

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10^{-6} Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

LEGEND

Missouri criterion higher than EPA criterion	
No Missouri criterion	
Missouri criterion lower than EPA criterion	

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
PRIORITY POLLUTANTS									
Antimony 7440360	No Criteria	N	No Criteria	N	6	6	5.6	640	4,300 EPA # is 640
Arsenic 7440382	340	No Missouri Criterion	150	20	10	50	0.018	0.14	No Missouri Criterion
Chromium VI 18540299	16	15	11	10	100 (Total)	No Missouri criteria	No Criteria	No Criteria	N
Mercury 7439976	1.4	2.4 EPA # is 1.4	0.77	0.5	2 (Inorg.)	2		0.3 mg/kg	No Missouri Criterion
Nickel 7440020	470	Using Correct Equation	52	Using Correct Equation	100	100	610	4,600	No Missouri Criterion

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Selenium 7782492 Total Selenium **EPA is working on this Criterion**	185.9 selenite 12.89 selenate	No Missouri criterion	5.0	5.0	50	50	170	4,200	No Missouri Criterion
Thallium 7440280	No Criteria	N	No Criteria	N	2	2	0.24	0.47	6.3 EPA # is 0.47
Zinc 7440666 (Hardness = 100mg/L)	120	Using Correct Equation	120	Equation more stringent	No STD	5,000	7,400	26,000	No Missouri Criterion
Cyanide 57125	22	22	5.2	5	200	No Missouri Criterion	140	140	No Missouri Criterion
2,3,7,8-TCDD Dioxin 1746016	No Criteria	N	No Criteria	N	3 E -05	**1.3 E-8 EPA # is 5.0E-9	5.0E-9	5.1E-9	**1.4E-8 EPA # is 5.1E-9
Acrolein 107028	No Criteria	N	No Criteria	N	No STD	320 EPA # is 190	190	290	780 EPA # is 290

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Acrylonitrile 107131	No Criteria	N	No Criteria	N	No STD	0.058 EPA # is 0.051	0.051	0.25	0.65 EPA # is 0.25
Benzene 71432	No Criteria	N	No Criteria	N	5	5	2.2	51	71 EPA # is 51
Bromoform 75252	No Criteria	N	No Criteria	N	No STD	4.3	4.3	140	**360 EPA # is 140
Carbon Tetrachloride 56235	No Criteria	N	No Criteria	N	5	5	0.23	1.6	5 EPA # is 1.6
Chlorodibromomethane 124481	No Criteria	N	No Criteria	N	No STD	0.41	0.40	13	**34 EPA # is 13
Dichlorobromomethane 75274	No Criteria	N	No Criteria	N	No STD	**0.56	0.55	17	**46 EPA # is 17
1,2-Dichloroethane 107062	No Criteria	N	No Criteria	N	5	5	0.38	37	99 EPA # is 37
1,2-Dichloropropane 78875	No Criteria	N	No Criteria	N	5	**0.52	0.50	15	**39 EPA # is 15

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
1,3-Dichloropropene 542756 (Dichloropropene)	No Criteria	N	No Criteria	N	No STD	87 EPA # is 0.34	0.34	21	1,700 EPA # is 21
Ethylbenzene 100414	No Criteria	N	No Criteria	320	700	700	530	2,100	No Missouri Criterion
Methyl Bromide 74839	No Criteria	N	No Criteria	N	No STD	48 EPA # is 47	47	1,500	4,000 EPA # is 1,500
Methylene Chloride 75092	No Criteria	N	No Criteria	N	No STD	**4.7 EPA # is 4.6	4.6	590	1600 EPA # is 590
1,1,2,2-Tetrachloroethane 79345	No Criteria	N	No Criteria	N	No STD	0.17	0.17	4.0	11 EPA # is 4.0
Tetrachloroethylene 127184	No Criteria	N	No Criteria	N	5	**0.8 EPA # is 0.69	0.69	3.3	**8.85 EPA # is 3.3

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Toluene 108883	No Criteria	N	No Criteria	N	1,000	1,000	1300	15,000	200,000 EPA # is 15,000
1,2-Trans-Dichloroethylene 156605	No Criteria	N	No Criteria	N	100	100	140	10,000	140,000 EPA # is 10,000
1,1,2-Trichloroethane 79005	No Criteria	N	No Criteria	N	5	5	0.59	16	42 EPA # is 16
Trichloroethylene 70916	No Criteria	N	No Criteria	N	5	5	2.5	30	80 EPA # is 30
Vinyl Chloride 75014	No Criteria	N	No Criteria	N	2	2	0.025	2.4	525 EPA # is 2.4
2-Chlorophenol 95578	No Criteria	N	No Criteria	N	No STD	0.1	81	150	400 EPA # is 150
2,4-Dichlorophenol 120832	No Criteria	N	No Criteria	7	No STD	93 EPA # is 77	77	290	790 EPA # is 290

