Supporting Information

Perfluoroalkyl Acid Characterization in U.S. Municipal Organic Solid Waste Composts

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A. Compost Method Descriptions. The composting methods provided in Table 1 (main manuscript) were what was reported by each of the compost providers. The primary differences are whether or not there is regular mechanical turning of the compost pile and if and how aeration may be enhanced.[1] In many cases, the provides mixed terms between different primary composting methods indicating some subtle differences in how they compost versus others. Windrow composting includes mechanical turning to optimize both physical and biological breakdown processes. Trapezoidal mass bed composting does not include physical turning on a continual basis but involves only the pushing (positive pressure) or pulling (negative pressure) of air through a pile. Sometime a bulking agent such as wood chips is added to provide pile porosity to enhance the flow of air and control temperatures. Forced aerated windrow composting would include both physical turning and the pushing (shown in Table 1) or pulling of air and typically in a fixed container (e.g., tunnel composting system). Passive aerated windrow composting would seem to refer to a tunnel windrow system with venting for passive air diffusion (no push/pull of air).

Table S1. Characterization of the composts from the organic fraction of municipal solid wastes (OFMSW, #1-8 & 10) and a backyard compost (#9) used in this study. All composts were received between May and June 2017. Composts were sieved through < 2 mm as received in their moist condition and then each fraction oven-dried.

Item #	Fraction of organic matter (oven-dried basis, < 2 mm fraction)[1]	% wt, Fraction (wet, < 2 mm)	% wt. Fraction (oven dried, < 2 mm)	% Moisture (> 2 mm)	% Moisture (< 2 mm)
1	0.436	64.4	69.4	18.6	35.4
2	0.409	51.6	53.1	43.4	46.7
3	0.387	50.9	50.2	44.0	44.2
4	0.393	56.2	55.9	46.4	47.1
5	0.578	38.0	39.1	53.4	55.9
6	0.327	65.4	65.6	22.9	25.1
7	0.309	29.4	30.3	42.5	44.9
8	nd[2]	56.5	58.2	35.9	40.6
9	nd	34.7	32.4	62.5	55.2
10	nd	63.3	70.6	36.2	53.7

[1]Loss on ignition (350 °C) determined by A & L Great Lakes Laboratories, Inc., 3505 Conestoga Drive,| Fort Wayne, IN 46808; [2] not determined

B. Non-PFAS Chemicals. Methanol (MeOH, ACS grade, 99.9 %), glacial acetic acid (CH$_3$COOH, > 99 %), and ammonium acetate (CH$_3$COONH$_4$, 100 %) were obtained from Mallinckrodt Baker (Phillipsburg, NJ). Envi-carb (bulk, 120-400 mesh) and potassium persulfate (K$_2$S$_2$O$_8$) was purchased from Sigma-Aldrich (St. Louis, MO, USA). Anhydrous sodium hydroxide (NaOH) was obtained from Fisher Scientific.

C. HPLC Analysis Conditions. Injection volumes were 15 µL and a delay column (Luna C18,100Å, 30×4.60 mm, 3 µm) was placed between the pump and autosampler. The gradient mobile phase consisted of 0.15% acetic acid in water (A) and 20 mM ammonium acetate in methanol (B) starting at 30% B, increased to 100% B in 6 min and maintained for 2 min, decreased to 30% B in 0.5 min, and maintained at 30% B for 4.5 min. MSMS transitions, limits of quantitation (LOQ), surrogates and internal standards and % recoveries for each PFAA are provide Table S2.

Table S2. MSMS information, LOQs and recoveries of the targeted PFAAs.

Compounds	Acronym	Formula	Precursor	Transition	Surrogate[1]	Transition	LOQ[2] (ng/ml)	Recovery[3]
Perfluoro-n-butanoic acid	PFBA	CF3(CF2)2COOH	212.98	(168.98-169.01)	13C4-PFBA	(171.98-172.02)	0.0137	94 (4)
Perfluoro-n-pentanoic acid	PFPeA	CF3(CF2)2COOH	262.98	(68.97-69.01)	13C2-PFHxA	(119.98-120.02)	0.0363	113 (28)
Potassium perfluoro-1-butanesulfonate	PFBS	CF3(CF2)3SO3K	298.94	(79.95-79.98)	13C2-PFHxA	(119.98-120.02)	0.1677	128 (39)
Perfluoro-n-hexanoic acid	PFHxA	CF3(CF2)4COOH	312.97	(268.95-269.04)	13C2-PFHxA	(269.96-270.03)	0.0372	93 (6)
Perfluoro-n-heptanoic acid	PFHpA	CF3(CF2)5COOH	362.98	(62.98-63.01)	13C2-PFHxA	(119.98-120.02)	0.8271	101 (27)
Sodium perfluoro-1-hexanesulfonate	PFHxS	CF3(CF2)5SO3Na	398.94	(82.95-82.99)	18O2-PFHxS	(102.95-102.98)	0.0046	94 (7)
Perfluoro-n-octanoic acid	PFOA	CF3(CF2)6COOH	412.97	(218.96 - 219.01)	13C4-PFOA	(371.97-372.04)	0.0102	93 (7)
Perfluoro-n-nonanoic acid	PFNA	CF3(CF2)7COOH	462.96	(418.95 - 419.01)	13C5-PFNA	(422.97-423.03)	0.0456	78 (17)
Sodium perfluoro-1-hexanesulfonate	PFOS	CF3(CF2)7SO3Na	498.93	(98.940-98.975)	13C4-PFOS	(98.94-98.98)	0.0154	97 (5)
Perfluoro-n-decanoic acid	PFDA	CF3(CF2)8COOH	512.96	(268.95-269.04)	13C2-PFDA	(469.95-470.05)	0.0014	97 (5)
Perfluoro-n-undecanoic acid	PFDS	CF3(CF2)9COOH	562.96	(98.945-98.975)	13C4-PFOS	(98.94-98.98)	0.0625	90 (7)
Sodium perfluoro-1-decanesulfonate	PFUdA	CF3(CF2)9SO3Na	598.92	(568.95-569.04)	13C2-PFUdA	(519.94-520.06)	0.2150	115 (13)
Perfluoro-n-dodecanoic acid	PFDoA	CF3(CF2)10COOH	612.95	(318.95 - 319.02)	13C2-PFDoA	(569.95-570.02)	0.0008	116 (19)
Perfluoro-n-tridecanoic acid	PFTrDA	CF3(CF2)11COOH	662.95	(618.93-619.03)	13C2-PFDoA	(569.95-570.02)	0.0097	142 (20)
Perfluoro-n-tetradecanoic acid	PFTeDA	CF3(CF2)12COOH	712.95	(668.93-669.03)	13C2-PFDoA	(569.95-570.02)	0.0041	122 (30)
Perfluoro-n-hexadecanoic acid	PFHxDA	CF3(CF2)14COOH	812.94	(768.92-769.04)	13C2-PFDoA	(569.95-570.02)	0.3680	126 (52)
Perfluoro-n-octadecanoic acid	PFODA	CF3(CF2)16COOH	912.93	(568.94-569.02)	13C2-PFDoA	(569.95-570.02)	0.0886	185 (86)

