

<u>Date</u>	<u>Item Changed</u>	<u>Change(s) Made</u>
2/1/2016	Ammonia	Correct the formula for calculation of the Criteria Continuous Concentration on Page 17a.
2/16/2016	alpha-Endosulfan	Correct California Toxics Rule Criteria to protect Freshwater Aquatic Life, Maximum (Instantaneous) to read 0.22 ug/L. Correct National Recommended Water Quality Criteria to protect Freshwater Aquatic Life, Maximum (Instantaneous) to read 0.22 ug/L.
2/22/2016	Diisononyl phthalate	For California Proposition 65 No Significant Risk Level, remove footnote 68.
9/08/2016	tert-Butyl alcohol	Add IRIS Reference Dose of 70 ug/L and add footnote 68. Add IRIS Cancer Risk Level of 70 ug/L and add footnotes 68 and S.
	RDX (Cyclonite)	Add IRIS Reference Dose of 2.1 ug/L and add footnote 68. Add IRIS Cancer Risk Level of 0.9 ug/L and add footnote 68.
	Malathion	For Prop 65 cancer risk add footnote 188.
	Parathion	For Prop 65 cancer risk add footnote 188.
	Styrene	For Prop 65 cancer risk add footnote 188.
	Tetrachlorvinphos	For Prop 65 cancer risk add footnote 188.
9/27/2016	Antimony	Change Public Health Goal to 1 ug/L. Delete draft threshold and delete footnote 68.
	Carbofuran	Delete Public Health Goal of 1.7 ug/L and delete footnote 68.
	Diquat	Delete Public Health Goal of 15 ug/L and delete footnote 68.
	Endrin	Delete Public Health Goal of 1.8 ug/L and delete footnotes 68 and 147.
	Picloram	Delete Public Health Goal of 500 ug/L and delete footnote 68.
	Thiobencarb	Delete Public Health Goal of 70 ug/L and delete footnote 68.
	1,3,5-Trimethylbenzene	Change IRIS Reference Dose to 70 ug/L and delete footnote 68. IRIS Cancer Risk: Delete footnote 68.

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	1,2,4-Trimethylbenzene	Change IRIS Reference Dose to 70 ug/L and delete footnote 68. IRIS Cancer Risk: Delete footnote 68.
	1,2,3-Trimethylbenzene	Change IRIS Reference Dose to 70 ug/L and delete footnote 68. IRIS Cancer Risk: Delete footnote 68.
10/26/2016	Cadmium	Update page 20 spreadsheet based on new National Recommended Water Quality Criteria to protect freshwater aquatic life. For National Recommended Water Quality Criteria to protect freshwater aquatic life, 24-hour average, delete see page 20 and footnote 1. For National Recommended Water Quality Criteria to protect freshwater aquatic life, Maximum Concentration (1-hour Average), delete footnote 68. For National Recommended Water Quality Criteria to protect saltwater aquatic life, 4-day average, remove thresholds of 8.8 ug/L and 8.3 ug/L and footnote 68; add threshold of 7.9 ug/L. Remove 24-hour average threshold of 40 ug/L and remove footnote 1. For 1-hour average, remove threshold of 35 ug/L and footnote 68; add threshold of 33 ug/L.
12/21/2016	Selenium	For National Recommended Water Quality Criteria to protect freshwater aquatic life, 4-day average, remove 5 ug/L and add thresholds 1.5 ug/L and 3.1 ug/L. Delete footnote 136.
1/4/2017	Chloroform	Change One-in-a-Million Cancer Risk, CalEPA Cancer Potency from 1.8 ug/L to 1.1 ug/L.
	Formaldehyde	Add One-in-a-Million Cancer Risk, CalEPA Cancer Potency of 1.7 ug/L.
	4,4'-Methylenedianiline	Change One-in-a-Million Cancer Risk, CalEPA Cancer Potency Threshold 2 from 0.029 ug/L to 0.022 ug/L.
	n-Nitrosodi-n-butylamine	Change One-in-a-Million Cancer Risk, CalEPA Cancer Potency from 0.0032 ug/L to 0.32 ug/L.
	Procarbazine hydrochloride	Change One-in-a-Million Cancer Risk, CalEPA Cancer Potency Threshold 2 from 0.0029 to 0.29 ug/L.

