

Supplementary material

Table S1. Internal standards used in the study

Analytes	Homologs
PCDD/Fs	¹³ C ₁₂ -2,3,7,8-TeCDD
	¹³ C ₁₂ -1,2,3,7,8-PeCDD
	¹³ C ₁₂ -1,2,3,6,7,8-HxCDD
	¹³ C ₁₂ -OCDD
	¹³ C ₁₂ -2,3,7,8-TeCDF
	¹³ C ₁₂ -1,2,3,7,8-PeCDF
	¹³ C ₁₂ -1,2,3,6,7,8-HxCDF
	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDD
	¹³ C ₁₂ -1,2,3,4,6,7,8-HpCDF
PCBs	¹³ C ₁₂ -PCB-77, 81, 105, 114, 123, 126, 156, 157, 167, 169, and 189
PBDD/Fs	¹³ C ₁₂ -2,3,7,8-TeBDF
	¹³ C ₁₂ -1,2,3,7,8-PeBDF
	¹³ C ₁₂ -2,3,4,7,8-PeBDF, ¹³ C ₁₂ -1,2,3,4,7,8-HxBDF
	¹³ C ₁₂ -1,2,3,4,6,7,8-HpBDF, ¹³ C ₁₂ -OctBDF
	¹³ C ₁₂ -2,3,7,8-TeBDD
	¹³ C ₁₂ -1,2,3,7,8-PeBDD
	¹³ C ₁₂ -1,2,3,4,6,7,8-HxBDD
	¹³ C ₁₂ -1,2,3,7,8,9-HxBDD
	¹³ C ₁₂ -1,2,3,4,6,7,8-HpBDD
¹³ C ₁₂ -OctBDD	
PBBs	¹³ C ₁₂ -PBB-52, 153, 194, and 209

Table S2. Recovery of standards and their corresponding criteria

Standard	Analytes	Homolog	Recovery	Criteria
PAR	PCDD/Fs	All	45.5-93.7%	70-130%
	PBDD/Fs	All		
Surrogate Standards	PCDD/Fs	All	90.3-99.5%	70-130%
Internal standards	PCDD/Fs	tetra through hexa PCDD/Fs	48.1-93.7%	40-130%
		hepta and octa PCDD/Fs	45.5-88.9%	25-130%
	PCBs	All	27.6-130%	25-150%
	PBDD/Fs	All	24.9-118%	20-150%
Recovery Standards	PCDD/Fs	¹³ C ₁₂ -1,2,3,7,8,9-HxCDF	45-75.8%	40-130 %