

**Biomonitoring California
Priority Chemicals
February 2019**

The following is a list of priority chemicals for Biomonitoring California.^a The Scientific Guidance Panel (SGP) recommends priority chemicals from the designated chemicals list.

Targets for measurement in biomonitoring studies could include the parent chemical, metabolites and other chemical products formed in the body or the environment (e.g., hemoglobin adduct; environmental degradation product). The approach for biomonitoring a chemical may change as methods development proceeds. For some of the parent chemicals listed below, metabolites or other targets for measurement are shown indented underneath. Chemicals are grouped into categories (like “metals” and “pesticides”); some are included in more than one category. The Program determines the chemicals that are actually biomonitoried and the appropriate targets for measurement. To jump to each footnote referenced in the list below, click on the relevant number.

Brominated and Chlorinated Organic Compounds used as Flame Retardants ¹

Allyl 2,4,6-tribromophenyl ether (ATE)
2,2-Bis(bromomethyl)-1,3-propanediol
2,2-Bis(chloromethyl)trimethylene bis[bis(2-chloroethyl)phosphate]
Bis(2-ethyl-1-hexyl)tetrabromophthalate (TBPH)
Bis(hexachlorocyclopentadieno)cyclooctane (Dechlorane Plus)
1,2-Bis(2,4,6-tribromophenoxy)ethane (BTBPE)
2-Bromoallyl-2,4,6-tribromophenyl ether (BATE)
Chlorendic acid
Chlorinated paraffins
Decabromodiphenylethane (DBDPE)
1,2-Dibromo-4-(1,2-dibromoethyl)cyclohexane (TBECH)
2,4-Dibromophenol
2,3-Dibromopropyl-2,4,6-tribromophenyl ether (DPTE)
2-Ethyl-1-hexyl-2,3,4,5-tetrabromobenzoate (TBB)
2,3,4,5-Tetrabromobenzoic acid (TBBA)
N,N'-Ethylenebis(tetrabromophthalimide)
Hexabromobenzene (HBB)
2,2',4,4',5,5'-Hexabromobiphenyl (BB 153)
Hexabromocyclododecane (HBCD)
Hexachlorocyclopentadienyl-dibromocyclooctane
2-Hydroxypropyl 2-(2-hydroxyethyl)ethyl tetrabromophthalate
Isobutoxypentabromocyclododecanes (iBPBCDs)
Octabromotrimethylphenylindane (OBIND)
Pentabromoethylbenzene (PBEB)
Pentabromophenol (PBP)
Pentabromotoluene (PBT)
1,1'-Sulfonylbis[3,5-dibromo-4-(2,3-dibromopropoxy) benzene
Tetrabromobisphenol A (TBBPA)

Tetrabromobisphenol A bis(2,3-dibromopropyl)ether (TBBPA-DBPE)
Tetrabromobisphenol A bis(2-hydroxyethyl) ether
Tetrabromobisphenol A diallyl ether
Tetrabromophthalic acid, mixed esters
Tetrabromophthalic anhydride
2,3,5,6-Tetrabromo-p-xylene
Tetrachlorophthalic anhydride
2,4,6-Tribromophenol
Tribromoneopentylalcohol
Tris(2-chloroethyl)phosphate (TCEP)
Bis(2-chloroethyl)phosphate (BCEP)
Tris(1-chloro-2-propyl)phosphate (TCPP)
Bis(1-chloro-2-propyl)phosphate (BCPP)
Tris(2,3-dibromopropyl) isocyanurate
Tris(2,3-dibromopropyl)phosphate (TDBPP)
Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)
Bis(1,3-dichloro-2-propyl)phosphate (BDCPP)
Tris(2,3-dichloro-1-propyl)phosphate
Tris(tribromoneopentyl)phosphate
2,4,6-Tris(2,4,6-tribromophenoxy)-1,3,5-triazine

Polybrominated diphenyl ethers (PBDEs)

