

## **Supplementary data for**

# **Characteristics of PM<sub>2.5</sub>-bound PCDD/Fs, PCBs, PBDD/Fs and PBDEs from a Diesel Generator Using Waste Cooking Oil-based Biodiesel Blends**

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Table S1. Recovery of standards and their corresponding criteria.

Standard	Analytes	Homologue	Recovery	Criteria
PAR	PCDD/Fs	All	107–125%	70–130%
	PCBs	All	80.9–101%	60–140%
	PBDD/Fs	<i>tetra-</i> through <i>hepta-</i>	102–129%	60–140%
		<i>octa-</i>	88.7–113%	50–150%
	PBDEs	<i>di-</i> through <i>octa-</i>	61.0–100%	70–130%
		<i>nona-</i> through <i>deca-</i>	70.5–144%	50–200%
Surrogate Standards	PCDD/Fs	All	87.0–113%	70–130%
Internal Standards	PCDD/Fs	<i>tetra-</i> through <i>hexa-</i>	72.0–101%	40–130%
		<i>hepta-</i> and <i>octa-</i>	69.1–90.5%	25–130%
	PCBs	All	61.3–136%	25–150%
	PBDD/Fs	<i>tetra-</i> through <i>hepta-</i>	65.9–134%	20–150%
		<i>octa-</i>	60.6–93.7%	10–150%
	PBDEs	<i>di-</i> through <i>octa-</i>	26.8–56.7%	25–150%
		<i>nona-</i> through <i>deca-</i>	23.0–47.7%	20–200%

Table S2. Internal standards used in the study.

Analytes	Homologs
PCDD/Fs	$^{13}\text{C}_{12}$ -2,3,7,8-TeCDD $^{13}\text{C}_{12}$ -1,2,3,7,8-PeCDD $^{13}\text{C}_{12}$ -1,2,3,6,7,8-HxCDD $^{13}\text{C}_{12}$ -OCDD $^{13}\text{C}_{12}$ -2,3,7,8-TeCDF $^{13}\text{C}_{12}$ -1,2,3,7,8-PeCDF $^{13}\text{C}_{12}$ -1,2,3,6,7,8-HxCDF $^{13}\text{C}_{12}$ -1,2,3,4,6,7,8-HpCDD $^{13}\text{C}_{12}$ -1,2,3,4,6,7,8-HpCDF
PCBs	$^{13}\text{C}_{12}$ -PCB-77, 81, 105, 114, 123, 126, 156, 157, 167, 169, and 189
PBDD/Fs	$^{13}\text{C}_{12}$ -2,3,7,8-TeBDF $^{13}\text{C}_{12}$ -1,2,3,7,8-PeBDF $^{13}\text{C}_{12}$ -2,3,4,7,8-PeBDF $^{13}\text{C}_{12}$ -1,2,3,4,7,8-HxBDF $^{13}\text{C}_{12}$ -1,2,3,4,6,7,8-HpBDF $^{13}\text{C}_{12}$ -OctBDF $^{13}\text{C}_{12}$ -2,3,7,8-TeBDD $^{13}\text{C}_{12}$ -1,2,3,7,8-PeBDD $^{13}\text{C}_{12}$ -1,2,3,4,6,7,8-HxBDD $^{13}\text{C}_{12}$ -1,2,3,7,8,9-HxBDD $^{13}\text{C}_{12}$ -1,2,3,4,6,7,8-HpBDD $^{13}\text{C}_{12}$ -OctBDD
PBDEs	$^{13}\text{C}_{12}$ -BDE-28, 47, 100, 99, 154, 153, 183, 197, 203, 196, 208, 207, 206, and 209