TABLE 5-1 METHOD DETECTION LIMITS (MDLs) FOR TISSUE SAMPLES

Parameter	Units	Target MDL [a]	Laboratory MDL[c]
Pesticides and PCBs - GC organochlorine compounds (SW846 3540A/3540A/8080A)			
Aldrin	ug/kg	30	0.64
γ-BHC (Lindane)	ug/kg	10	0.23
α-Chlordane	ug/kg	30	0.38
γ-Chlordane	ug/kg	30	0.52
4,4'-DDD	ug/kg	30	0.48
4,4'-DDE	ug/kg	30	0.66
4,4'-DDT	ug/kg	30	0.42
Dieldrin	ug/kg	30	0.38
Endrin	ug/kg	10	0.31
Heptachlor	ug/kg	20	0.34
Toxaphene	ug/kg	10	17 (solid = 14)
Semivolatile Organics HPLC - PAHs (SW846 3540A/3640A/8310)			
Acenaphthene	ug/kg	30	3.8
Acenaphthylene	ug/kg	30	57 (solid = 24)
Anthracene	ug/kg	30	2.0
Benzo[a]anthracene	ug/kg	30	1.6
Benzo[b]fluoranthene	ug/kg	30	1.4
Benzo[k]fluoranthene	ug/kg	30	1.2
Benzo[a]pyrene	ug/kg	30	1.3
Benzo[ghi]perylene	ug/kg	30	1.4
Chrysene	ug/kg	30	2.0
Dibenzo[a,h]anthracene	ug/kg	30	1.6
Fluoranthene	ug/kg	30	3.2
Fluorene	ug/kg	30	3.6
Indeno[1,2,3-cd]pyrene	ug/kg	30	0.83
1-Methyl Naphthalene	ug/kg	30	15
2-Methyl Naphthalene	ug/kg	30	16
Naphthalene	ug/kg	30	1.7
Phenanthrene	ug/kg	30	1.3
Pyrene	ug/kg	30	1.1
PCB Congeners - GC/ECD - (NOAA, 1989)			
2,4'-Dichlorobiphenyl (IUPAC-8)	ug/kg	3.3	0.36
2,2',5-Trichlorobiphenyl (IUPAC-18)	ug/kg	3.3	0.70
2,4,4'-Trichlorobiphenyl (IUPAC-28)	ug/kg	3.3	0.55
2,2',3,5'-Tetrachlorobiphenyl (IUPAC-44)	ug/kg	3.3	0.46
2,2',4,5'-Tetrachlorobiphenyl (IUPAC-49)	ug/kg	3.3	0.39
2,2',5,5'-Tetrachlorobiphenyl (IUPAC-52)	ug/kg	3.3	0.51
2,3',4,4'-Tetrachlorobiphenyl (IUPAC-66)	ug/kg	3.3	1.1
3,3',4,4'-Tetrachlorobiphenyl (IUPAC-77) (b)	ug/kg	3.3	0.71
2,2',3,4,5'-Pentachlorobiphenyl (IUPAC-87)	ug/kg	3.3	0.50
2,2',4,5,5'-Pentachlorobiphenyl (IUPAC-101)	ug/kg	3.3	0.51
2,3,3',4,4'-Pentachlorobiphenyl (IUPAC-105)	ug/kg	3.3	0.40
2,3',4,4',5-Pentachlorobiphenyl (IUPAC-118)	ug/kg	3.3	0.59

