g,h,i)Perylene		5 ³	5 ³	5	
Benzo(k)Fluoranthene		0.0044	0.049	2	
Bis(2-Chloroethoxy)Methane		5 ³	5 ³	5	
Bis(2-Chloroethyl)Ether		0.031	1.4	1	
Bis(2-Chloroisopropyl)Ether		1,400	170,000	10	
Bis(2-Ethylhexyl)Phthalate		1.8	5.9	5	
Butylbenzyl Phthalate		3,000	5,200	10	
Chrysene		0.0044	0.049	5	
Dibenzo(a,h)Anthracene		0.0044	0.049	1	
Diethyl Phthalate		23,000	120,000	10	
Dimethyl Phthalate		313,000	2,900,000	10	
di-n-Butyl Phthalate		2,700	12,000	10	
di-n-Octyl Phthalate		10 ³	10 ³	10	
Fluoranthene		300	370	10	
Fluorene		1,300	14,000	10	
Hexachlorobenzene		0.00075	0.00077	1	

Parameter	Sample Result (µg/L)	Screening Levels ¹		Minimum Levels (MLs) (µg/L)	Above Screening Level (yes/no)
		Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²		
Hexachlorobutadiene		0.44	50	1	
Hexachlorocyclopentadiene		50	17,000	5	
Hexachloroethane		1.9	8.9	1	
Indeno(12,3-cd)Pyrene		0.0044	0.049	0.05	
Isophorone		8.4	600	1	
N-Nitrosodimethyl amine		0.00069	8.1	5	
N-Nitroso-di-n-propyl amine		0.005	1.4	5	
N-Nitrosodiphenyl amine		5.0	16	1	
Naphthalene		10 ³	10 ³	10	
Nitrobenzene		17	1,900	10	
Pentachlorophenol		0.28	7.9	1	
Phenanthrene		5 ³	5 ³	5	
Phenol		21,000	4,600,000	50	
Pyrene		960	11,000	10	
Metals and Other Compounds					
Antimony, Total Recoverable		14	4,300	5	
Arsenic, Total Recoverable		50	36	10	
Beryllium, Total Recoverable		4	--	0.5	
Cadmium, Total Recoverable		Refer to Table B-3			
Chromium (III)		Refer to Table B-3			
Chromium (VI)		11	50	5	
Copper, Total Recoverable		Refer to Table B-3			
Cyanide, Free		5.2	--	5	
Lead, Total Recoverable		Refer to Table B-3			
Mercury, Total Recoverable		0.050	0.051	0.2	
Nickel, Total Recoverable		Refer to Table B-3			
Selenium, Total Recoverable		5.0	71	2	
Silver, Total Recoverable		Refer to Table B-3			
Thallium, Total Recoverable		1.7	6.3	1	
Zinc, Total Recoverable		Refer to Table B-3			
Asbestos		7 MFL ⁴	7 MFL ⁵	--	
2,3,7,8-TCDD		1.3 x 10 ⁻⁸	1.4 x 10 ⁻⁸	--	
Pesticides and PCBs					
4,4'-DDD		0.00083	0.00084	0.05	
4,4'-DDE		0.00059	0.00059	0.05	
4,4'-DDT		0.00059	0.00059	0.01	
alpha-Endosulfan		0.056	0.0087	0.02	
alpha-BHC		0.0039	0.013	0.01	
Aldrin		0.00013	0.00014	0.005	
beta-Endosulfan		0.056	0.0087	0.01	
beta-BHC		0.014	0.046	0.005	

Parameter	Sample Result (µg/L)	Screening Levels ¹		Minimum Levels (MLs) (µg/L)	Above Screening Level (yes/no)
		Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²		
Chlordane		0.00057	0.00059	0.1	
delta-BHC		--	--	0.005	
Dieldrin		0.00014	0.00014	0.01	
Endosulfan Sulfate		110	240	0.05	
Endrin		0.036	0.0023	0.01	
Endrin Aldehyde		0.76	0.81	0.01	
Heptachlor		0.00021	0.00021	0.01	
Heptachlor Epoxide		0.0001	0.00011	0.01	
gamma-BHC		0.019	0.063	0.02	
PCBs, sum of ⁶		0.00017	0.00017	0.5	
Toxaphene		0.00073	0.00075	0.5	

¹ The screening levels for MUN designated waters were established based on the maximum contaminant level (MCL) and California Toxics Rule (CTR) criteria for the protection of aquatic life or for the protection of human health for consumption of water and organisms, whichever was the more stringent. The screening levels for Non-MUN designated waters were established based on CTR criteria for the protection of aquatic life or human health for the consumption of organisms only, whichever was the more stringent.

² µg/L = micrograms per liter

³ Priority pollutants for which no applicable MCLs or CTR criteria for the protection of human health or aquatic life exist include beryllium, chloroethane, 2-chloroethylvinyl ether, chloroform, 1,1-dichloroethane, methyl chloride, 1,1,1-trichloroethane, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, acenaphthylene, benzo(ghi)perylene, bis(2-chloroethoxy)methane, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether, 2,6-dinitrotoluene, di-n-octyl phthalate, naphthalene, phenanthrene, 1,2,4-trichlorobenzene, delta-BHC, and asbestos (non-MUN only). The screening level for these parameters is based on the lowest minimum level (ML) contained in the SIP.