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
2,4-Dimethylphenol 105679	No Criteria	N	No Criteria	N	No STD	540 EPA # is 380	380	850	2,300 EPA # is 850
2-Methyl-4,6-Dinitrophenol 534521	No Criteria	N	No Criteria	N	No STD	13	13	280	765 EPA # is 280
2,4-Dinitrophenol 51285	No Criteria	N	No Criteria	N	No STD	70 EPA # is 69	69	5,300	14,000 EPA # is 5,300
Pentachlorophenol 87865	19	Need to see eqn.	15	Need to see eqn.	1	1	0.27	3.0	8 EPA # is 3.0
Phenol 108952	No Criteria	N	No Criteria	100	No STD	100	21,000	1,700,000	No Missouri Criterion
2,4,6-Trichlorophenol 88062	No Criteria	N	No Criteria	N	No STD	2 EPA # is 1.4	1.4	2.4	6.5 EPA # is 2.4

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Acenaphthene 83329	No Criteria	N	No Criteria	N	No STD	1,200 EPA # is 670	670	990	2,700 EPA # is 990
Anthracene 120127	No Criteria	N	No Criteria	N	No STD	9,600 EPA # is 8,300	8,300	40,000	110,000 EPA # is 40,000
Benzidine 92875	No Criteria	N	No Criteria	N	No STD	0.00012 EPA # is 0.000086	0.000086	0.00020	0.00053 EPA # is 0.00020
Benzo-a-Anthracene 56553 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018
Benzo-a-Pyrene 50328 (PAH)	No Criteria	N	No Criteria	N	0.2	0.2	0.0038	0.018	0.049 EPA # is 0.018
Benzo-b-Fluoranthene 205992 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Benzo-k-Fluoranthene 207089 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018
Bis-2-Chloroethyl Ether 111444	No Criteria	N	No Criteria	N	No STD	0.03	0.030	0.53	1.4 EPA # is 0.53
Bis-2-Ethylhexyl Phthalate 117817	No Criteria	N	No Criteria	N	No STD	6 EPA # is 1.2	1.2	2.2	5.9 EPA # is 2.2
Butylbenzyl Phthalate 85687	No Criteria	N	No Criteria	N	No STD	3,000 EPA # is 1,500	1,500	1,900	5,200 EPA # is 1,900
2-Chloronaphthalene 91587	No Criteria	4,300	No Criteria	N	No STD	No Missouri Criterion	1,000	1,600	No Missouri Criterion
Chrysene 218019 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Dibenzo-a-h-Anthracene 53703 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018
1,2-Dichlorobenzene 95501 (Ortho-Other dichlorobenzenes)	No Criteria	N	No Criteria	N	600	600 EPA # is 420	420	1,300	2,600 EPA # is 1,300
1,3-Dichlorobenzene 541731 (Other dichlorobenzenes)	No Criteria	N	No Criteria	N	No STD	600 EPA # is 63	63	190	2,600 EPA # is 190
3-3'-Dichlorobenzidine 91941	No Criteria	N	No Criteria	N	No STD	0.04 EPA # is 0.021	0.021	0.028	0.08 EPA # is 0.028
Diethyl Phthalate 84662	No Criteria	N	No Criteria	N	No STD	23,000 EPA # is 17,000	17,000	44,000	120,000 EPA # is 44,000
Dimethyl Phthalate 131113	No Criteria	N	No Criteria	N	No STD	313,000 EPA # is 270,000	270,000	1,100,000	2,900,000 EPA # is 1,100,000