[1]surrogates used for quantification; [2]Limit of quantification based on ten times the signal to noise ratio; [3]% extraction recovery assessed by adding native PFAA mix (referred to as spike) to samples (as exemplified in Fig. S6). Quantification considered the concentration of native sample present and the spiked method blank. Recoveries were calculated as noted follows:

$$extraction\ recovery\ (\%) = \frac{concentrations\ measured\ in\ spiked\ sample\ extract}{\left(\frac{spiked\ concentration*spiked\ voume+concentrations\ in\ unspiked\ sample\ extract*sample\ wt.}{sample\ wt.}\right)} * 100\%.$$ PFAAs measured in samples were not corrected for recoveries.

Table S3. Average PFAA concentrations (ng/g) and standard deviations (parenthetical) in the OFMSW and control compost material.

Item	PFBA	PFPeA	PFBS	PFHxA	PFHpA	PFHxS	PFOA	PFNA	PFOS	PFDA	PFDS	PFUdA	PFDoA	PFTrDA	PFTeDA	PFHxDA	PFODA
PFAA concentrations (ng/g) in < 2mm fraction																	
#1	8.88 (0.54)[a]	5.92 (0.87)	0.95 (0.01)	33.5 (1.79)	0 (0)[b]	0.20 (0.07)	6.88 (0.48)	0.82 (0.58)	1.06 (0.15)	3.19 (0.14)	0.31 (0.22)	0 (0)	0.85 (0.17)	0.22 (0.02)	0.47 (0.13)	0 (0)	0.14 (0.19)
#2	3.51 (0.02)	8.59 (1.49)	1.23 (0.1)	17.65 (0.89)	0 (0)	0.25 (0.02)	2.54 (0.21)	0 (0)	1.23 (0.02)	1.07 (0.05)	0.49 (0.01)	0 (0)	0.46 (0.03)	0.12 (0.01)	0.24 (0.02)	0 (0)	0 (0)
#3	7.78 (0.42)	2.99 (0.21)	0.82 (0.04)	28.61 (2.18)	0 (0)	0.24 (0.04)	3.85 (0.19)	0.12 (0.17)	1.09 (0.02)	1.98 (0.1)	0.28 (0.2)	0 (0)	0.78 (0.11)	0.14 (0.03)	0.31 (0.05)	0 (0)	0 (0)
#4	10.63 (0.66)	6.87 (0.65)	0.79 (0.02)	37.91 (2.45)	0 (0)	0.22 (0.04)	7.85 (0.49)	0 (0)	1.20 (0.13)	3.25 (0.22)	0.44 (0.02)	0 (0)	1.13 (0.21)	0.16 (0.01)	0.35 (0.05)	0 (0)	0 (0)
#5	2.81 (0.13)	7.91 (0.52)	0 (0)	23.24 (0.68)	2.56 (1.83)	0.17 (0.01)	10.31 (0.18)	1.05 (0.48)	1.14 (0.15)	4.43 (0.11)	0.13 (0.18)	0 (0)	1.71 (0.08)	0.24 (0.02)	0.65 (0.04)	0 (0)	0 (0)
#6	2.95 (0.31)	2.66 (0.7)	7.63 (0.91)	10.52 (0.91)	0 (0)	0.25 (0.04)	2.73 (0.22)	0.30 (0.23)	1.53 (0.15)	1.31 (0.17)	0.46 (0.03)	0 (0)	0.66 (0.29)	0.14 (0.03)	0.34 (0.09)	0 (0)	0 (0)
#7	12.04 (1.25)	6.83 (1.09)	0 (0)	49.84 (5.70)	0 (0)	0.08 (0.05)	3.64 (0.4)	0 (0)	0.35 (0.02)	1.24 (0.17)	0.12 (0.18)	0 (0)	0.50 (0.05)	0.08 (0.06)	0.17 (0.01)	0 (0)	0 (0)
#8	0.21 (0.03)	0.41 (0.29)	0 (0)	0.38 (0.03)	0 (0)	0.07 (0.05)	0.48 (0.08)	0 (0)	1.2 (0.05)	0.38 (0.04)	0.38 (0.00)	0 (0)	0.16 (0.01)	0.04 (0.05)	0 (0)	0 (0)	0 (0)
#9	0.64 (0.05)	1.43 (0.07)	0 (0)	1.07 (0.03)	0 (0)	0.18 (0.04)	1.05 (0.02)	0 (0)	1.69 (0.08)	0.65 (0.06)	0.38 (0.02)	0 (0)	0.30 (0.09)	0 (0)	0.04 (0.05)	0 (0)	0 (0)
#10	0.15 (0.10)	0.80 (0.65)	0 (0)	0.38 (0.06)	0 (0)	0.19 (0.08)	0.04 (0.05)	0 (0)	0.47 (0.11)	0 (0)	0.25 (0.18)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

[a]Standard deviation (n = 3); [b]all replicates were < LOQ and values for <LOQ changed to 0 for calculating averages and standard deviations.