⁴ MFL = million fibers per liter

⁵ There are no applicable MCLs or CTR criteria for the protection of human health (consumption of organisms only) or aquatic life for asbestos for non-MUN designated waters. There is also no applicable ML for asbestos in the SIP. Therefore, the screening level for asbestos for non-MUN designated waters is equivalent to the CTR criterion for the protection of human health (consumption of water and organisms). If the discharge exceeds this screening level, effluent limitations will not be required, but the Discharger will be required to conduct additional monitoring as specified in the NOA from the Executive Officer.

⁶ The screening level applies to the sum of Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.

Table B-3. Screening Levels for Hardness-Dependent Priority Pollutant Metals

Receiving Water Hardness (mg/L as CaCO ₃)	Most Stringent CTR Water Quality Criterion (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
1 – 10	0.07	4.8	0.18	0.01	1.1	0.01	2.4
11 – 20	0.44	34	1.4	0.19	8.1	0.09	18
21 – 30	0.72	58	2.5	0.44	14	0.28	32
31 – 40	0.98	79	3.4	0.72	19	0.54	44
41 – 50	1.2	100	4.4	1.0	25	0.88	56
51 – 60	1.5	120	5.2	1.4	30	1.3	68
61 – 70	1.7	140	6.1	1.7	34	1.7	79
71 – 80	1.9	160	7.0	2.1	39	2.3	90
81 – 90	2.1	170	7.8	2.4	44	2.8	100
91 – 100	2.3	190	8.6	2.8	48	3.5	110

Receiving Water Hardness (mg/L as CaCO ₃)	Most Stringent CTR Water Quality Criterion (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
101 – 110	2.5	210	9.4	3.2	53	4.1	120
111 – 120	2.7	230	10	3.6	57	4.9	130
121 – 130	2.9	240	11	4.1	61	5.6	140
131 – 140	3.0	260	12	4.5	66	6.5	150
141 – 150	3.2	270	13	4.9	70	7.3	160
151 – 160	3.4	290	13	5.4	74	8.2	170
161 – 170	3.6	310	14	5.8	78	9.2	180
171 – 180	3.8	320	15	6.3	82	10	190
181 – 190	3.9	340	15	6.8	86	11	200
191 – 200	4.1	350	16	7.3	90	12	210
201 – 210	4.3	370	17	7.7	94	13	220
211 – 220	4.4	380	18	8.2	98	15	230
221 – 230	4.6	400	18	8.7	100	16	230
231 – 240	4.8	410	19	9.2	110	17	240
241 – 250	4.9	430	20	9.7	110	18	250
251 – 260	5.1	440	20	10	110	20	260
261 – 270	5.2	450	21	11	120	21	270
271 – 280	5.4	470	22	11	120	23	280
281 – 290	5.5	480	23	12	130	24	290
291 – 300	5.7	500	23	12	130	25	300
301 – 310	5.8	510	24	13	130	27	300
311 – 320	6.0	520	25	13	140	29	310
321 – 330	6.2	540	25	14	140	30	320
331 – 340	6.3	550	26	15	140	32	330
341 – 350	6.5	570	27	15	150	33	340
351 – 360	6.6	580	27	16	150	35	350
361 – 370	6.7	590	28	16	150	37	360
371 – 380	6.9	610	29	17	160	39	360
381 – 390	7.0	620	29	17	160	41	370
391 – 400	7.2	630	30	18	170	42	380
> 400	7.3	650	31	19	170	44	390

B. Section 303(d) Parameters. If the proposed receiving water is listed as impaired on the latest 303(d) List

http://waterboards.ca.gov/coloradoriver/water_issues/programs/tmdl/docs/303d/r7_2010_303d_list.pdf, the Discharger shall analyze a representative sample of the discharge for the affected parameter(s) and submit the results with the completed NOI.

III. Waterbody or Designated Use Specific Analyses Required

The Basin Plan establishes limitations for the discharge of certain pollutants to specific waterbodies. Dischargers proposing to discharge treated groundwater from cleanup of VOCs under this General Order to the New River, Alamo River, Imperial Valley Drains, Coachella Valley Drains, Palo Verde

Valley Drains, and to tributaries to the Salton Sea shall analyze a representative sample of the discharge for the parameters indicated in Tables B-4 through B-6 below, as applicable, and compare the results to the screening levels noted. The Discharger shall submit the results of all analyses performed with the completed NOI.

Table B-4. Analysis Requirements for Discharges to the New River, Alamo River, and the Imperial Valley Drains

Parameter	Units	Sample Result	Screening Level	Above Screening Level (yes/no)
Total Dissolved Solids	mg/L		4,000	

Table B-5. Analysis Requirements for Discharges to the Coachella Valley Drains and the Palo Verde Valley Drains

Parameter	Units	Sample Result	Screening Level	Above Screening Level (yes/no)
Total Dissolved Solids	mg/L		2,000	

Table B-6. Analysis Requirements for Discharges to the Tributaries to the Salton Sea

Parameter	Units	Sample Result	Screening Level	Above Screening Level (yes/no)
Selenium	mg/L		0.005	