

Table 1

Chemical	CAS Number	EPA 2015 Recommended Criteria		Current NJ Criteria		NJ Criteria being Considered for Proposal		Rationale for difference between NJDEP and EPA	
		Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)	Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)	Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)		
1	Acenaphthene	83-32-9	70	90	670	990	68	83	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
2	Acrolein	107-02-8	3	400	6.1	9.3	3	400	No difference
3	Acrylonitrile	107-13-1	0.061	7.0	0.051	0.25	0.061	7.0	No difference
4	Aldrin	309-00-2	0.00000077	0.00000077	0.000049	0.00005	0.00000077	0.00000077	No difference
5	alpha-BHC (alpha-HCH)	319-84-6	0.00036	0.00039	0.0026	0.0049	0.00036	0.00039	No difference
6	alpha-Endosulfan	959-98-8 (mixture: 115-29-7)	20	30	62	89	20	30	No difference
7	Anthracene	120-12-7	300	400	8300	40000	300	400	No difference
8	Benzene	71-43-2	0.58 - 2.1	16 - 58	0.15	3.3	0.11	3.1	NJDEP used a singular cancer slope factor as opposed to a range of cancer slope factors
9	Benzidine	92-87-5	0.00014	0.011	0.000086	0.0002	0.00014	0.011	No difference
10	Benzo(a) Anthracene	56-55-3	0.0012	0.0013	0.038	0.18	0.006	0.006	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
11	Benzo(a) Pyrene	50-32-8	0.00012	0.00013	0.0038	0.018	0.0006	0.0006	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
12	Benzo(b) Fluoranthene	205-99-2	0.0012	0.0013	0.038	0.18	0.006	0.006	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
13	Benzo(k) Fluoranthene	207-08-9	0.012	0.013	0.38	1.8	0.06	0.06	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
14	beta-BHC (beta-HCH)	319-85-7	0.0080	0.014	0.0091	0.017	0.0080	0.014	No difference
15	beta-Endosulfan	33213-65-9	20	40	62	89	20	40	No difference
16	Bis(Chloromethyl) Ether	542-88-1	0.00015	0.017	ND	ND	0.00015	0.017	No difference
17	Bis(2-Chloroethyl) Ether	111-44-4	0.030	2.2	0.03	0.53	0.030	2.2	No difference
18	Bis(2-Chloro-1-Methylethyl) Ether (previously Bis(2-Chloroisopropyl) Ether)	108-60-1	200	4000	1400	65000	200*	3200	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 220 µg/L, but will use EPA's recommended fresh water criterion of 200 µg/L because it is more protective.
19	Bis(2-Ethylhexyl) Phthalate	117-81-7	0.32	0.37	1.2	2.2	0.32	0.37	No difference
20	Bromoform	75-25-2	7.0	120	4.3	140	7.0	120	No difference
21	Butylbenzyl Phthalate	85-68-7	0.10	0.10	150	190	0.10	0.10	No difference
22	Carbon Tetrachloride	56-23-5	0.4	5	0.33	2.3	0.33	3.6	NJDEP used a different cancer slope factor
23	Chlordane	57-74-9	0.00031	0.00032	0.0001	0.00011	0.000041	0.000041	NJDEP used a different cancer slope factor
24	Chlorobenzene	108-90-7	100	800	210	2500	37	270	NJDEP used a different reference dose
25	Chlorodibromomethane (Dibromochloromethane)	124-48-1	0.80	21	0.4	13	0.75	19	No difference, but note: NJDEP used the same cancer slope factor but with 2 significant figures (EPA may have typo with CSF = 0.040, as opposed to CSF = 0.043 in OW document cited by USEPA (2015))
26	Chloroform	67-66-3	60	2000	68	2100	60*	2000*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 65 µg/L and saline criterion of 2300 µg/L, but will use EPA's recommended fresh water criterion of 60 µg/L and saline criterion of 2000 µg/L because they are more protective.
27	Chlorophenoxy Herbicide (2,4-D)	94-75-7	1300	12000	ND	ND	60.	560	NJDEP used a different reference dose
28	Chlorophenoxy Herbicide (2,4,5-TP)	93-72-1	100	400	ND	ND	100*	380	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a freshwater criterion of 130 µg/L, but will use EPA's recommended fresh water criterion of 100 µg/L because it is more protective.
29	Chrysene	218-01-9	0.12	0.13	3.8	18	0.6	0.6	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
30	Cyanide	57-12-5	4	400	140	140	4	400*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures; criteria rounded to 1 significant figure due to BCF. NJDEP calculated a saline criterion of 500 µg/L, but will use EPA's recommended saline criterion of 400 µg/L because it is more protective.
31	Dibenzo(a,h) Anthracene	53-70-3	0.00012	0.00013	0.0038	0.018	0.0006	0.0006	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
32	Dichlorobromomethane (Bromodichloromethane)	75-27-4	0.95	27	0.55	17	0.95	27	No difference
33	Dieldrin	60-57-1	0.0000012	0.0000012	0.000052	0.000054	0.0000012	0.0000012	No difference
34	Diethyl Phthalate	84-66-2	600	600	17000	44000	530	590	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
35	Dimethyl Phthalate	131-11-3	2000	2000	ND	ND	500	500	NJDEP used a different reference dose