Table S4. Change in the % of short chain PFAAs and change in the % of total PFCAs in the OFMSW Composts before and after TOP assay and associated p-value of ANOVA test. Most of the PFAAs in the composts were short chain PFAAs and of the total PFAAs, most were PFCAs. The two-way analysis of variance (ANOVA) followed by Tukey test was used to examine the significant difference in PFAAs concentrations in compost extract before and after TOP assay. Both PFAAs in compost and TOP assay conducted in triplicates.

	Before TOP (%)		After TOP (%)		Differences pre and post TOP*
*	Short	PFCA	Short	PFCA	p-value
1	77.7%	96.0%	83.4%	96.2%	0.346
2	82.8%	91.4%	80.6%	92.4%	0.0883
3	82.0%	95.0%	87.6%	96.1%	0.0437
4	79.4%	96.2%	86.1%	98.2%	0.0063
5	64.8%	97.5%	64.2%	98.2%	0.0512
6	75.6%	68.7%	84.9%	60.2%	0.1253
7	91.7%	99.3%	94.9%	99.9%	0.0534

*Two-way Analysis of variance (ANOVA) followed by Tukey test was used to examine the significant difference in PFAA concentrations in compost extract before and after TOP assay.

 D. Instrumental analysis for screening of selective PFAA precursors. To determine PFAS precursor, extracts were injected on a LC-QToF-MS (liquid chromatography-time of flight-mass spectrometer) in full scan mode for both negative electrospray ionization (ESI) in SWATH mode. A TOF-MS scan was acquired at m/z 30-2000 with 50 msec accumulation time with 17 MS/MS scans (m/z 100 to 1250). Phenomenex Kinetex EVO C18 column (100Å, 100×2.1 mm, 5 µm) was used at a flow rate of 0.5 mL/min with 30 µL injection volume. The same mobile phases were used with a different gradient profile as follow (total 18.20 min): 0 - 0.1 min: 10 %B; 0.1- 10 min: 10- 100 %B; 10- 15 100 %B; 15.00- 15.20 min: 10 %B and 15.20 – 18.20 min: 10%B. Screening of the data with a list of selected potential precursors was performed using Sciex PeakView/Masterview software. Only [M-H]- was considered as potential adducts. Initial criteria of acceptance were mass error < 5 ppm and isotope pattern ratio difference <15%. Then MS/MS fragmentation spectrum was compared to MS/MS spectrum from the individual analytical standard (confirmed structure, confidence level 1 of 5) or MS/MS spectrum database using LibraryVeiw, SCIEX (probable structure, confidence level 2 of 5). Whether analytical standards or just the library was available for each of the PFAS precursors targeted are identified in Table S5. The criteria behind the confidence level scale of 1 to 5 with level 1 being the highest level of confidence was previously proposed by Schymanski et al.[2] for identifying compounds via high resolution mass spectrometry.

Table S5. PFAS precursors known to be present in food contact materials (FCMs) or known to be intermediate metabolites in precursor PFAS degradation.

Synonym	Formula	Name	Confirmation with
6:2 FTOH	C8H5F13O	6:2 Fluorotelomer alcohol	Standard chemical [a]
8:2 FTOH	C10H5F17O	8:2 Fluorotelomer alcohol	Library [b]
6:2 FTS	C8H5F13O3S	6:2 Fluorotelomer sulfonate[c]	Standard chemical
8:2 FTS	C10H5F17O3S	8:2 Fluorotelomer sulfonate	Library
6:2 monoPAP	C8H6F13O4P	6:2 fluorotelomer phosphate monoester	Library
8:2 monoPAP	C10H6F17O4P	8:2 fluorotelomer phosphate diester2	Library
6:2, 6:2 diPAP	C16H9F26O4P	6:2[c], 6:2 fluorotelomer phosphate diester	Library
6:2, 8:2 diPAP	C18H9F30O4P	6:2, 8:2 fluorotelomer phosphate diester	Library
8:2, 8:2 diPAP	C20H9F34O4P	8:2, 8:2 fluorotelomer phosphate diester	Library
8:2, 10:2 diPAP	C22H9F38O4P	8:2, 10:2 fluorotelomer phosphate diester	Library
DiSAmPAP	C24H19F34N2O8PS2	EtFOSE-based phosphate diester	Standard chemical
MonoSAmPAP	C12H11F17NO6PS	EtFOSE-based phosphate monoester	Standard chemical
EtFOSA	C10H6F17NO2S	Ethyl perfluorooctane sulfonamide	Standard chemical
EtFOSAA	C12H8F17NO4S	Ethyl perfluorooctane sulfonamido acetic acid	Standard chemical
EtFOSE	C12H10F17NO3S	Ethyl Perfluorooctane Sulfonamido Ethanol	Standard chemical
FOSA	C8H2F17NO2S	Perfluorooctane sulfonamide	Standard chemical
FOSAA	C10H4F17NO4S	Perfluorooctane sulfonamido acetic acid	Standard chemical
FOSE	C10H6F17NO3S	Perfluorooctane Sulfonamido Ethanol	Standard chemical
MeFOSA	C9H4F17SO2N	Methyl perfluorooctane sulfonamide	Standard chemical
5:2 FTCA	C7H3F11O2	5:2 Fluorotelomer carboxylic acid	Standard chemical
5:3 FTCA	C8H5F11O2	5:3 Fluorotelomer carboxylic acid	Standard chemical
6:2 FTCA	C8H3F13O2	6:2 Fluorotelomer carboxylic acid	Standard chemical
7:3 FTCA	C10H5F15O2	7:3 Fluorotelomer carboxylic acid	Library
8:2 FTCA	C10H3F17O2	8:2 Fluorotelomer carboxylic acid	Library
5:3 FTUCA	C8H3F11O2	5:3 Fluorotelomer unsaturated carboxylic acid	Library
6:2 FTUCA	C8H2F12O2	6:2 Fluorotelomer unsaturated carboxylic acid	Library
7:3 FTUCA	C10H3F15O2	7:3 Fluorotelomer unsaturated carboxylic acid	Library
8:2 FTUCA	C10H2F16O2	8:2 Fluorotelomer unsaturated carboxylic acid	Library

[a]Level 1 confirmation[2] includes mass error < 5 ppm, isotope pattern ratio difference <15% and confirmed with an analytical standard; [b]Level 2 confirmation[2] includes mass error < 5 ppm, isotope pattern ratio difference <15% and confirmed with the MS/MS spectrum library database. [c]Confirmed with level 1 confirmation in one or more composts as detailed in the main.

