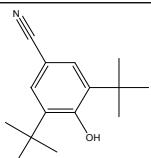
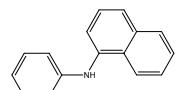
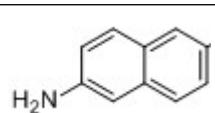
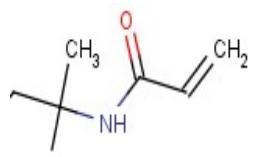
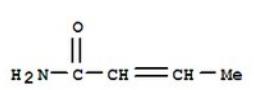
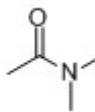
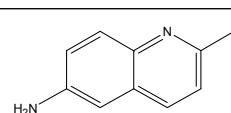
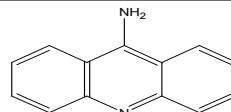
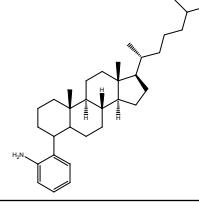
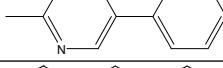
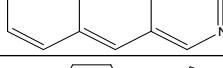
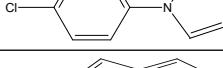
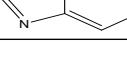
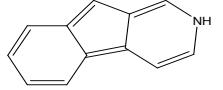
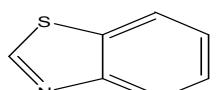
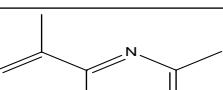
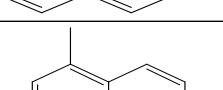
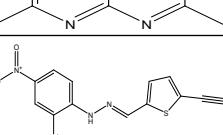
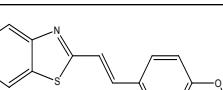
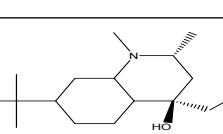
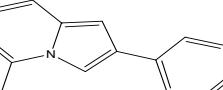
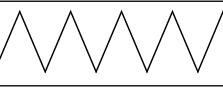
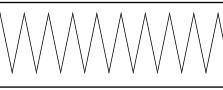
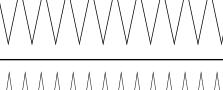
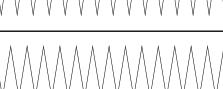
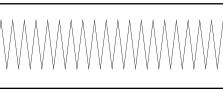
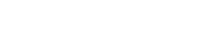


Table S1 The structure of disinfection by-product (THMs and HANs) precursors

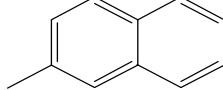
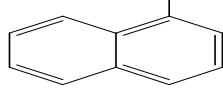
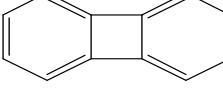
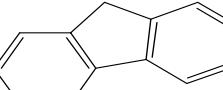
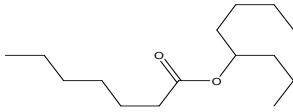
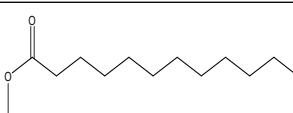
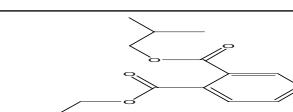
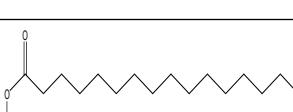
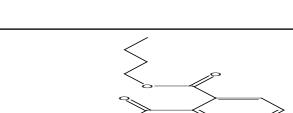
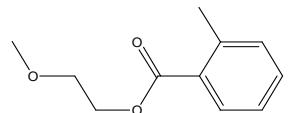
Chemical group	Name	Structure
nitriles	9-Anthracenecarbonitrile	
	1-Naphthalenecarbonitrile	
	1-Naphthyl acetonitrile	
	2-Naphthylacetonitrile	
	9-Cyanoanthracene	
	3- phenyl, 2- propenyl cyanide	
	Isoquinoline nitrile	
	9 - fluorene nitrile	
	[1,1'-Biphenyl]-2,2'-dicarbonitrile	
	2,6-Bis(1,1-dimethylethyl)-4-cyanomethylphenol	

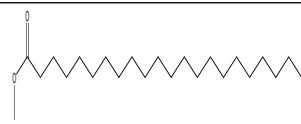
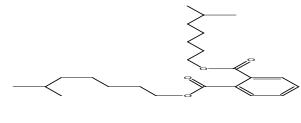
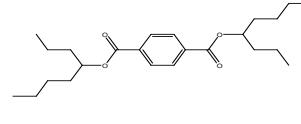
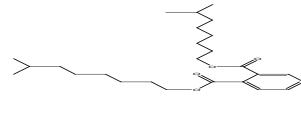
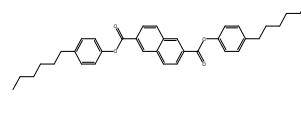
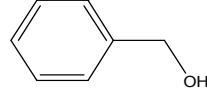
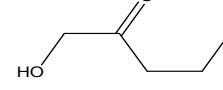
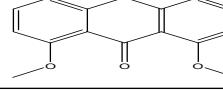
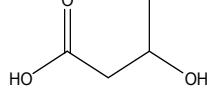
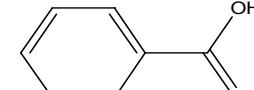
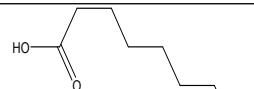
	Benzonitrile, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-	
	1-Naphthalenamine, N-phenyl-	
	2-Aminonaphthalene	
	2 - acrylamide	
	3 - butene amide	
amine	N,N-Dimethylacetamide;	
	6-Quinolinamine, 2-methyl-	
	9-Acridinamine	
	Cholestane, 4-(2-aminophenyl)-	
nitrogenous heterocyclic	2-methyl-5-phenyl- Pyridine	
	Benzo[g]isoquinoline	
	1-(4-chlorophenyl)- 1H-Pyrrole	
	2-Azafluorene	
	Benzothiazole	