2,2',4-Tribromodiphenyl ether (BDE 17)
2,4,4'-Tribromodiphenyl ether (BDE 28)
2,2',4,4'-Tetrabromodiphenyl ether (BDE 47)
2,3',4,4'-Tetrabromodiphenyl ether (BDE 66)
2,2',3,4,4'-Pentabromodiphenyl ether (BDE 85)
2,2',4,4',5-Pentabromodiphenyl ether (BDE 99)
2,2',4,4',6-Pentabromodiphenyl ether (BDE 100)
2,2',4,4',5,5'-Hexabromodiphenyl ether (BDE 153)
2,2',4,4',5,6'-Hexabromodiphenyl ether (BDE 154)
2,2',3,4,4',5',6-Heptabromodiphenyl ether (BDE 183)
2,2',3,3',4,4',5,6'-Octabromodiphenyl ether (BDE 196)
2,2',3,3',4,4',6,6'-Octabromodiphenyl ether (BDE 197)

a. California Environmental Contaminant Biomonitoring Program, codified at Health and Safety Code section 105440 et seq.

2,2',3,3',4,5',6,6'-Octabromodiphenyl ether (BDE 201)
2,2',3,3',5,5',6,6'-Octabromodiphenyl ether (BDE 202)
2,2',3,4,4',5,5',6-Octabromodiphenyl ether (BDE 203)
2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether (BDE 206)
2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether (BDE 207)
2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether (BDE 208)
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (BDE 209)

Hydroxy-PBDEs (Metabolites of PBDEs)

4'-Hydroxy-BDE 17
4-Hydroxy-BDE 42
3-Hydroxy-BDE 47
5-Hydroxy-BDE 47
6-Hydroxy-BDE 47
4'-Hydroxy-BDE 49
2'-Hydroxy-BDE 68
4-Hydroxy-BDE 90
5'-Hydroxy-BDE 99
6'-Hydroxy-BDE 99
3-Hydroxy-BDE 100
5'-Hydroxy-BDE 100
4'-Hydroxy-BDE 101
4'-Hydroxy-BDE 103

Bisphenol S (BPS)
4,4'-Sulfonylbis[2-(2-propen-1-yl)phenol] (TGSA)

Brominated phenols ^{3, 4}

2,4-Dibromophenol
Pentabromophenol (PBP)
Tetrabromobisphenol A (TBBPA)
2,4,6-Tribromophenol

Chlorinated phenols ^{3, 5}

2,4-Dichlorophenol
2,5-Dichlorophenol
Pentachlorophenol ⁶
2,4,5-Trichlorophenol ⁶
2,4,6-Trichlorophenol ⁶
Triclosan

Parabens ³

Butylparaben ⁷
Ethylparaben
Methylparaben
n-Propylparaben

Metals ³

Antimony ⁸
Arsenic
Arsenic (V) acid
Arsonobetaine
Arsenocholine
Arsenous (III) acid
Dimethylarsinic acid
Monomethylarsonic acid
Trimethylarsine oxide

Beryllium ⁸

Cadmium
Cobalt
Lead
Manganese
Mercury
Molybdenum
Thallium
Tungsten
Uranium

Cyclosiloxanes ¹

Decamethylcyclopentasiloxane (D5)
Dodecamethylcyclohexasiloxane (D6)
Octamethylcyclotetrasiloxane (D4)

Diesel Exhaust ²

1-Nitropyrene
6-Hydroxy-1-nitropyrene
8-Hydroxy-1-nitropyrene

Diglycidyl Ethers of *p,p'*-Bisphenols ¹

Bisphenol A diglycidyl ether (BADGE)
Bisphenol F diglycidyl ether (BFDGE)

Environmental Phenols ³

***p,p'*-Bisphenols** ¹

Bisphenol A (BPA)
Bisphenol AF (BPAF)
Bisphenol B (BPB)
Bisphenol F (BPF)

Non-Halogenated Aromatic Phosphates ¹

Bisphenol A bis(diphenyl phosphate)
Butylated triphenyl phosphate
Butyldiphenyl phosphate
t-Butylphenyl diphenyl phosphate
Dibutylphenyl phosphate
2-Ethylhexyl diphenyl phosphate