TABLE 5-1 Continued

Parameter	Units	Target MDL [a]	Laboratory MDL[c]
3,3',4,4',5-Pentahlorobiphenyl (IUPAC-126) (b)	ug/kg	3.3	0.52
2,2',3,3',4,4'-Hexachlorobiphenyl (IUPAC-128)	ug/kg	3.3	0.67
2,2',3,4,4',5'-Hexachlorobiphenyl (IUPAC-138)	ug/kg	3.3	0.42
2,2',4,4',5,5'-Hexachlorobiphenyl (IUPAC-153)	ug/kg	3.3	0.39
2,3,3',4,4',5-Hexachlorobiphenyl (IUPAC-156) (b)	ug/kg	3.3	0.20
3,3',4,4',5,5'-Hexachlorobiphenyl (IUPAC-169)	ug/kg	3.3	0.46
2,2',3,3',4,4',5-Heptachlorobiphenyl (IUPAC-170)	ug/kg	3.3	0.36
2,2',3,4,4',5,5'-Heptachlorobiphenyl (IUPAC-180)	ug/kg	3.3	0.35
2,2',3,4,4',5',6-Heptachlorobiphenyl (IUPAC-183)	ug/kg	3.3	0.43
2,2',3,4,4',6,6'-Heptachlorobiphenyl (IUPAC-184)	ug/kg	3.3	0.58
2,2',3,4',5,5',6-Heptachlorobiphenyl (IUPAC-187)	ug/kg	3.3	0.31
2,2',3,3',4,4',5,6-Octachlorobiphenyl (IUPAC-195)	ug/kg	3.3	0.26
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (IUPAC-206)	ug/kg	3.3	0.26
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (IUPAC-209)	ug/kg	3.3	0.21
Dioxins and Furans - HRGC/HRMS (EPA 1613)			
2,3,7,8-TCDD	ng/kg	1	0.12
1,2,3,7,8-PeCDD	ng/kg	1	1.13
1,2,3,4,7,8-HxCDD	ng/kg	1	0.27
1,2,3,6,7,8-HxCDD	ng/kg	1	0.29
1,2,3,7,8,9-HxCDD	ng/kg	1	0.24
1,2,3,4,6,7,8-HpCDD	ng/kg	1	0.17
OCDD	ng/kg	10	0.97
2,3,7,8-TCDF	ng/kg	1	0.10
1,2,3,7,8-PeCDF	ng/kg	1	0.24
2,3,4,7,8-PeCDF	ng/kg	1	0.17
1,2,3,4,7,8-HxCDF	ng/kg	1	0.18
1,2,3,6,7,8-HxCDF	ng/kg	1	0.16
1,2,3,7,8,9-HxCDF	ng/kg	1	0.60
1,2,3,4,6,7,8-HpCDF	ng/kg	1	1.13
1,2,3,4,7,8,9-HpCDF	ng/kg	1	0.37
OCDF	ng/kg	10	1.09
Organometals			
Tributyltins	mg/kg	0.01	0.022[d]
Metals - Cold Vapor			
Mercury	mg/kg	0.05	0.05
Metals -(SW3050A/7000 series) - GFAA			
Lead	mg/kg	0.1	0.15 (solid = 0.1)
Selenium	mg/kg	0.2	0.90 (solid = 0.2)

TABLE 5-1 Continued

Parameter	Units	Target MDL [a]	Laboratory MDL[c]
Metals - ICP			
Chromium	mg/kg	0.1	0.27 (solid = 0.07)
Copper	mg/kg	0.1	0.42 (solid = 0.1)
Nickel	mg/kg	0.1	0.22 (solid = 0.1)
Zinc	mg/kg	0.5	9.1 (solid = 0.6)
Metals - (SW3050A/6010A) - ICP Trace			
Antimony	mg/kg	0.5	0.9 (solid = 0.28)
Arsenic	mg/kg	0.5	0.42 (solid = 0.80)
Cadmium	mg/kg	0.1	0.04
Silver	mg/kg	0.1	0.27 (solid = 0.02)

(a) USACE/SAD. May 1993. *Regional Implementation Manual. Requirements for Procedures for Evaluation of the Ocean Disposal of Dredged Material in Southeastern Atlantic and Gulf Coastal Waters.*

(b) Coplanar PCB Congener.

(c) Several tissue MDLs are above the target MDL. Where applicable, the Solid Matrix MDL is reported in ( ) indicating the laboratory's ability to detect concentrations without tissue matrix interferences.

(d) Past performance from laboratory has proven that the target MDL can be met on specific instruments, but the laboratory MDL is provided.