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Di-n-Butyl Phthalate 84742	No Criteria	N	No Criteria	N	No STD	2,700 EPA # is 2,000	2,000	4,500	12,000 EPA # is 4,500
2,4-Dinitrotoluene 121142	No Criteria	N	No Criteria	N	No STD	0.11	0.11	3.4	9 EPA # is 3.4
1,2-Diphenylhydrazine 122667	No Criteria	N	No Criteria	N	No STD	0.04 EPA # is 0.036	0.036	0.20	0.54 EPA # is 0.20
Fluoranthene 206440	No Criteria	N	No Criteria	N	No STD	300 EPA # is 130	130	140	370 EPA # is 140
Fluorene 86737	No Criteria	N	No Criteria	N	No STD	1,300 EPA # is 1,100	1,100	5,300	14,000 EPA # is 5,300
Hexachlorobenzene 118741	No Criteria	N	No Criteria	N	1	1 EPA # is 0.00028	0.00028	0.00029	0.00074 EPA # is 0.00029

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Hexachlorobutadiene 87683	No Criteria	N	No Criteria	N	No STD	0.45 EPA # is 0.44	0.44	18	50 EPA # is 18
Hexachlorocyclopentadiene 77474	No Criteria	N	No Criteria	0.5	50	50 EPA # is 40	40	1,100	No Missouri Criterion
Hexachloroethane 66721	No Criteria	N	No Criteria	N	No STD	1.9 EPA # is 1.4	1.4	3.3	8.7 EPA # is 3.3
Ideno 1,2,3-cd-Pyrene 193395 (PAH)	No Criteria	N	No Criteria	N	No STD	0.0044 EPA # is 0.0038	0.0038	0.018	0.049 EPA # is 0.018
Isophorone 78591	No Criteria	N	No Criteria	N	No STD	36 EPA # is 35	35	960	2,600 EPA # is 960
Nitrobenzene 98953	No Criteria	N	No Criteria	N	No STD	17	17	690	1,900 EPA # is 690

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
N-Nitrosodimethylamine 62759	No Criteria	N	No Criteria	N	No STD	0.0007	0.00069	3.0	8 EPA # is 3.0
N-Nitrosodi-n-Propylamine 621647	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	0.0050	0.51	1.4 EPA # is 0.51
N-Nitrosodiphenylamine 86306	No Criteria	N	No Criteria	N	No STD	5.0 EPA # is 3.3	3.3	6.0	16 EPA # is 6.0
Pyrene 129000	No Criteria	N	No Criteria	N	No STD	960 EPA # is 830	830	4,000	11,000 EPA # is 4,000
1,2,4-Trichlorobenzene 120821	No Criteria	N	No Criteria	N	70	70 EPA # is 35	35	70	940 EPA # is 70
Aldrin 309002	3.0	N	No Criteria	N	No STD	0.00013 EPA # is 0.000049	0.000049	0.000050	0.000079 EPA # is 0.000050

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
alpha-BHC 319846	No Criteria	N	No Criteria	N	No STD	0.0022 EPA # is 0.0026	0.0026	0.0049	0.0074 EPA # is 0.0049
beta-BHC 319857	No Criteria	N	No Criteria	N	No STD	0.0022	0.0091	0.017	0.0074 EPA # is 0.017
gamma-BHC (Lindane)58899	0.95	No Missouri Criterion	No Criteria	N	0.2	0.2	.98	1.8	0.062
Chlordane 57749	2.4	No Missouri Criterion	0.0043	No Missouri Criterion	2	2	0.00080	0.00081	0.00048 EPA # is 0.00081
4-4'-DDT 50293	1.1	No Missouri Criterion	0.001	No Missouri Criterion	No STD	**0.0059 EPA # is 0.00022	0.00022	0.00022	**0.00059 EPA # is 0.00022
4-4'-DDE 72559	No Criteria	N	No Criteria	N	No STD	**0.00059 EPA # is 0.00022	0.00022	0.00022	**0.00059 EPA # is 0.00022

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
4-4'-DDD 72548	No Criteria	N	No Criteria	N	No STD	**0.00083 EPA # is 0.00031	0.00031	0.00031	**0.00084 EPA # is 0.00031
Dieldrin 60571	0.24	No Missouri Criterion	0.056	No Missouri Criterion	No STD	0.00014 EPA # is 0.000052	0.000052	0.000054	0.000076 EPA # is 0.000054
alpha-Endosulfan 959988 (Endosulfan)	0.22	0.11	0.056	0.056	No STD	No Missouri Criterion	62	89	No Missouri Criterion
beta-Endosulfan 33213659 (Endosulfan)	0.22	0.11	0.056	0.056	No STD	No Missouri Criterion	62	89	No Missouri Criterion
Endosulfan Sulfate 1031078	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	62	89	No Missouri Criterion
Endrin 72208	0.086	No Missouri Criterion	0.036	No Missouri Criterion	2	2	0.059	0.06	0.0023