Isodecyl diphenyl phosphate Isopropyl phenyl diphenyl phosphate Isopropylated triphenyl phosphate Resorcinol bis(diphenyl phosphate) Tribenzyl phosphate (TBzP) Dibenzyl phosphate (DBzP) Tricresyl phosphate (TCP) Tri-o-cresylphosphate (ToCP) Di-o-cresylphosphate (DoCP) Tri-p-cresylphosphate (TpCP) Di-p-cresylphosphate (DpCP) Triphenyl phosphate (TPP) Diphenyl phosphate (DPhP)	Perfluoroheptane sulfonic acid Perfluoroheptanoic acid Perfluorohexadecanoic acid Perfluorohexane sulfonic acid Perfluorohexanoic acid Perfluorohexylperfluoroctylphosphinic acid Perfluorohexylphosphonic acid Perfluorononane sulfonic acid Perfluorononanoic acid Perfluoroctadecanoic acid Perfluoroctane sulfonamide Perfluoroctane sulfonic acid (PFOS), including linear and branched isomers Perfluoroctanoic acid (PFOA), including linear and branched isomers Perfluoroctylphosphonic acid Perfluoropentane sulfonic acid Perfluoropentanoic acid Perfluorotetradecanoic acid Perfluorotridecanoic acid Perfluoroundecanoic acid Sodium bis-[2-(N-ethylperfluoroctane-1-sulfonamido)ethyl] phosphate Sodium 2-(N-ethylperfluoroctane-1-sulfonamido)ethyl phosphate 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid 1,1,2,2-Tetrafluoro-2-((1,1,1,2,3,3-hexafluoro-3-[(trifluorovinyl)oxy]-2-propanyl)oxy)ethane sulfonic acid
Perchlorate	
Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs) ^{1,9}	
Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA) Bis(perfluorohexyl)phosphinic acid Bis(perfluoroctyl)phosphinic acid N-Ethyl-perfluoroctane sulfonamido acetic acid 6:2 Fluorotelomer acetate 8:2 Fluorotelomer acetate 10:2 Fluorotelomer acetate 6:2 Fluorotelomer acrylate 8:2 Fluorotelomer acrylate 10:2 Fluorotelomer acrylate 5:3 Fluorotelomer carboxylic acid 6:2 Fluorotelomer carboxylic acid 7:3 Fluorotelomer carboxylic acid 8:2 Fluorotelomer carboxylic acid 10:2 Fluorotelomer carboxylic acid 6:2 Fluorotelomer phosphate diester 6:2/8:2 Fluorotelomer phosphate diester 8:2 Fluorotelomer phosphate diester 6:2 Fluorotelomer phosphate monoester 8:2 Fluorotelomer phosphate monoester 4:2 Fluorotelomer sulfonic acid 6:2 Fluorotelomer sulfonic acid 8:2 Fluorotelomer sulfonic acid 6:2 Fluorotelomer unsaturated carboxylic acid 8:2 Fluorotelomer unsaturated carboxylic acid 10:2 Fluorotelomer unsaturated carboxylic acid N-Methyl-perfluoroctane sulfonamido) acetic acid Perfluorobutane sulfonic acid Perfluorobutanoic acid Perfluorodecane sulfonic acid Perfluorodecanoic acid Perfluorodecylphosphonic acid Perfluorododecanoic acid Perfluoroethylcyclohexane sulfonic acid	
Pesticides^{3, 10}	
Herbicides³	
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters 2,4-Dichlorophenoxyacetic acid 2,4-Dichlorophenol	
Organochlorine Pesticides³	
Dichlorodiphenyltrichloroethane (DDT) (including <i>p,p'</i> -DDT and <i>o,p'</i> -DDT) <i>p,p'</i> -Dichlorodiphenyldichloroethene (<i>p,p'</i> -DDE)	
Organophosphate Insecticides³	
Acephate Azinphos methyl Dimethyldithiophosphate Dimethylphosphate Dimethylthiophosphate Chlorethoxyphos Diethylphosphate Diethylthiophosphate	