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36	Di-n-Butyl Phthalate	84-74-2	20	30	2000	4500	20*	30*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 30 µg/L and a saline criterion of 31 µg/L, but will use EPA's recommended fresh water criterion of 20 µg/L and salt water criterion of 30 µg/L because they are more protective.
37	Dinitrophenols	25550-58-7	10	1000	69	5300	10	1000	No difference
38	Endosulfan Sulfate	1031-07-8	20	40	62	89	20	40	No difference
39	Endrin	72-20-8	0.03	0.03	0.059	0.06	0.028	0.028	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
40	Endrin Aldehyde	7421-93-4	1	1	0.059	0.06	0.89	1.0	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
41	Ethylbenzene	100-41-4	68	130	530	2100	68	130	No difference
42	Fluoranthene	206-44-0	20	20	130	140	19	20.	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
43	Fluorene	86-73-7	50	70	1100	5300	50*	70*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 57 µg/L and a saline criterion of 72 µg/L, but will use EPA's recommended fresh water criterion of 50 µg/L and saline criterion of 70 µg/L because they are more protective.
44	gamma-BHC (Lindane)	58-89-9	4.2	4.4	0.98	1.8	0.0014	0.0014	NJDEP used a cancer slope factor instead of a reference dose
45	Heptachlor	76-44-8	0.0000059	0.0000059	0.000079	0.000079	0.0000059	0.0000059	No difference
46	Heptachlor Epoxide	1024-57-3	0.000032	0.000032	0.000039	0.000039	0.000032	0.000032	No difference
47	Hexachlorobenzene	118-74-1	0.000079	0.000079	0.00028	0.00029	0.000079	0.000079	No difference
48	Hexachlorobutadiene	87-68-3	0.01	0.01	0.44	18	0.01	0.01	No difference
49	Hexachlorocyclohexane - Technical	608-73-1	0.0066	0.010	ND	ND	0.0066	0.010	No difference
50	Hexachlorocyclopentadiene	77-47-4	4	4	40	1100	4	4	No difference
51	Hexachloroethane	67-72-1	0.1	0.1	1.4	3.3	0.1	0.1	No difference
52	Indeno(1,2,3-cd) Pyrene	193-39-5	0.0012	0.0013	0.038	0.18	0.006	0.006	NJDEP used more recent cancer slope factor (for BaP) and applied ADAFs
53	Isophorone	78-59-1	34	1800	35	960	34	1800	No difference
54	Methoxychlor	72-43-5	0.02	0.02	40	ND	0.02	0.02	No difference
55	Methyl Bromide	74-83-9	100	10000	47	1500	9.2	820	NJDEP used a different reference dose
56	Methylene Chloride	75-09-2	20	1000	2.5	310	7	800	NJDEP applied ADAFs