Table S6. Average and standard deviations (parenthetical) (n = 2) for PFAA porewater concentrations (µg/L). PFAAs not shown were < LOQ.

	PFPeA	PFBS	PFHxA	PFHxS	PFOA	PFOS
1	0.29 (0.16)	0.13 (0)	8.12 (0.40)	0.00 (0.00)	0.11 (0.00)	0.02 (0.00)
2	1.04 (0.09)	0.24 (0.01)	4.71 (0.35)	0.02 (0.01)	0.08 (0.02)	0.03 (0.00)
3	0.10 (0.02)	0.22 (0.01)	8.01 (0.17)	0.00 (0.00)	0.10 (0.01)	0.01 (0.00)
4	2.68 (0.45)	0.24 (0.01)	13.3 (0.75)	0.01 (0.00)	0.32 (0.07)	0.02 (0.00)
5	1.32 (0.16)	0.10 (0.00)	3.98 (0.15)	0.01 (0.00)	0.25 (0.01)	0.01 (0.00)
6	0.09 (0.01)	1.76 (0.13)	2.10 (0.31)	0.00 (0.00)	0.04 (0.01)	0.01 (0.00)
7	1.34 (0.14)	0.03 (0.00)	12.62 (0.74)	0.00 (0.00)	0.05 (0.01)	0.01 (0.00)

Table S7. Average and standard deviations (parenthetical) of the PFAA-specific mass quantified in porewater relative to the average levels quantified in the initial compost (< 2 mm). PFAAs not shown were < LOQ or fraction in the porewater was insignificant.

Compost ID	PFPeA	PFBS	PFHxA	PFHxS	PFOA	PFOS
1	9.2 (7.2)	24.8 (1.0)	45.0 (3.1)	< LOQ[a]	3.0 (0.1)	1.3 (0.5)
2	22.3 (2.6)	36.8 (1.7)	49.1 (5.1)	6.1 (8.6)	6.1 (1.9)	2.3 (0.2)
3	6.2 (2.2)	50.2 (2.5)	51.7 (1.7)	< LOQ	4.8 (0.4)	0.02 (0.02)
4	77.0 (20)	59.4 (6.7)	69.0 (7.4)	< LOQ	8.1 (2.7)	0.69 (0.69)
5	37.6 (6.0)	NA	38.4 (2.3)	< LOQ	5.3 (0.5)	0.35 (0.18)
6	5.7 (0.6)	37.8 (4.3)	32.6 (7.1)	< LOQ	2.2 (0.8)	0.01 (0.02)
7	44.8 (6.3)	NA	57.8 (4.6)	< LOQ	3.1 (0.7)	2.2 (3.1)

[a] Porewater concentrations < LOQ

Table S8. Average and standard deviations (parenthetical) of the total PFAA-specific mass quantified in porewater and spent composts relative to the average levels quantified in the initial compost (< 2 mm).

| Compost ID	PFPeA	PFBS	PFHxA	PFHxS	PFOA	PFOS
1	NQ[a]	121 (33)	88.0 (4.2)	116 (13)	108 (3.3)	85.4 (8.4)
2	113 (25)	74.9 (4.4)	67.4 (8.2)	102 (5.8)	93.6 (1.7)	101 (1.9)
3	NQ	119 (24)	85.4 (10.6)	83 (0.6)	110 (6.0)	144 (92)
4	101 (13)	151 (5.1)	124 (6.4)	113 (1.3)	126 (1.8)	118 (17)
5	58.4 (3.0)	NA[b]	67.6 (2,7)	118 (0.5)	100 (2.0)	95.0 (4.1)
6	NQ	108 (187)	68.3 (0.9)	96.3 (3.1)	88.2 (9.5)	71.8 (16)
7	56.3 (9.8)	NA	112 (12.5)	200[c] (9.6)	103 (15)	46.6 (1.3)

