

Ann Arbor Compost Facility
Compost PFAS Data

Updated January 22, 2020		Units	Compost Composite 1	Compost Composite 2	Compost Composite 3	
Sample Location: Compost			10/25/19	10/25/19	10/25/19	
Sample Date: October 25, 2019						
Parameter						
Perfluoroalkyl Carboxylates/Carboxylic Acids (PFCA)						
Perfluorobutanoic acid (PFBA)	ug/Kg	2.8 B	2.5 B	2.0 B		
Perfluoropentanoic acid (PFPeA)	ug/Kg	12	12	8.3		
Perfluorohexanoic acid (PFHxA)	ug/Kg	17	16	13		
Perfluoroheptanoic acid (PFHpA)	ug/Kg	0.91 B	0.68 B	0.66 B		
Perfluoroctanoic acid (PFOA)	ug/Kg	1.5	1.1	1.2		
Perfluorononanoic acid (PFNA)	ug/Kg	0.24 J	0.20 J	0.22 J		
Perfluorodecanoic acid (PFDA)	ug/Kg	0.70 B	0.41 JB	0.56 B		
Perfluoroundecanoic acid (PFUnA)	ug/Kg	0.21 JI	Not Detected	0.13 J		
Perfluorododecanoic acid (PFDoDA/PFDoA)	ug/Kg	0.33 J	0.22 J	0.33 J		
Perfluorotridecanoic Acid (PFTriA)	ug/Kg	Not Detected	Not Detected	Not Detected		
Perfluorotetradecanoic acid (PFTeA)	ug/Kg	Not Detected	Not Detected	0.14 J		
Perfluoroalkyl Sulfonates/Sulfonic Acids (PFSA)						
Perfluorobutane sulfonic acid (PFBS)	ug/Kg	0.99	0.044	0.91		
Perfluoropentane sulfonic acid (PFPeS)	ug/Kg	0.040 J	Not Detected	Not Detected		
Perfluorohexane sulfonic acid (PFHxS)	ug/Kg	0.13 J	0.20 J	0.13 J		
Perfluoroheptane sulfonic acid (PFHpS)	ug/Kg	Not Detected	Not Detected	Not Detected		
Perfluorooctane sulfonic acid (PFOS)	ug/Kg	1.0 B* / 0.77 JH	0.93 JB*	1.1 B* / 1.2 H		
Perfluorononane sulfonic acid (PFNS)	ug/Kg	Not Detected	Not Detected	Not Detected		
Perfluorodecane sulfonic acid (PFDS)	ug/Kg	Not Detected	Not Detected	Not Detected		
Fluorotelomer Sulfonates/Sulfonic Acids (FTSA)						
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	ug/Kg	Not Detected	Not Detected	Not Detected		
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	ug/Kg	Not Detected	Not Detected	Not Detected		
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	ug/Kg	Not Detected	Not Detected	Not Detected		
Perfluoroalkane Sulfonamides/Sulfonamidoacetic Acids (FASA)						
N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ug/Kg	Not Detected	Not Detected	Not Detected		
N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ug/Kg	Not Detected	Not Detected	Not Detected		
Perfluoroalkane Sulfonamides						
Perfluorooctane sulfonamide (FOSA)	ug/Kg	Not Detected	Not Detected	Not Detected		

Definitions and Notes:

PFAS = per- and polyfluoroalkyl substances

ug/Kg = micrograms per kilogram, equivalent to parts per billion (ppb)

J = estimated concentration above the method detection limit and below the method reporting limit. The concentration is an approximate value.

B = Compound was found in the blank and sample.

I = Because of quality control results, value is estimated maximum possible concentration.

H = Sample was prepared or analyzed beyond the specified holding time.

* = Quality control data is outside acceptance limits.

1. The contract laboratory analyzed samples in duplicate as a part of their quality control measures. This results in two results.

2. USEPA Method 537 was modified by Eurofins Test America and used for the sample analysis.

3. All three samples were analyzed within hold time. Composite samples 1 and 3 were re-analyzed outside of hold time due to the high PFOS recoveries in the method blank and the laboratory control sample.

**Ann Arbor Compost Facility
Compost Ponds PFAS Data**

Sample Location	Units	Groundwater Surface Water Interface Criteria (GSI)	Michigan Proposed Drinking Water MCL Values	Retention Pond North	Retention Pond South
Sample Date:				10/25/19	10/25/19
Parameter					
Perfluoroalkyl Carboxylates/Carboxylic Acids (PFCA)					
Perfluorobutanoic acid (PFBA)	ppt	--	--	100 B	170 B
Perfluoropentanoic acid (PFPeA)	ppt	--	--	230	470
Perfluorohexanoic acid (PFHxA)	ppt	--	400,000	340	680
Perfluoroheptanoic acid (PFHpA)	ppt	--	--	13	19
Perfluoroctanoic acid (PFOA)	ppt	12,000	8	11	16
Perfluorononanoic acid (PFNA)	ppt	--	6	1.4 J	1.7 J
Perfluorodecanoic acid (PFDA)	ppt	--	--	1.1 J	Not Detected
Perfluoroundecanoic acid (PFUnA)	ppt	--	--	Not Detected	Not Detected
Perfluorododecanoic acid (PFDoDA/PFDoA)	ppt	--	--	Not Detected	Not Detected
Perfluorotridecanoic Acid (PFTriA)	ppt	--	--	Not Detected	Not Detected
Perfluorotetradecanoic acid (PFTeA)	ppt	--	--	0.44 J	Not Detected
Perfluoroalkyl Sulfonates/Sulfonic Acids (PFSA)					
Perfluorobutane sulfonic acid (PFBS)	ppt	--	420	33	33
Perfluoropentane sulfonic acid (PFPeS)	ppt	--	--	Not Detected	Not Detected
Perfluorohexane sulfonic acid (PFHxS)	ppt	--	51	1.1 JB	Not Detected
Perfluoroheptane sulfonic acid (PFHpS)	ppt	--	--	Not Detected	Not Detected
Perfluorooctane sulfonic acid (PFOS)	ppt	12	16	4.7	2.7 J
Perfluorononane sulfonic acid (PFNS)	ppt	--	--	Not Detected	Not Detected
Perfluorodecane sulfonic acid (PFDS)	ppt	--	--	Not Detected	Not Detected
Fluorotelomer Sulfonates/Sulfonic Acids (FTSA)					
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	ppt	--	--	Not Detected	Not Detected
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	ppt	--	--	Not Detected	Not Detected
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	ppt	--	--	Not Detected	Not Detected
Perfluoroalkane Sulfonamides/Sulfonamidoacetic Acids (FASA)					
N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ppt	--	--	Not Detected	Not Detected
N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ppt	--	--	Not Detected	Not Detected
Perfluoroalkane Sulfonamides					
Perfluorooctane sulfonamide (FOSA)	ppt	--	--	0.69 J	Not Detected
Total PFOA and PFOS	ppt	--	--	15.7	18.7