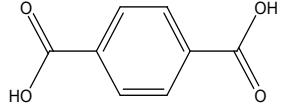
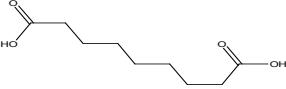
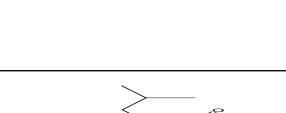
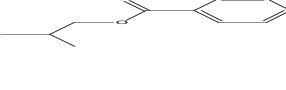
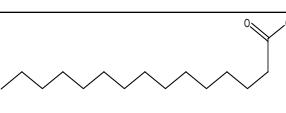
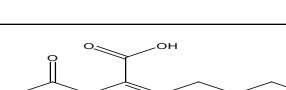
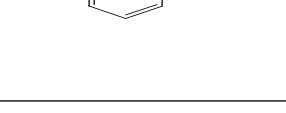
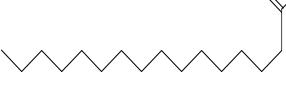
	2-methyl-6-Quinolinamine	
	2,8-Dimethylquinoline	
	2,4,7-trimethyl-1,8-Naphthyridine	
	9-Acridinamine	
	2-Thiophenecarboxaldehyde, 5-ethynyl-, (2,4-dinitrophenyl)hydrazone	
	2-[2-(4-Methoxyphenyl)ethenyl]benzothiazole	
	4-Ethyl-1,2-dimethyl-7-tert-butyl-trans-decahydroquinolin-4-ol	
	Benzeneacetic acid, .alpha.-phenyl-.alpha.-[(trimethylsilyl)oxy]-, 3-quinuclidinyl ester	
	1H-Indole, 2-(4-fluorophenyl)-5-methoxy-3-methyl-	
	5-Methyl-2-phenylindolizine	
	2-methyl-5-phenyl- Pyridine	
	Benzo[g]isoquinoline	
	1-(4-chlorophenyl)- 1H-Pyrrole	

	2-Azafluorene	
	Benzothiazole	
	2,8-Dimethylquinoline	
	2,4,7-trimethyl-1,8-Naphthyridine	
	2-Thiophenecarboxaldehyde, 5-ethynyl-, (2,4-dinitrophenyl)hydrazone	
	2-[2-(4-Methoxyphenyl)ethenyl]benzothiazole	
	4-Ethyl-1,2-dimethyl-7-tert-butyl-trans-decahydroquinolin-4-ol	
	5-Methyl-2-phenylindolizine	
Hydrocarbon	Decane	
	Tridecane	
	Eicosane	
	Nonadecane	
	Heneicosane	
	Docosane	
	Dotriacontane	
	Hentriacontane	
	Tetratetracontane	
	Octacosane	

	5-Octadecene	
	Tricosane	
	Tetracosane	
	Eicosane	
	3,3-dimethyl- Hexane	
	3-Ethyl-3-methylheptane	
	10-Methylnonadecane	
	2,6,10-trimethyl- Dodecane	
	2,4-Diphenyl-4-methyl-1-pentene	
	Benzene, 1,1'-(1,1,2,2-tetramethyl-1,2-ethanediyl)bis-	
	11-(1-ethylpropyl)- Heneicosane	
	2-Bromotetradecane	
	Phenanthrene, 1,2,3,4,4a,9,10,10a-octahydro-1,1,4a-trimethyl-7-(1-methylethyl)-, (4aS-trans)-	
	Benzene, 1,1'-(3-methyl-1-propene-1,3-diyl)bis-	
	Squalene	
polycyclic aromatic hydrocarbons	Naphthalene	

	2-methyl- Naphthalene	
	1-methyl- Naphthalene	
	Biphenylene	
	Acenaphthene	
	Fluorene	
Esters	Heptanoic acid, 4-octyl ester	
	Dodecanoic acid, methyl ester	
	1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester	
	Hexadecanoic acid, methyl ester	
	1,2-Benzenedicarboxylic acid, butyl 2-methylpropyl ester	
	2-Methylbenzoic acid, 2-methoxyethyl ester	
	Heptadecanoic acid, 16-methyl-, methyl ester	

	Docosanoic acid, methyl ester	
	1,2-Benzenedicarboxylic acid, diisooctyl ester	
	Terephthalic acid, di(4-octyl) ester	
	Phthalic acid, bis(7-methyloctyl) ester	
	Naphthalene-2,6-dicarboxylic acid, bis(4-hexylphenyl) ester	
Phenols	methylphenol	
Ketones	1-Hydroxy-2-pentanone	
	1,8-dimethoxy-9,10-Anthracenedione,	
Organic acids		
	Benzoic acid	
		
	Dodecanoic acid	

	1,4-Benzenedicarboxylic acid	
	Azelaic acid	
	Tetradecanoic acid	
	1,2-Benzenedicarboxylic acid	
	n-Pentadecanoic acid	
	2-methylpropyl, 1,2-Benzenedicarboxylic acid	
	Hexadecanoic acid	
	9,12-Octadecadienoic acid	
	trans-9-Octadecenoic acid	
	Octadecanoic acid	