[a]NQ because PFPeA LOQ values were higher in the analysis run for the spent composts resulting in lack of quantitation for these composts with lower PFPeA loads. This was also true for PFBA in all composts, thus not shown in the table. [b]NA is not available due to concentration in original compost < LOQ. PFHxS in the initial compost had a large standard deviation across triplicates (Table S3), which was not observed for in the extracts of the spent compost, which is contributing to an over estimation in the mass balance assessment.
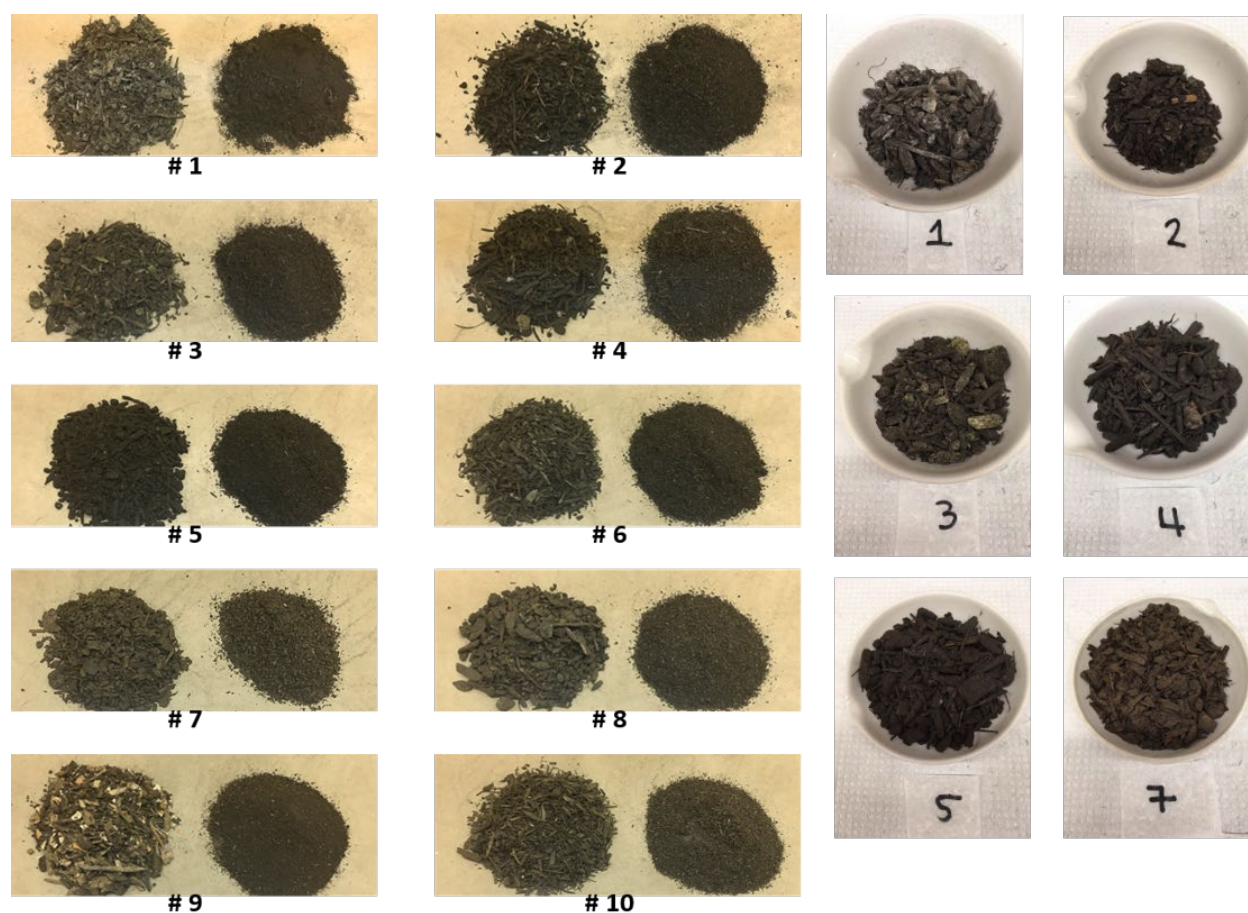
Figure S1. Photo of < 2 mm and > 2 mm fractions of air-dried sieved composts (tan backgrounds) and an expanded view of a subset of > 2 mm composts in ceramic dishes after oven drying (white background).

E. Kinetics and equilibrium time for PFAAs in pore water. To determine the equilibrium time needed between the compost and pore water, two representative composts (#5 and 7) were selected and evaluated in triplicate at each sampling times of 6 h, 24 h, 48 h, 72 h, and 5 d. The effects of microbial activity on PFAA pore-water concentrations were determined by a using 200 mg L^{-1} NaN_3 as a biocide instead of chemical-free water in a set of triplicates for each of the two representative composts. Samples treated NaN_3 were sacrificed at 5 d and compared to the composts equilibrated for the same time but with no NaN_3. Based on a kinetic study, 48 h was deemed sufficient to reach equilibrium (Fig. S2). No significant differences were observed in PFAA concentrations at 5 d between NaN_3 treated and untreated samples (Fig. S2).

