

Environmental Monitoring – Multi-City Study
Water, Sludge, Sediment, POTW Effluent and Landfill Leachate Samples

Results: PFOA

Table 4
PFOA Concentration, Parts per Billion

Results of Duplicate Samples

Sample	Decatur	Cleveland	Mobile	Columbus	Pensacola	Port St. Lucie*	Port St. Lucie**
POTW effluent	2.14	0.655	0.067	0.139	0.084	0.041	0.043
	2.42	0.674	0.088	0.147	0.090	0.044	0.040
POTW sludge (dry wt)	101	3.11		16.5	2.51		
	244	2.82	NQ	16.3	2.40	NQ	ND
Drinking water influent	ND	ND	ND	0.026 NQ	ND	ND	ND
Drinking water treated	ND	ND	ND	0.025 0.029	ND	ND	ND
Drinking water tap 1	ND	ND	ND	0.026 NQ	ND	ND	ND
Drinking water tap 2	not analyzed	ND	ND	0.026 NQ	ND	ND	ND
Drinking water tap 3	not analyzed	ND	ND	0.025 NQ	ND	ND	ND
Landfill leachate	48.1			NQ		0.953	1.03
	46.8	not collected	ND	0.028	ND	0.939	1.02
Surface water 1	NQ	NQ	0.026	0.026			
	ND	ND	0.027	0.026	ND	ND	ND
Surface water 2	ND		0.054	0.026			
	NQ	ND	0.060	0.027	ND	NQ	ND
Surface water 3			0.083				
	ND	ND	0.083	NQ	ND	ND	ND
Sediment 1 (dry wt)	ND					0.370	
	NQ	ND	NQ	ND	ND	0.326	ND
Sediment 2 (dry wt)						0.316	
	NQ	NQ	ND	ND	ND	0.294	ND
Sediment 3 (dry wt)						1.68	
	NQ	ND	NQ	ND	ND	1.75	ND
Quiet water	0.057		NQ			0.737	0.097
	0.063	not collected	0.027	ND	ND	0.760	0.097

*Data from 1999 sample event

**Data from 2000 sample event. Additional samples in 2001 (not shown) showed similar results.

LOD (Limit of Detection) approximately 0.0075 µg/L for water and 0.80 µg/kg for sludge and sediment as received (wet weight)

LOQ (Limit of Quantitation) is 0.025 µg/L for water, 0.2 µg/kg for sludge and sediment as received (wet weight).

ND = not detected

NQ = compound detected at a level between the LOD and LOQ

PFOA was found in similar samples in the same cities as PFOS. The concentrations of PFOA were generally lower than those of PFOS, although in some cases the concentrations were similar.