Chlorpyrifos	Methyl parathion
Diethylphosphate	Dimethylphosphate
Diethylthiophosphate	Dimethylthiophosphate
3,5,6-Trichloro-2-pyridinol (TCPy)	<i>p</i> -Nitrophenol
Chlorpyrifos methyl	Naled
Dimethylphosphate	Dimethylphosphate
Dimethylthiophosphate	Oxydemeton-methyl
3,5,6-Trichloro-2-pyridinol (TCPy)	Dimethylphosphate
Coumaphos	Dimethylthiophosphate
3-Chloro-7-hydroxy-4-methyl-2H-chromen-2-one/ol	Parathion (Ethyl parathion)
Diethylphosphate	Diethylphosphate
Diethylthiophosphate	Diethylthiophosphate
Diazinon	<i>p</i> -Nitrophenol
Diethylphosphate	Phorate
Diethylthiophosphate	Diethyldithiophosphate
2-Isopropyl-4-methyl-6-hydroxypyrimidine (IMPY)	Diethylphosphate
Dichlorvos (DDVP)	Diethylthiophosphate
Dimethylphosphate	Phosmet (Imidan)
Dicrotophos	Dimethyldithiophosphate
Dimethylphosphate	Dimethylphosphate
Dimethoate	Dimethylthiophosphate
Dimethyldithiophosphate	Pirimiphos-methyl
Dimethylphosphate	2-(Diethylamino)-6-methylpyrimidin-4-ol/one
Dimethylthiophosphate	Dimethylphosphate
Disulfoton	Dimethylthiophosphate
Diethyldithiophosphate	Sulfotep
Diethylphosphate	Diethylphosphate
Diethylthiophosphate	Diethylthiophosphate
Ethion	Temephos
Diethyldithiophosphate	Dimethylphosphate
Diethylphosphate	Dimethylthiophosphate
Diethylthiophosphate	Terbufos
Fenitrothion	Diethyldithiophosphate
Dimethylphosphate	Diethylphosphate
Dimethylthiophosphate	Diethylthiophosphate
Fenthion	Tetrachlorvinphos
Dimethylphosphate	Dimethylphosphate
Dimethylthiophosphate	
Isazophos-methyl	Pyrethroid Pesticides ³
5-Chloro-1,2-dihydro-1-isopropyl-[3H]-1,2,4-triazol-3-one	Allethrin <i>cis/trans</i> -Dimethylvinylcyclopropane carboxylic diacid
Dimethylphosphate	Cyfluthrin <i>cis</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>cis</i> -DCCA)
Dimethylthiophosphate	<i>trans</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>trans</i> -DCCA)
Malathion	4-Fluoro-3-phenoxybenzoic acid
Dimethyldithiophosphate	Cyhalothrin (including <i>lambda</i> - and <i>gamma</i> -) 3-Phenoxybenzoic acid (3-PBA)
Dimethylphosphate	
Dimethylthiophosphate	
Methamidophos	
Methidathion	
Dimethyldithiophosphate	
Dimethylphosphate	
Dimethylthiophosphate	