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	1-Naphthylamine	<p>Add 1-Naphthylamine. Add CAS Number 134-32-7. Add synonyms Naphthalen-1-amine, alpha-Naphthylamine, 1-Aminonaphthalene.</p> <p>Add One-in-a-Million Cancer Risk, CalEPA Cancer Potency of 0.019 ug/L.</p>
1/5/2017	Microcystins	<p>Add Microcystins. Add CAS Number 77238-39-2. Add synonyms A class of cyanotoxins, Microcystin, Cyanoginosin.</p> <p>Add USEPA National Recommended Water Quality Criterion, Human Health, Water and Fish of 4 ug/L; add footnotes 68 and 79.</p> <p>Add USEPA Health Advisories (non-cancer) of 0.3 ug/L and 1.6 ug/L. Add footnotes 10-day and 72.</p> <p>Add footnote I to USEPA Health Advisory (cancer risk).</p> <p>Add California Public Health Goal (OEHHA) of 0.8 ug/L and 2 ug/L. Add footnote 216.</p> <p>Add Agricultural Water Quality Limit of 0.9 ug/L and 50 ug/L. Add footnote 217.</p>
	Footnote 72	<p>Threshold 1 is the ten-day Health Advisory value for bottle-fed infants and young children of pre-school-age. Threshold 2 is the ten-day Health Advisory value for school-age children through adults.</p>
	Footnote 79	<p>Threshold 1 - To protect swimmers, the concentration shall not be exceeded in a day. Threshold 2 - To protect the recreational use, the concentration shall not be exceeded more than 10 percent of days in a recreational season.</p>
	Cylindrospermopsin	<p>Add Cylindrospermopsin. Add CAS Number 143545-90-8. Add synonym A type of cyanotoxin.</p> <p>Add USEPA National Recommended Water Quality Criterion, Human Health, Water and Fish of 8 ug/L; add footnotes 68 and 79.</p> <p>Add USEPA Health Advisories (non-cancer) of 0.7 ug/L and 3 ug/L. Add footnotes 10-day and 72.</p> <p>Add footnote I to USEPA Health Advisory (cancer risk).</p>

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		Add California Public Health Goal (OEHHA) of 4 ug/L and 10 ug/L. Add footnote 216.
	Anatoxin-a	Add Agricultural Water Quality Limit of 5 ug/L and 60 ug/L. Add footnote 217. Add Anatoxin-a. Add CAS Number 64285-06-9. Add synonym Antx-A.
		Add California Public Health Goal (OEHHA) of 90 ug/L and 100 ug/L. Add footnote 216.
	Ethylene glycol	Add Agricultural Water Quality Limit of 40 ug/L and 40 ug/L. Add footnote 217. Add Prop 65 Maximum Allowable Dose for Reproductive Toxicity of 4,400 ug/L; add footnote 68.
1/11/2017	Selenium	For National Recommended Water Quality Criteria, Freshwater Aquatic Life Protection, Maximum (Instantaneous), delete footnote 136. For National Recommended Water Quality Criteria, Freshwater Aquatic Life Protection, Maximum (1-hour Avg), delete footnote 135.
	Footnote 135	Change text to read: 30-day average, as total recoverable. Threshold 1 for lentic (standing water); Threshold 2 for lotic (flowing water). Short term criterion for intermittent spike exposures also available. Freshwater aquatic life chronic criteria are applied in the following hierarchy: 15.1 mg/kg dry weight (fish egg-ovary), 8.5 mg/kg dry weight (fish whole body), and 11.3 mg/kg dry weight (fish muscle). Water column criteria may be used in the absence of steady state fish tissue concentrations. See Reference 24.
	Footnote 216	Add new footnote. Add text to read: Thresholds are OEHHA action levels. Threshold 1: Human recreational use. Threshold 2: Subchronic water intake for a dog. See list of action levels for selected scenarios on page iv for these and the following action levels: Human fish consumption and acute water intake for a dog. See Reference 37.
	Footnote 217	Add new footnote. Add text to read: Thresholds are OEHHA action levels. Threshold 1: Subchronic water intake for cattle. Threshold 2: Acute water intake

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		for cattle. See list of action levels for selected scenarios on page iv for these and the following action levels: Crust and mat intake for cattle. See Reference 37.
	Reference 37	Add new reference. Add text to read: California Environmental Protection Agency (Cal/EPA), Office of Environmental Health Hazard Assessment, Toxicological Summary and Suggested Action Levels to Reduce Potential Adverse Health Effects of Six Cyanotoxins, http://oehha.ca.gov/risk-assessment/document/toxicological-summary-and-suggested-action-levels-reduce-potential-adverse .
	Perfluorooctanoic acid	For California Proposition 65, reproductive toxicity, add footnotes 68 and 189.
	Perfluorooctane sulfonate	For California Proposition 65, reproductive toxicity, add footnotes 68 and 189.
2/9/2017	Malathion	For California Proposition 65, No Significant Risk Level, add 90 ug/L and add footnote 68.
2/10/2017	Nitrate	Add Public Health Goal of 10,000 ug/L and add footnote 68.
	Nitrite	Add Public Health Goal of 1,000 ug/L and add footnote 68.
2/14/2017	para-Chlorobenzene sulfonic acid	Add para-Chlorobenzene sulfonic acid. Add CAS Number 98-66-8. Add synonyms p-Chlorobenzene sulfonic acid, 4-Chlorobenzenesulphonic acid, pCBSA.
		Add Public Health Goal of 3,000 ug/L. Add Footnotes 68 and 218.
	Footnote 218	Add new footnote. Add text to read: Threshold is a public health protective concentration and not a Public Health Goal. A public health protective concentration is a health-based advisory level that OEHHA develops for a chemical in drinking water for which there is no public health goal or formal regulatory standard. A public health protective concentration differs from a public health goal in that it does not undergo formal public review and comment, or an external scientific peer review.
	Ethyl Tertiary Butyl Ether	Add Ethyl Tertiary Butyl Ether. Add CAS number 637-92-3. Add synonyms Ethyl tert-butyl ether, Ethyl t-butyl ether, ETBE.