Pore-water pH increased during equilibration but within 0.5 pH units overall (Fig. S3). PFAA porewater concentrations were not significantly difference in the presence or absence of sodium azide (NaN_3) indicating microbial activity had a negligible effect on PFAA concentrations. The effects on porewater pH due to NaN_3 addition was minimal to small (< 0.3 pH units).
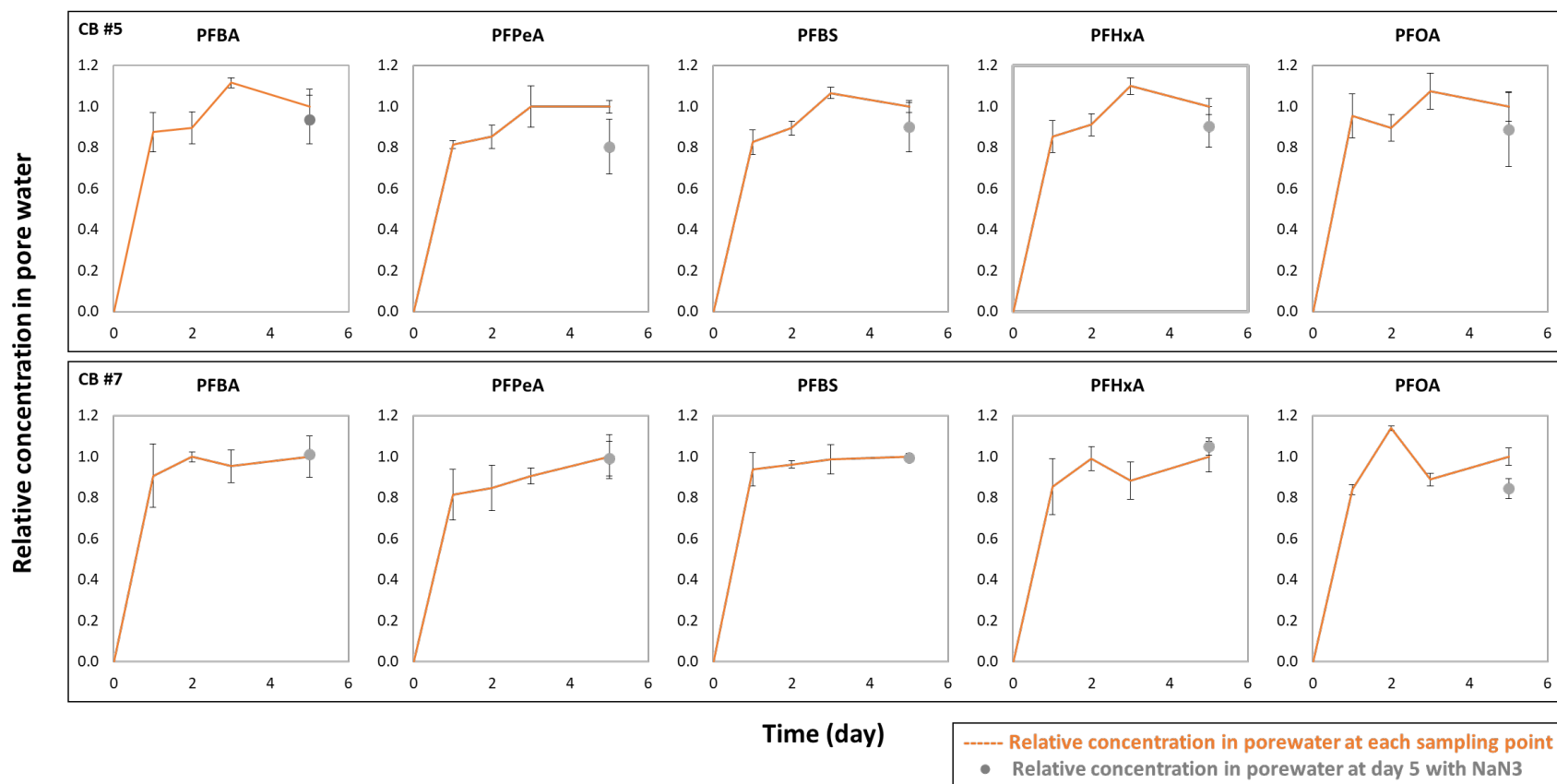
Figure S2. Relative concentration of PFAAs in pore water over time (line) and in pore water of NaN$_3$ applied sample (grey circle). Compounds having concentration below LOQ are not shown. Error bar represents standard deviation.
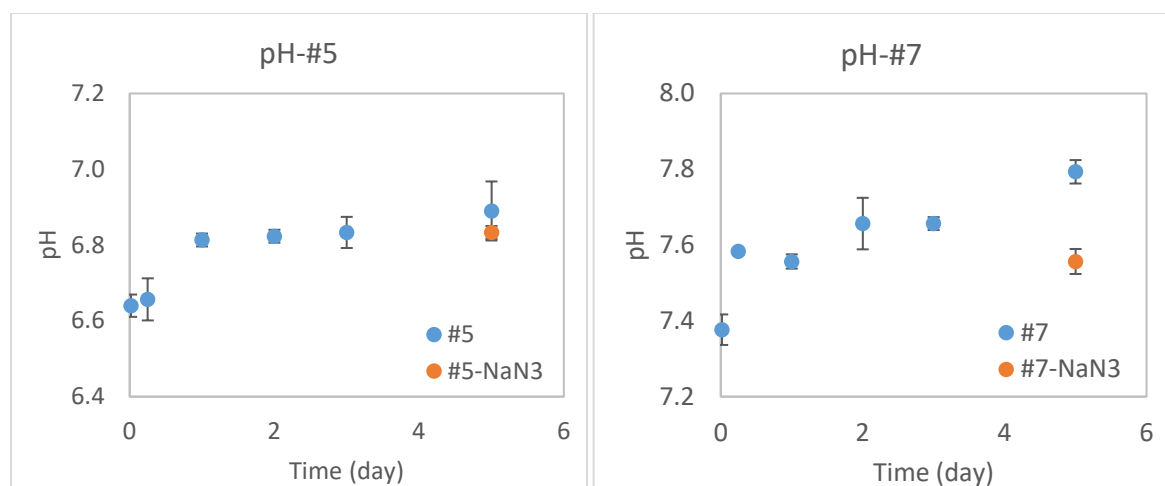
Figure S3. Porewater pH over time associated with OFMSW composts #5 and 7. NaN$_3$ applied only to a set of samples at day 5 and reduced pH measured from the samples. Error bar represents standard deviation (n = 3).
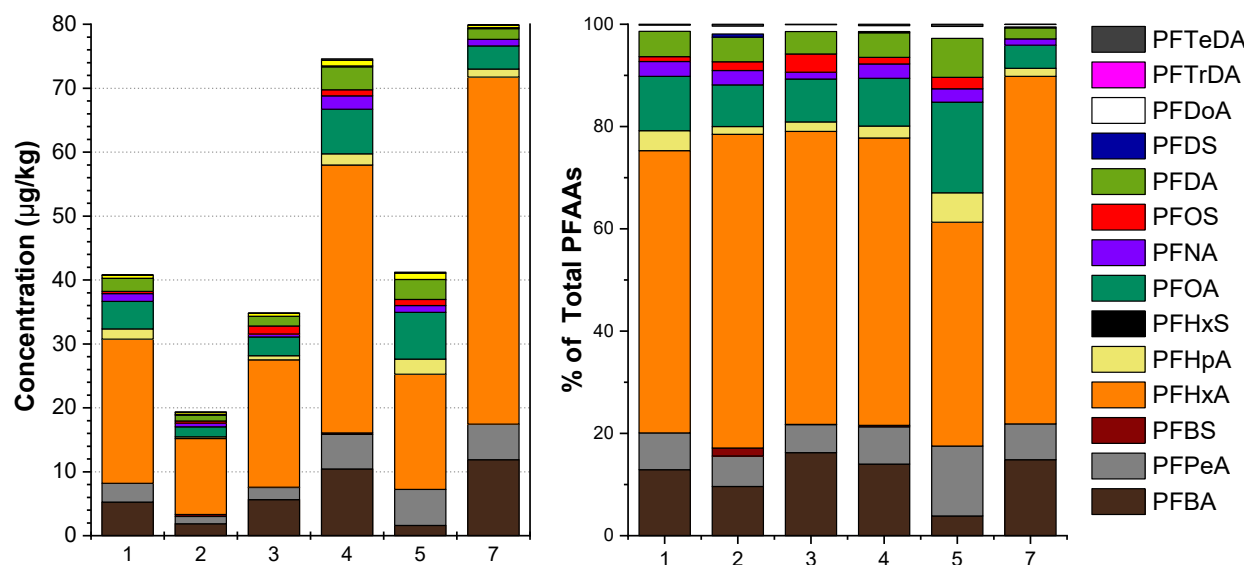
**Figure S4.** The PFAA concentrations quantified (µg/kg oven dried, > 2 mm) in the compost (left) and the relative contribution (%) of each PFAA to the total PFAAs quantified for #1-5 and 7 (right). See Table S1 for the fraction of compost < 2 mm.