Cypermethrin (including <i>cis</i> - and <i>trans</i> -) <i>cis</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>cis</i> -DCCA) <i>trans</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>trans</i> -DCCA) 3-Phenoxybenzoic acid (3-PBA)	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP) Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)
Deltamethrin <i>cis</i> -3-(2,2-Dibromovinyl)-2,2-dimethylcyclopropane carboxylic acid 3-Phenoxybenzoic acid (3-PBA)	Di- <i>n</i> -hexyl phthalate Di-isodecyl phthalate (DIDP) Mono-(carboxynonyl) phthalate (MCNP)
Fenpropathrin 3-Phenoxybenzoic acid (3-PBA)	Di-isoheptyl phthalate Di-isononyl phthalate (DINP) Mono-(carboxyoctyl) phthalate (MCOP)
Permethrin (including <i>cis</i> - and <i>trans</i> -) <i>cis</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>cis</i> -DCCA) <i>trans</i> -3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropane carboxylic acid (<i>trans</i> -DCCA) 3-Phenoxybenzoic acid (3-PBA)	Mono-(hydroxyisononyl) phthalate Mono-isobutyl phthalate (MINP) Mono-(oxoisobutyl) phthalate Dimethyl phthalate (DMP) Mono-methyl phthalate (MMP)
Pyrethrin 1 <i>cis/trans</i> -Dimethylvinylcyclopropane carboxylic diacid	Di- <i>n</i> -octyl phthalate (DnOP) Mono-(3-carboxypropyl) phthalate (MCPP) Mono- <i>n</i> -octyl phthalate (MnOP)
Resmethrin <i>cis/trans</i> -Dimethylvinylcyclopropane carboxylic diacid	Di- <i>n</i> -pentyl phthalate Di-2-propylheptyl phthalate Diundecyl phthalate Di-isoundecyl phthalate Di-isotridecyl phthalate
Tralomethrin 3-Phenoxybenzoic acid (3-PBA)	
Other Pesticides	
1,4-Dichlorobenzene (<i>p</i> -Dichlorobenzene) 2,5 Dichlorophenol	
<i>ortho</i>-Phthalates ¹	
Benzylbutyl phthalate (BzBP) Mono-benzyl phthalate (MBzP) Mono- <i>n</i> -butyl phthalate (MnBP)	
Diallyl phthalate	
Di- <i>n</i> -butyl phthalate (DnBP) Mono- <i>n</i> -butyl phthalate (MnBP) Mono-3-hydroxybutyl phthalate (MHBP)	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105) 2,3,4,4',5-Pentachlorobiphenyl (PCB 114) 2,3',4,4',5-Pentachlorobiphenyl (PCB 118) 2',3,4,4',5-Pentachlorobiphenyl (PCB 123) 2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156) 2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157) 2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167) 2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)
Di-isobutyl phthalate (DIBP) Mono-isobutyl phthalate (MIBP) Mono-2-methyl-2-hydroxypropyl phthalate	
Dicyclohexyl phthalate (DCHP) Mono-cyclohexyl phthalate (MCHP)	
Diethyl phthalate (DEP) Mono-ethyl phthalate (MEP)	
Di-2-ethylhexyl phthalate (DEHP) Mono-(2-carboxymethylhexyl) phthalate Mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP)	
Mono-2-ethylhexyl phthalate (MEHP)	
Polychlorinated Biphenyls (PCBs), Dioxin-Like ³	
	Coplanar PCBs ³
	3,4,4',5-Tetrachlorobiphenyl (PCB 81) 3,3',4,4',5-Pentachlorobiphenyl (PCB 126) 3,3',4,4',5,5'-Hexachlorobiphenyl (PCB 169)
	Mono-ortho-Substituted PCBs ³
	2,3,3',4,4'-Pentachlorobiphenyl (PCB 105) 2,3,4,4',5-Pentachlorobiphenyl (PCB 114) 2,3',4,4',5-Pentachlorobiphenyl (PCB 118) 2',3,4,4',5-Pentachlorobiphenyl (PCB 123) 2,3,3',4,4',5-Hexachlorobiphenyl (PCB 156) 2,3,3',4,4',5'-Hexachlorobiphenyl (PCB 157) 2,3',4,4',5,5'-Hexachlorobiphenyl (PCB 167) 2,3,3',4,4',5,5'-Heptachlorobiphenyl (PCB 189)
Polychlorinated Biphenyls (PCBs), Non-Dioxin-Like ³	
	2,2',5-Trichlorobiphenyl (PCB 18) 2,4,4'-Trichlorobiphenyl (PCB 28) 2,2',3,5'-Tetrachlorobiphenyl (PCB 44) 2,2',4,5'-Tetrachlorobiphenyl (PCB 49) 2,2',5,5'-Tetrachlorobiphenyl (PCB 52) 2,3',4,4'-Tetrachlorobiphenyl (PCB 66) 2,4,4',5-Tetrachlorobiphenyl (PCB 74) 2,2',3,4,5'-Pentachlorobiphenyl (PCB 87) 2,2',4,4',5-Pentachlorobiphenyl (PCB 99) 2,2',4,5,5'-Pentachlorobiphenyl (PCB 101) 2,3,3',4,6-Pentachlorobiphenyl (PCB 110) 2,2',3,3',4,4'-Hexachlorobiphenyl (PCB 128)