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		<p>Add One-in-a-Million Cancer Risk, USEPA IRIS, of 40 ug/L. Add footnotes 68 and S.</p> <p>Add USEPA IRIS Reference Dose of 350 ug/L. Add footnote 68.</p>
	Methyl Bromide	For California Proposition 65, Maximum Allowable Dose for Reproductive Toxicity, delete 500 ug/L and delete footnote 68.
2/15/2017	Benzo(a)pyrene	<p>For Drinking Water Health Advisories for non-cancer, USEPA IRIS Reference Dose, delete footnote 68.</p> <p>For One-in-a-Million Cancer Risk, USEPA IRIS: Delete 0.005 ug/L, delete footnote B2, and delete footnote 68. Add 1 (mg/kg-day)⁻¹ and add footnotes 6 and H.</p>
	Acetaldehyde	For One-in-a-Million Cancer Risk, CalEPA Cancer Potency: Delete 3.5 ug/L.
	Arsenic	For One-in-a-Million Cancer Risk, CalEPA Cancer Potency: Delete 0.0037 ug/L and add 0.023 ug/L.
	Copper	<p>For National Recommended Water Quality Criteria, Saltwater Aquatic Life Protection, Continuous Concentration (4-day Average), delete 1.9 ug/L and footnote 68. Add footnote 180.</p> <p>Remove National Recommended Water Quality Criteria, Saltwater Aquatic Life Protection, 24-hour Average and delete footnotes 1 and 68.</p> <p>For National Recommended Water Quality Criteria, Saltwater Aquatic Life Protection, Maximum Concentration (1-hour Average), delete footnote 68 and add footnote 180.</p>
	Footnote 180	Change text to read: Acute and chronic freshwater aquatic life criteria are calculated using the Biotic Ligand Model, a metal bioavailability model. In addition to the thresholds shown, USEPA has proposed new acute and chronic saltwater aquatic life criteria calculated using the Biotic Ligand Model. As an example, the draft acute saltwater criterion of 2.0 ug/L and the draft chronic saltwater criterion of 1.3 ug/L are calculated based on the following parameters:

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		pH of 8.0, temperature of 22°C, DOC of 1.0 mg/L and salinity of 32 ppt. See Reference 25.
	Footnote 136	Change text to read: Draft chronic criterion. Because selenium might be as chronically toxic to saltwater fishes as it is to freshwater fishes, the status of the fish community should be monitored if selenium exceeds 5.85 µg/g dw in summer or fall or 7.91 µg/g dw during any season in the whole-body tissue of salt water fishes. See Reference 26.
	Electrical Conductivity	For National Recommended Water Quality Criteria, Freshwater Aquatic Life Protection, Continuous (4-day Average), add footnotes 68 and 219. For National Recommended Water Quality Criteria, Freshwater Aquatic Life Protection, 24-hour Average, add footnotes 68 and 219.
	Footnote 219	Add new footnote. Add text to read: USEPA has published draft aquatic life protective recommended water quality criteria for specific conductivity in wadeable streams derived for ecoregional or state-specific geographic areas and based on benthic macroinvertebrates (identified to genus-level) and natural variation in background specific conductivity. Two methods are available for derivation of criteria when use of the primary method (the Extirpation Concentration Distribution model) is precluded due to insufficient large, paired chemical and biological data sets. Guidance is also provided for estimation of criteria duration and exceedance frequency.
2/21/2017	Reference 4	Add text to read: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Public Health Protective Concentration in drinking water (various dates), https://oehha.ca.gov/water/report/public-health-protective-concentration-para-chlorobenzene-sulfonic-acid .
	Reference 25	Change text to read: U.S. Environmental Protection Agency, Office of Water, Aquatic Life Ambient Freshwater Quality Criteria - Copper, 2007 Revision, EPA-822-R-07-001 (February 2007); 2016 Draft Estuarine/Marine Copper Aquatic Life Ambient Water Quality Criteria, http://www.epa.gov/wqc/aquatic-life-criteria-copper .

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