F. TOP Assay. PFAAs present pre- and post TOP assay are summarized in Fig. S4. In some cases, a decrease in the total PFAAs was observed (e.g., #2 and 5), which can happen if the solution pH drops during the TOP assay due to the degradation of PFCAs by the oxidative sulfate radicals[3,4]. Sulfate radical generated from excessive persulfate ion can produce hydroxyl radical regardless of pH,[5] but rates increase with decreasing pH leading to PFCAs being degraded to shorter chain PFCAs or even completely mineralized.[6]
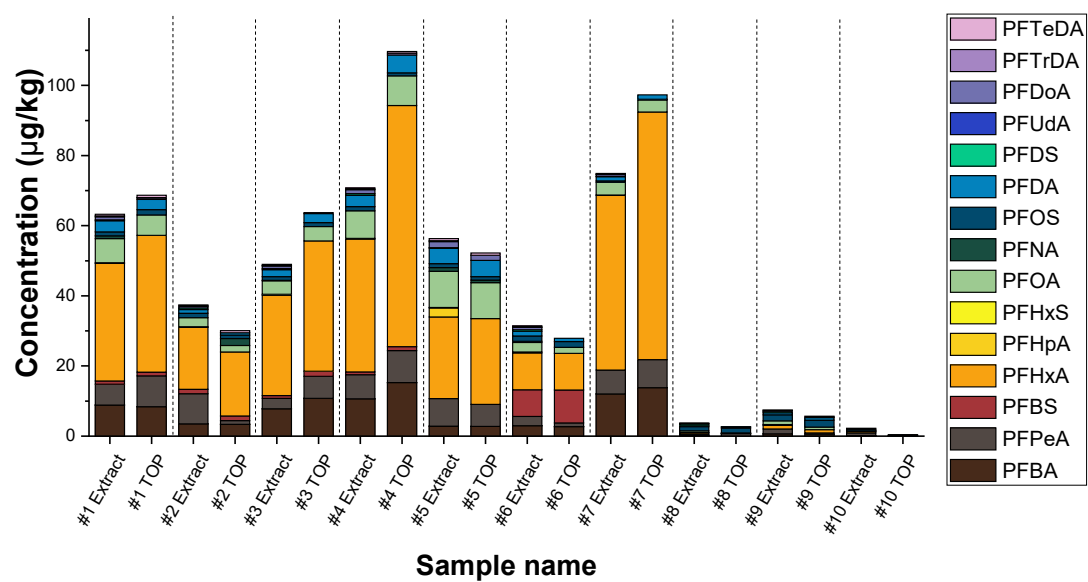