2,2',3,4,4',5'-Hexachlorobiphenyl (PCB 138)
2,2',3,4',5,5'-Hexachlorobiphenyl (PCB 146)
2,2',3,4',5',6-Hexachlorobiphenyl (PCB 149)
2,2',3,5,5',6-Hexachlorobiphenyl (PCB 151)
2,2',4,4',5,5'-Hexachlorobiphenyl (PCB 153)
2,3,3',4,4',6-Hexachlorobiphenyl (PCB 158)
2,2',3,3',4,4',5-Heptachlorobiphenyl (PCB 170)
2,2',3,3',4,5,5'-Heptachlorobiphenyl (PCB 172)
2,2',3,3',4,5',6'-Heptachlorobiphenyl (PCB 177)
2,2',3,3',5,5',6-Heptachlorobiphenyl (PCB 178)
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)
2,2',3,4,4',5',6-Heptachlorobiphenyl (PCB 183)
2,2',3,4',5,5',6-Heptachlorobiphenyl (PCB 187)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (PCB 194)
2,2',3,3',4,4',5,6-Octachlorobiphenyl (PCB 195)
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (PCB 196)
2,2',3,3',4,5,5',6-Octachlorobiphenyl (PCB 199)
2,2',3,4,4',5,5',6-Octachlorobiphenyl (PCB 203)
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (PCB 206)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (PCB 209)

Polychlorinated Biphenyls (PCBs)

Hydroxy-PCBs (Metabolites of PCBs) [11](#)

4-Hydroxy-PCB 107
4-Hydroxy-PCB 120
4'-Hydroxy-PCB 130
3'-Hydroxy-PCB 138
4-Hydroxy-PCB 146
3-Hydroxy-PCB 153
4'-Hydroxy-PCB 172
3'-Hydroxy-PCB 180
4-Hydroxy-PCB 187
4'-Hydroxy-PCB 193

Polycyclic Aromatic Hydrocarbons (PAHs) [3, 12](#)

3-Hydroxybenzo[a]pyrene
6-Hydroxychrysene
3-Hydroxyphenanthrene

Tobacco Smoke

Nicotine
Cotinine
Hydroxycotinine
NNK (4-[Methylnitrosamino]-1-[3-pyridyl]-1-butanone)
NNAL (4-[Methylnitrosamino)-1-(3-pyridyl)-1-butanol)

Notes

- 1 All members of the chemical class are priority chemicals, including, but not limited to, the chemicals listed.
- 2 Diesel exhaust is a complex mixture that contains many components, one or more of which may be useful as an indicator for biomonitoring.
- 3 All members of the chemical class are not priority chemicals; only the specific chemicals listed are priority chemicals.
- 4 These brominated phenols are part of the chemical group “brominated and chlorinated organic compounds used as flame retardants”, which are listed as priority chemicals. The brominated phenols are also included in the category “environmental phenols” because the laboratory measures them with other environmental phenols.
- 5 These chlorinated phenols, with the exception of triclosan, are metabolites of certain pesticides that are listed as priority chemicals. These chlorophenols are also included in the category “environmental phenols” because the laboratory measures them with other environmental phenols.
- 6 Pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol have been removed from the priority list, because they were mistakenly added in a previous version of the list. These three phenols are designated chemicals only.
- 7 Includes *n*-butylparaben and isobutylparaben.
- 8 The SGP recommended that the Program develop methods for antimony and beryllium that meet the Program's quality assurance/quality control (QA/QC) standards.
- 9 PFASs are fluorinated aliphatic substances that contain the moiety C_nF_{2n+1} . In a perfluoroalkyl substance (also known as a “perfluorochemical”), all carbon atoms, except for carbon atoms associated with functional groups (such as an aldehyde group), are fully fluorinated. In a polyfluoroalkyl substance, at least one (but not all) of the carbon atoms is fully fluorinated
- 10 Fungicides, herbicides, and insecticides are grouped under the general heading of “Pesticides.”
- 11 Hydroxy-PCBs are measured as biomarkers of exposure to the listed PCBs.
- 12 The SGP recommended that the three hydroxy-PAHs shown be listed as priority chemicals. These three hydroxy-PAHs are metabolites of benzo[a]pyrene, chrysene and phenanthrene, respectively.