57	Nitrobenzene	98-95-3	10	600	17	690	1.2	50.	NJDEP applied an additional uncertainty factor of 10 to the RfD to account for potential cancer risk
58	Pentachlorobenzene	608-93-5	0.1	0.1	1.4	1.5	0.1*	0.1*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 0.11 µg/L and a saline criterion of 0.11 µg/L, but will use EPA's recommended fresh water criterion of 0.1 µg/L and saline criterion of 0.1 µg/L because they are more protective.
59	Pentachlorophenol	87-86-5	0.03	0.04	0.27	3.0	0.03	0.04	No difference
60	Perfluorononanoic acid (PFNA)	375-95-1	NA	NA	NA	0.013 (Water Only)	NA	NA	
61	Perfluorooctanoic acid (PFOA)	335-67-1	NA	NA	NA	0.014 (Water Only)	NA	NA	
62	Perfluorooctane Sulfonate (PFOS)	1763-23-1	NA	NA	NA	0.013 (Water Only)	NA	NA	
63	Phenol	108-95-2	4000	300000	10000	860000	2000.	140000	NJDEP used a different reference dose
64	Pyrene	129-00-00	20	30	830	4000	19	21	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures
65	Tetrachloroethylene	127-18-4	10	29	0.34	1.6	0.26	0.73	NJDEP used a different cancer slope factor
66	Toluene	108-88-3	57	520	1300	15000	470	4200	NJDEP used a different reference dose
67	Toxaphene	8001-35-2	0.00070	0.00071	0.00028	0.00028	0.00070	0.00071	No difference
68	Trichloroethylene	79-01-6	0.6	7	1.0	12	0.27	5.0	NJDEP applied ADAFs
69	Vinyl Chloride	75-01-4	0.022	1.6	0.082	8.1	0.022	1.6	No difference
70	1,1,1-Trichloroethane	71-55-6	10000	200000	120	2600	1700	25000	NJDEP used a different reference dose
71	1,1,2,2-Tetrachloroethane	79-34-5	0.2	3	4.7	110	0.2	3	No difference
72	1,1,2-Trichloroethane	79-00-5	0.55	8.9	13	350	0.55	8.9	No difference
73	1,1-Dichloroethylene	75-35-4	300	20000	4.7	100	30.	1500	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures AND NJDEP applied an additional uncertainty factor of 10 to the RfD to account for potential cancer risk
74	1,2,4-Trichlorobenzene	120-82-1	0.071	0.076	21	42	0.071	0.076	No difference
75	1,2,4,5-Tetrachlorobenzene	95-94-3	0.03	0.03	0.97	1.1	0.03*	0.03*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 0.033 µg/L and a saline criterion of 0.034 µg/L, but will use EPA's recommended fresh water criterion of 0.03 µg/L and saline criterion of 0.03 µg/L because they are more protective.



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76	1,2-Dichlorobenzene	95-50-1	1000	3000	2000	6200	130	350	Numerical difference due to NJDEP using the same toxicity factor but with 2 or more significant figures AND NJDEP applied an additional uncertainty factor to account for database deficiencies
77	1,2-Dichloroethane	107-06-2	9.9	650	0.29	28	0.27	18	NJDEP used a different cancer slope factor
78	1,2-Dichloropropane	78-87-5	0.90	31	0.5	15	0.90	31	No difference
79	1,2-Diphenylhydrazine	122-66-7	0.03	0.2	0.036	0.20	0.03	0.2	No difference
80	1,2-trans-Dichloroethylene	156-60-5	100	4000	590	43000	110	3200	NJDEP used a different reference dose
81	1,3-Dichlorobenzene	541-73-1	7	10	2200	8300	2.4	5.0	NJDEP used the same principal study and critical effect as USEPA but applied an additional uncertainty factor of 3 to account for database deficiencies
82	1,3-Dichloropropene	542-75-6	0.27	12	0.34	21	0.3	10	NJDEP used a different cancer slope factor
83	1,4-Dichlorobenzene	106-46-7	300	900	550	2200	10.	30.	NJDEP used a different reference dose
84	2,4,5-Trichlorophenol	95-95-4	300	600	1800	3600	300	600	No difference
85	2,4,6-Trichlorophenol	88-06-2	1.5	2.8	0.58	1.0	1.5	2.8	No difference
86	2,4-Dichlorophenol	120-83-2	10	60	77	290	10	60	No difference
87	2,4-Dimethylphenol	105-67-9	100	3000	380	850	100	3000	No difference
88	2,4-Dinitrophenol	51-28-5	10	300	69	5300	10	300	No difference
89	2,4-Dinitrotoluene	121-14-2	0.049	1.7	0.11	3.4	0.049	1.7	No difference
	1,4-Dioxane	123-91-1	NA	NA	NA	NA	0.33	NA	NA
90	2-Chloronaphthalene	91-58-7	800	1000	1000	1600	800*	1000*	Numerical difference due to NJDEP using same toxicity factor but with 2 or more significant figures. NJDEP calculated a fresh water criterion of 810 µg/L and a saline criterion of 1300 µg/L, but will use EPA's recommended fresh water criterion of 800 µg/L and saline criterion of 1000 µg/L because they are more protective.
91	2-Chlorophenol	95-57-8	30	800	81	150	30	800	No difference
92	2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-o-cresol)	534-52-1	2	30	13	280	0.6	9	NJDEP used a different reference dose
93	3,3'-Dichlorobenzidine	91-94-1	0.049	0.15	0.021	0.028	0.049	0.15	No difference
94	3-Methyl-4-Chlorophenol	59-50-7	500	2000	ND	ND	500	2000	No difference
95	4,4'-DDD	72-54-8	0.00012	0.00012	0.00031	0.00031	0.00012	0.00012	No difference
96	4,4'-DDE	72-55-9	0.000018	0.000018	0.00022	0.00022	0.000018	0.000018	No difference
97	4,4'-DDT	50-29-3	0.000030	0.000030	0.00022	0.00022	0.000030	0.000030	No difference

KEY:

* Will use EPA's 2015 recommended criterion as New Jersey's recommended criterion.



Table 2

Handout for Stakeholder Meeting
Supporting Information for NJ Criteria being Considered for Proposal
June 2022

Chemical	CAS Number	Reference Dose (RfD) (mg/kg x d)	Cancer Slope Factor (CSF) (mg/kg-day)-1	Relative Source Contribution (RSC)	Chemical Specific Considerati ons	Carcinogen Group	Final BAF (or equivalent) L/kg	NJ Criteria being Considered for Proposal	
								Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)
1 Acenaphthene	83-32-9	0.0583		0.2			510*	68	83
2 Acrolein	107-02-8	0.0005		0.2		D	0.0213	3	400
3 Acrylonitrile	107-13-1		0.54	NA		B1	0.0213	0.061	7.0
4 Aldrin	309-00-2		17	NA		B2	6118	0.00000077	0.00000077
5 Anthracene	120-12-7	0.3		0.2		D	610*	300	400
6 Benz(a) Anthracene	56-55-3		0.1	NA	X	B2	3900*	0.006	0.006
7 Benzene	71-43-2		0.28	NA		A	0.09156	0.11	3.1
8 Benzidine	92-87-5		230	NA		A	0.03307	0.00014	0.011
9 Benzo(b) Fluoranthene	205-99-2		0.1	NA	X	B2	3900*	0.006	0.006
10 Benzo(k) Fluoranthene	207-08-9		0.01	NA	X	B2	3900*	0.06	0.06
11 Benzo(a) Pyrene	50-32-8		1	NA	X	H	3900*	0.0006	0.0006
12 alpha-BHC (alpha-HCH)	319-84-6		6.3	NA		B2	32.61	0.00036	0.00039
13 beta-BHC (beta-HCH)	319-85-7		1.8	NA		C	3.13	0.0080	0.014
14 gamma-BHC (Lindane)	58-89-9		1.3	NA		S	42.51	0.0014	0.0014
15 Bis(2-Chloroethyl) Ether	111-44-4		1.1	NA		B2	0.03307	0.030	2.2
16 Bis(2-Chloroisopropyl) Ether	108-60-1	0.0358		0.2			0.1776	220***	3200
17 Bis(Chloromethyl) Ether	542-88-1		220	NA		A	0.0213	0.00015	0.017
18 Bis(2-Ethylhexyl) Phthalate	117-81-7		0.014	NA		B2	710*	0.32	0.37
19 Bromodichloromethane (Dichlorobromomethane)	75-27-4		0.034	NA		L	0.0873	0.95	27
20 Bromoform	75-25-2		0.0045	NA		L	0.1519	7.0	120
21 Butylbenzyl Phthalate	85-68-7		0.0019	NA		C	19000*	0.10	0.10
22 Carbon Tetrachloride	56-23-5		0.091	NA		L	0.2453	0.33	3.6
23 Chlordane	57-74-9		2.7	NA		B2	724.7	0.000041	0.000041
24 Chlorobenzene	108-90-7	0.0065		0.2	Y	D	0.382	37	270
25 Chloroform	67-66-3	0.010		0.2		B2	0.0699	65***	2300***
26 Chlorophenoxy Herbicide (2,4-D)	94-75-7	0.010		0.2		D	13*	60	560
27 Chlorophenoxy Herbicide (2,4,5-TP)	93-72-1	0.008		0.8		D	58*	130***	380
28 2-Chloronaphthalene	91-58-7	0.083		0.8			4.17	810***	1300***
29 2-Chlorophenol	95-57-8	0.005		0.2			0.0977	30	800
30 Chrysene	218-01-9		0.001	NA	X	B2	3900*	0.6	0.6
31 Cyanide	57-12-5	0.00063		0.2		I	1**	4	500***
32 4,4'-DDD	72-54-8		0.24	NA		B2	2679	0.00012	0.00012
33 4,4'-DDE	72-55-9		0.167	NA		L	27322	0.000018	0.000018
34 4,4'-DDT	50-29-3		0.34	NA		B2	7940	0.000030	0.000030
35 Dibenzo(a,h) Anthracene	53-70-3		1	NA	X	B2	3900*	0.0006	0.0006