Figure S5. Change in PFAA concentrations in compost extracts (n = 3) before and after the TOP assay.
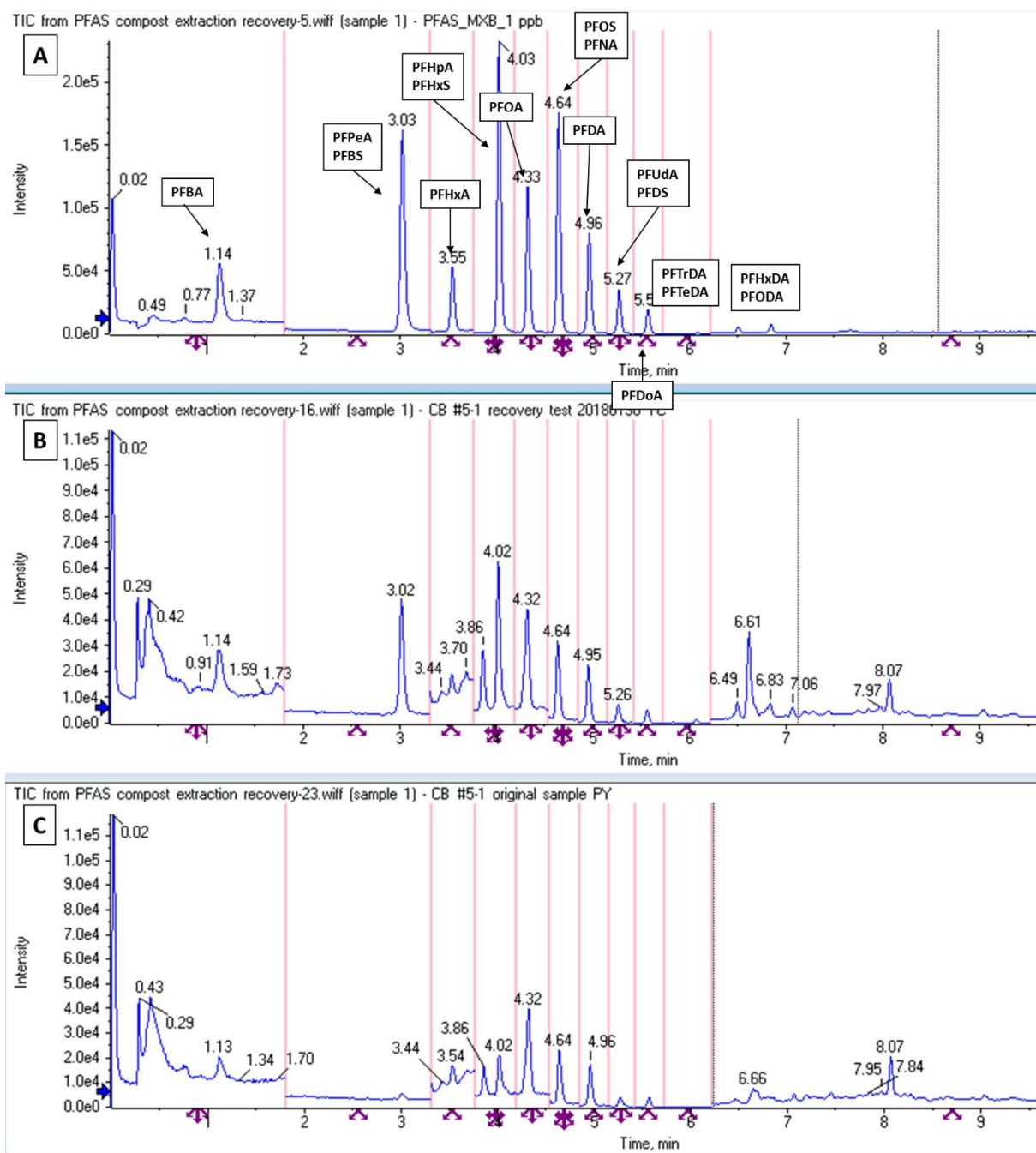
Figure S6. Total ion chromatogram of 17 PFAAs for (A) 1 µg/L for each PFAA; (B) the extract of compost #5 spiked with a native standard mix of PFAAs; and (C) extract of compost #5 (no added PFAAs).
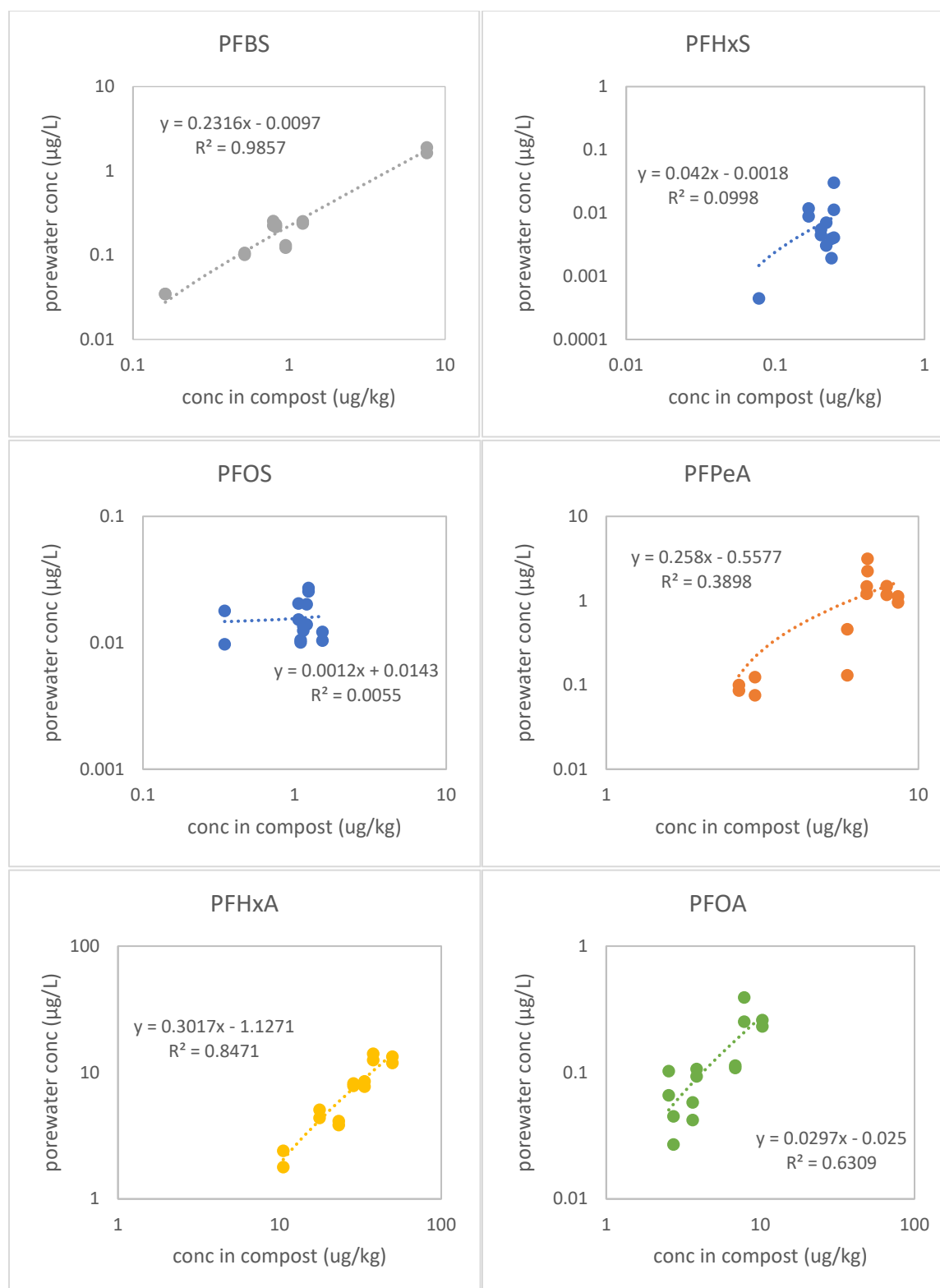
Figure S7. Porewater concentration (µg/L) vs PFAA loads in the composts (µg/kg) for each PFAA > LOQ.

G. Reference

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