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Endrin Aldehyde 7421934	No Criteria	N	No Criteria	N	No STD	0.75 EPA # is 0.29	0.29	0.30	0.0023
Heptachlor 76448	0.52	No Missouri Criterion	0.0038	0.0038	0.4	0.4	0.000079	0.000079	0.0002 EPA # is 0.000079
Heptachlor Epoxide 1024573	0.52	No Missouri Criterion	0.0038	No Missouri Criterion	0.2	0.2	0.000039	0.000039	0.00011 EPA # is 0.000039
Polychlorinated Biphenyls: PCBs	No Criteria	N	0.014	No Missouri Criterion	0.5	No Missouri Criterion	0.000064	0.000064	0.000045
Toxaphene 8001352	0.73	No Missouri Criterion	0.0002	No Missouri Criterion	3	3	0.00028	0.00028	0.000073
NON-PRIORITY POLLUTANTS									
Alkalinity	No Criteria	N	20,000	N	No STD	N	No Criteria	No Criteria	N

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Aluminum pH 6.5-9.0 7429905	750	750	87	No Missouri Criterion	No STD	N	No Criteria	No Criteria	N
chlorpyrifos 2921882	0.083	No Missouri Criterion	0.041	0.04	No STD	N	No Criteria	No Criteria	N
Ether, Bis-Chloromethyl 542881	No Criteria	N	No Criteria	N	No STD	**0.00013 EPA # is 0.00010	0.00010	0.00029	**0.00078 EPA # is 0.00029
Hexachlorocyclo-hexane- Technical or BHC 319868	No Criteria	N	No Criteria	N	No STD	N	0.0123	0.0414	No Missouri Criterion
Manganese 7439965	No Criteria	N	No Criteria	N	No STD	N	50	100	No Missouri Criterion
Nitrosamines	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	0.0008	1.24	No Missouri Criterion

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Dinitrophenols 25550587	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	69	5,300	No Missouri Criterion
N-Nitrosodibutylamine 924163	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	0.0063	0.22	No Missouri Criterion
N-Nitrosodiethylamine 55185	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	0.0008	1.24	No Missouri Criterion
N-Nitrosopyrrolidine, 930552	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	0.016	34	91.9 EPA # is 34
Parathion 56382	0.065	No Missouri Criterion	0.013	0.04	No STD	N	No Criteria	No Criteria	N
Pentachlorobenzene 608935	No Criteria	N	No Criteria	N	No STD	**3.5 EPA # is 1.4	1.4	1.5	**4.1 EPA # is 1.5

MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Version: 3/11/11

Missouri Department of Natural Resources Uses the 10⁻⁶ Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, EPA has revised its human health criteria and now recommends a different values.

POLLUTANT/CAS #	EPA 304(a) CMC Acute Aquatic Life µg/l	MO Acute Aquatic Life Use µg/l	EPA 304(a) CCC Chronic Aquatic Life µg/l	MO Chronic Aquatic Life Use µg/l	EPA MCL from SDWA µg/l	MO Public Drinking Supply µg/l	EPA Human Health Org. +Water µg/l 10 ⁻⁶ Risk Factor	EPA Human Health Org. ONLY µg/l 10 ⁻⁶ Risk Factor	MO Fish Cons. µg/l
Solids Dissolved and Salinity	No Criteria	N	No Criteria	N	No STD	No Missouri Criterion	250,000	No Criteria	N
Tetrachlorobenzene, 1,2,4, 5-95943	No Criteria	N	No Criteria	N	No STD	**2.3 EPA # is 0.97	0.97	1.1	2.9 EPA # is 1.1
Tributyltin TBT	0.46	No Missouri Criterion	0.072	No Missouri Criterion	No STD	N	No Criteria	No Criteria	N
Trichlorophenol, 2,4,5- 95954	No Criteria	N	No Criteria	N	No STD	2,600 EPA # is 1,800	1,800	3,600	9,800 EPA # is 3,600

2006 MISSOURI NUMERIC WATER QUALITY CRITERIA SUMMARY

Missouri Department of Natural Resources Uses the 10^{-6} Human Health carcinogenicity factor

** Indicates MDNR revised the criterion in response to EPA's disapproval and adopted the number recommended in EPA's Sept. 8, 2000, disapproval letter. However, in the time since that action occurred EPA has revised its human health criteria and now recommends a different value.