Handout for Stakeholder Meeting
NJ Criteria being Considered for Proposal
August 2023

Table 1

	Chemical	CAS Number	EPA 2015 Recommended Criteria		Current NJ Criteria		NJ Criteria Anticipated 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

Handout for Stakeholder Meeting
NJ Criteria being Considered for Proposal
August 2023

Table 1

	Chemical	CAS Number	EPA 2015 Recommended Criteria		Current NJ Criteria		NJ Criteria Anticipated 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)	
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
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	ND	ND	10	300	NJDEP used a different bioaccumulation factor.
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

Handout for Stakeholder Meeting
NJ Criteria being Considered for Proposal
August 2023

Table 1

	Chemical	CAS Number	EPA 2015 Recommended Criteria		Current NJ Criteria		NJ Criteria Anticipated 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)	
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	NA	0.013 (Water Only)	NA	NA
61	Perfluorooctanoic acid (PFOA)	335-67-1	NA	NA	NA	NA	0.014 (Water Only)	NA	NA
62	Perfluorooctane Sulfonate (PFOS)	1763-23-1	NA	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.
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 deficiences
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

Handout for Stakeholder Meeting
NJ Criteria being Considered for Proposal
August 2023

Table 1

	Chemical	CAS Number	EPA 2015 Recommended Criteria		Current NJ Criteria		NJ Criteria Anticipated 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)	
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
90	1,4-Dioxane	123-91-1	NA	NA	ND	ND	0.33	NA	NA
91	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.
92	2-Chlorophenol	95-57-8	30	800	81	150	30	800	No difference
93	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
94	3,3'-Dichlorobenzidine	91-94-1	0.049	0.15	0.021	0.028	0.049	0.15	No difference
95	3-Methyl-4-Chlorophenol	59-50-7	500	2000	ND	ND	500	2000	No difference
96	4,4'-DDD	72-54-8	0.00012	0.00012	0.00031	0.00031	0.00012	0.00012	No difference
97	4,4'-DDE	72-55-9	0.000018	0.000018	0.00022	0.00022	0.000018	0.000018	No difference
98	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.
	No difference compared to USEPA 2015 recommended criterion.
	Less stringent compared to USEPA 2015 recommended criterion.
	More stringent compared to USEPA 2015 recommended criterion.
ND	No Data

Table 2

Handout for Stakeholder Meeting
Supporting Information for NJ Criteria being Considered for Proposal
August 2023

	Chemical	CAS Number	Reference Dose (RfD) (mg/kg/day)	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 Anticipated for Proposal: Water + Organism (Fresh Water) (µg/L)	NJ Criteria Anticipated for Proposal: 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		L	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***

Table 2

	Chemical	CAS Number	Reference Dose (RfD) (mg/kg/day)	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 Anticipated for Proposal: Water + Organism (Fresh Water) (µg/L)	NJ Criteria Anticipated for Proposal: Organism Only (Saline) (µg/L)
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
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	S	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	Dinitrophenols	25550-58-7	0.002		0.2			4.4	10	300
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

Table 2

	Chemical	CAS Number	Reference Dose (RfD) (mg/kg/day)	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 Anticipated for Proposal: Water + Organism (Fresh Water) (µg/L)	NJ Criteria Anticipated for Proposal: Organism Only (Saline) (µg/L)
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		L	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
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

Table 2

	Chemical	CAS Number	Reference Dose (RfD) (mg/kg/day)	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 Anticipated for Proposal: Water + Organism (Fresh Water) (µg/L)	NJ Criteria Anticipated for Proposal: Organism Only (Saline) (µg/L)
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		S	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		L	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."	**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

1986 USEPA Cancer Classifications:	**2005 USEPA Cancer Descriptors:**	
A - Human carcinogen	H - Carcinogenic to humans	NC - No criteria
B1–B2 - Probable human carcinogen	I - Inadequate information to assess carcinogenic potential	X - Age-dependent adjustment factors (ADAFs) were applied to carcinogens with a mutagenic mode of action
C - Possible human carcinogen	L - Likely to be carcinogenic to humans	Y - Additional modifying factor of 3 applied to the RfD
D - Not classifiable as to human carcinogenicity	S - Suggestive evidence of carcinogenic potential	Z - RfD includes uncertainty factor of 10 for potential carcinogenicity
E - Evidence of noncarcinogenicity for human		