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								Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)
36 Dibromochloromethane (Chlorodibromomethane)	124-48-1		0.043	NA		S	0.09643	0.75	19
37 Di-n-Butyl Phthalate	84-74-2	0.13		0.2		D	2900*	30***	31***
38 1,2-Dichlorobenzene	95-50-1	0.031		0.2		D	1.424	130	350
39 1,3-Dichlorobenzene	541-73-1	0.00070		0.2		D	2.237	2.4	5.0
40 1,4-Dichlorobenzene	106-46-7	0.0023		0.2	Z	C	1.209	10	30
41 3,3'-Dichlorobenzidine	91-94-1		0.45	NA		B2	1.202	0.049	0.15
42 1,2-Dichloroethane	107-06-2		0.12	NA		B2	0.0373	0.27	18
43 1,1-Dichloroethylene	75-35-4	0.0046		0.2	Z	C	0.0491	30	1500
44 1,2-trans-Dichloroethylene	156-60-5	0.017		0.2		I	0.0852	110	3200
45 2,4-Dichlorophenol	120-83-2	0.003		0.2			0.8416	10	60
46 1,2-Dichloropropane	78-87-5		0.036	NA		B2	0.072	0.90	31
47 1,3-Dichloropropene	542-75-6		0.1	NA		B2	0.056	0.3	10
48 Dieldrin	60-57-1		16	NA		B2	4003	0.0000012	0.0000012
49 Diethyl Phthalate	84-66-2	0.75		0.2		D	920*	530	590
50 2,4-Dimethylphenol	105-67-9	0.02		0.2			0.1255	100	3000
51 Dimethyl Phthalate	131-11-3	3		0.2		D	4000*	500	500
52 4,6-Dinitro-o-cresol	534-52-1	0.0001		0.2		I	0.1792	0.6	9
53 Dinitrophenol	25550-58-7	0.002		0.2			1.51**	10	1000
54 2,4-Dinitrophenol	51-28-5	0.002		0.2			4.4*	10	300
55 2,4-Dinitrotoluene	121-14-2		0.667	NA		L	0.0713	0.049	1.7
56 1,4-Dioxane	123-91-1		0.1					0.33	NC
57 1,2-Diphenylhydrazine	122-66-7		0.8	NA		B2	0.481	0.03	0.2
58 alpha-Endosulfan	959-98-8	0.006		0.2			3.556	20	30
59 beta-Endosulfan	33213-65-9	0.006		0.2			2.217	20	40
60 Endosulfan Sulfate	1031-07-8	0.006		0.2			2.415	20	40
61 Endrin	72-20-8	0.00025		0.8		D	579.2	0.028	0.028
62 Endrin Aldehyde	7421-93-4	0.00025		0.8			15.59	0.89	1.0
63 Ethylbenzene	100-41-4	0.022		0.2		D	2.78	68	130
64 Fluoranthene	206-44-0	0.042		0.2		D	1500*	19	20
65 Fluorene	86-73-7	0.042		0.2		D	9.24	57***	72***
66 Heptachlor	76-44-8		4.1	NA		B2	3322	0.0000059	0.0000059
67 Heptachlor Epoxide	1024-57-3		5.5	NA		B2	450	0.000032	0.000032
68 Hexachlorobenzene	118-74-1		1.02	NA		B2	991	0.000079	0.000079
69 Hexachlorobutadiene	87-68-3		0.04	NA		C	204.5	0.01	0.01
70 Hexachlorocyclohexane - Technical	608-73-1		1.8	NA		B2	4.38	0.0066	0.010
71 Hexachlorocyclopentadiene	77-47-4	0.006		0.2		E	24.24	4	4
72 Hexachloroethane	67-72-1		0.04	NA		L	14.59	0.1	0.1
73 Indeno(1,2,3-cd) Pyrene	193-39-5		0.1	NA	X	B2	3900*	0.006	0.006
74 Isophorone	78-59-1		0.00095	NA		C	0.0456	34	1800
75 Methoxychlor	72-43-5	0.00002		0.8		D	74.4	0.02	0.02
76 Methyl Bromide	74-83-9	0.0014		0.2		D	0.0274	9.2	820
77 3-Methyl-4-Chlorophenol	59-50-7	0.1		0.2		D	0.681	500	2000
78 Methylene Chloride	75-09-2		0.002	NA	X	L	0.00059	7	800



Table 2

Chemical	CAS Number	Reference Dose (RfD) (mg/kg x d)	Cancer Slope Factor (CSF) (mg/kg-day)-1	Relative Source Contribution (RSC)	Chemical Specific Considerations	Carcinogen Group	Final BAF (or equivalent) L/kg	NJ Criteria being Considered for Proposal	
								Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)
79 Nitrobenzene	98-95-3	0.00018		0.2	Z	L	0.0574	1.2	50
80 Pentachlorobenzene	608-93-5	0.00083		0.2		D	116.3	0.11***	0.11***
81 Pentachlorophenol	87-86-5		0.4	NA		L	5.48	0.03	0.04
82 Perfluorononanoic acid (PFNA)	375-95-1	Technical Support Document						0.013 (Water Only)	NA
83 Perfluorooctanoic acid (PFOA)	335-67-1				Technical Support Document			0.014 (Water Only)	NA
84 Perfluorooctane sulfonate (PFOS)	1763-23-1			Technical Support Document				0.013 (Water Only)	NA
85 Phenol	108-95-2	0.31		0.2		D	0.0357	2000	140000
86 Pyrene	129-00-0	0.025		0.2		D	860*	19	21
87 1,2,4,5-Tetrachlorobenzene	95-94-3	0.00034		0.2			161.8	0.033***	0.034***
88 1,1,2,2-Tetrachloroethane	79-34-5		0.2	NA		L	0.1498	0.2	3
89 Tetrachloroethylene	127-18-4		0.082	NA		L	1.328	0.26	0.73
90 Toluene	108-88-3	0.079		0.2		I	0.299	470	4200
91 Toxaphene	8001-35-2		1.1	NA		B2	101.8	0.00070	0.00071
92 1,2,4-Trichlorobenzene	120-82-1		0.029	NA		L	36.37	0.071	0.076
93 1,1,1-Trichloroethane	71-55-6	0.28		0.2		I	0.1808	1700	25000
94 1,1,2-Trichloroethane	79-00-5		0.057	NA		C	0.1581	0.55	8.9
95 Trichloroethylene	79-01-6		0.046	NA	X	H	0.00439	0.27	5.0
96 2,4,5-Trichlorophenol	95-95-4	0.1		0.2			2.78	300	600
97 2,4,6-Trichlorophenol	88-06-2		0.011	NA		B2	2.597	1.5	2.8
98 Vinyl Chloride	75-01-4		1.5	NA		H	0.0331	0.022	1.6

KEY:

*Consistent with USEPA (2015) "This bioaccumulation factor was estimated from laboratory-measured bioconcentration factors; USEPA multiplied this bioaccumulation factor by the overall national recommended fish consumption rate of 22.0 g/d (see USEPA's 2014 Estimated Fish Consumption Rates for the U.S. Population and Selected Subpopulations (NHANES 2003-2010)) to calculate the 2015 human health criteria."



Table 2

Chemical	CAS Number	Reference Dose (RfD) (mg/kg x d)	Cancer Slope Factor (CSF) (mg/kg-day)-1	Relative Source Contribution (RSC)	Chemical Specific Considerations	Carcinogen Group	Final BAF (or equivalent) L/kg	NJ Criteria being Considered for Proposal	
								Water + Organism (Fresh Water) (µg/L)	Organism Only (Saline) (µg/L)
**Consistent with USEPA (2015) this bioconcentration factor was multiplied by the overall national recommended fish consumption rate of 22.0 g/d (see USEPA's 2014 Estimated Fish Consumption Rates for the U.S. Population and Selected Subpopulations (NHANES 2003-2010)) to calculate the 2015 human health criteria.									
***Will use EPA's 2015 recommended value as New Jersey's recommended criterion.									
NA - Not applicable									
A - Human carcinogen									
B1-B2 - Probable human carcinogen									
C - Possible human carcinogen									
D - Not classifiable as to human carcinogenicity									
E - Evidence of noncarcinogenicity for human									
H - Carcinogenic to humans									
I - Inadequate information to assess carcinogenic potential									
L - Likely to be carcinogenic to humans									
S - Suggestive evidence of carcinogenic potential									
NC - No criteria									
X - Age-dependent adjustment factors (ADAFs) were applied to carcinogens with a mutagenic mode of action									
Y - Additional modifying factor of 3 applied to the RfD									
Z - RfD includes uncertainty factor of 10 for potential carcinogenicity									

Draft,
Deliberative

