

TABLE 1

The California Water Code, and regulations and policies developed thereunder require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored. Alternative cleanup levels greater than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board (State Water Resources Control Board Resolutions Nos. 68-16 and 92-49).

Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The Basin Plan provides that "whenever several different objectives exist for the same water quality parameter, the strictest objective applies". Accordingly, the most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality criteria levels. The table below sets out the water quality objectives for waters of the State impacted by discharges from the identified constituents of concern:

Groundwater Water Quality Objectives

Constituent of Concern	Practical Quantitation Limit ug/l	Water Quality Objective ¹ ug/l	Reference for Objective
Trichloroethylene	< 0.5	0.8	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Tetrachloroethylene	< 0.5	0.06	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Cis-1,2-Dichloroethene	< 0.5	6	California Department of Health Services Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
Trans-1,2-dichloroethene	< 0.5	10	California Department of Health Services Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
1,1-Dichloroethylene	< 0.5	0.6	US EPA Health Advisory applied to the GENERAL water quality objective in the Basin Plan

¹ Practical quantitation limits are based on current technology. For instances where technology cannot achieve the water quality objective the practical quantitation limit will be used.

Trichlorotrifluoroethane	< 0.5	150	California Department of Health Services Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
1,1,1-Trichloroethane	< 0.5	200	California Department of Health Services Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
Trichloromethane	< 0.5	1.1	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Bromodichloromethane	< 0.5	0.27	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Acetone	< 0.5	6300	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Methyl t-Butyl Ether	< 0.5	5	California Department of Health Services Secondary Maximum Contaminant Level applied to the TASTE and ODOR water quality objective in the Basin Plan
1,2,4-Trimethylbenzene	< 0.5	330	California Department of Health Services Notification Level applied to GENERAL water quality objective in the Basin Plan
1,3,5-Trimethylbenzene	< 0.5	15	Published literature provides a taste and odor threshold of 15 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan
sec-Butylbenzene	< 0.5	260	California Department of Health Services Notification Level applied to GENERAL water quality objective in the Basin Plan
tert-Butylbenzene	< 0.5	260	California Department of Health Services Notification Level applied to GENERAL water quality objective in the Basin Plan
n-Propylbenzene	< 0.5	260	California Department of Health Services Notification Level applied to GENERAL water quality objective in the Basin Plan
n-Butylbenzene	< 0.5	260	California Department of Health Services Notification Level applied to GENERAL water quality objective in the Basin Plan
Isopropylbenzene (Cumene)	< 0.5	0.8	Published literature provides a taste and odor threshold of 0.8 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan
4-isopropyl Toluene	< 0.5	none available	
Vinyl Chloride	< 0.5	0.05	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Pentachlorophenol	< 0.2	0.4	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
2, 3, 4, 6- Tetrachlorophenol	< 0.2	1.0	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan.
2, 4, 5-Trichlorophenol	< 0.2	1.0	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan.
2, 4, 6-Trichlorophenol	< 0.2	0.5	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Methanol	< 50	3500	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Phenylmercuric Acetate	< 0.2	0.6	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL

			water quality objective in the Basin Plan
Gasoline	< 50	5.0	Published literature provides a taste and odor threshold of 5 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan
Diesel	< 50	100	US EPA health advisory of September 4, 1992, Suggested No Adverse Response Level (SNARL) applied to TASTE AND ODOR water quality objective in the Basin Plan
Motor Oil	< 175	100	US EPA health advisory Suggested No Adverse Response Level (SNARL) of 0.1 ug/l to 1.0 ug/l applied to GENERAL water quality objective in the Basin Plan
Furan	< 0.0001	7.0	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
2,3,7,8-TCDD (Dioxin) ²	< 0.0001	2.7 E-7	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Benzene	< 0.5	0.15	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Toluene	< 0.5	42	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan
Ethylbenzene	< 0.5	3.2	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Xylenes	< 0.5	17	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan
Acenaphthene	< 0.1	20	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan.
Anthracene	< 0.1	2100	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Benz(a)Anthracene	< 0.1	0.04	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Benzo(b)Fluoranthene	< 0.1	0.04	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Benzo(k)Fluoranthene	< 0.1	0.04	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Benzo(a)Pyrene	< 0.1	0.0029	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Chrysene	< 0.1	0.04	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin

² Toxicity equivalency factors (TEF) are used to determine the relative toxicity of chlorinated dibenzodioxin (CDD) and chlorinated dibenzofuran (CDF) congeners. The following table represents applicable isomer groups and their associated TEF.

Isomer Group	Toxicity Equivalence Factor	Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0	2,3,7,8 tetra CDF	0.1
2,3,7,8-penta CDD	0.5	1,2,3,7,8 penta CDF	0.05
2,3,7,8-hexa CDD	0.1	2,3,4,7,8 penta CDF	0.5
2,3,7,8-hepta CDD	0.01	2,3,7,8 hexa CDF	0.1
octa CDD	0.001	2,3,7,8 hepta CDF	0.01
		octa CDF	0.001

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Dibenz(a,h)Anthracene	< 0.1	0.0085	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Fluoranthene	< 0.1	280	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Fluorene	< 0.1	280	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Indeno(1,2,3-c,d)Pyrene	< 0.1	0.04	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Naphthalene	< 1.0	21	Published literature provides a taste and odor threshold of 21 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan
Phenol	< 1.0	2100	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Pyrene	< 0.1	210	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Arsenic	< 2.0	0.0037	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Barium	< 2.0	1000	California Department of Health Services Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
Cadmium	< 2.0	0.04	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Chromium (Total)	< 2.0	50	California Department of Health Services Maximum Contaminant Level applied to TOXICITY water quality objective in the Basin Plan
Chromium (VI)	< 2.0	21	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Copper	< 2.0	300	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Iron	< 2.0	300	California Department of Health Services Secondary Maximum Contaminant Level applied to the TASTE & ODOR water quality objective in the Basin Plan
Lead	< 2.0	2.0	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Manganese	< 2.0	50	California Department of Health Services Secondary Maximum Contaminant Level applied to the GENERAL water quality objective in the Basin Plan
Mercury	< 0.2	1.2	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Nickel	< 2.0	12	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Zinc	< 2.0	2100	US EPA Integrated Risk Information System (IRIS) Reference Dose applied to GENERAL water quality objective in the Basin Plan
Phenanthrene	<0.1	None available	

1,1 Dichloroethane	<0.5	3	California PHG in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
1,2 Dichloroethane	<0.5	0.4	California PHG in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
1,1,2 Trichloroethane	<0.5	0.3	California PHG in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan