

**Polychlorinated Biphenyl (PCB) Residues in Water, Stream Sediments
and Floodplain Soils Collected May 23-25, 2006
from the Bayou Creek System**

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DRAFT REPORT

January 24, 2007

Submitted to

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**Division of Waste Management
Kentucky's Environmental and Public Protection Cabinet**

INTRODUCTION

Water, sediments and floodplain soil samples were taken from Big and Little Bayou Creeks on May 23-25, 2006 for PCB analyses. These samples were taken during high-flow stream conditions. A total of 11 sites were sampled from Big Bayou Creek (stations BB1A through BB9) and 5 sites from Little Bayou Creek (stations LB1, LB2, LB2A, LB3 and LB4). In addition, Massac Creek (MC) was sampled (*i.e.* West Fork) and served as a reference station. Samples also were collected near outfalls for effluents 001, 006, 008, and the combined effluents 010 and 011. Three Aroclors (*i.e.* 1248, 1254, 1260) were determined for all samples.

METHODS

Water samples for PCB analyses were collected in chemically cleaned, 1-L amber glass jars with Teflon-lined caps. New jars were obtained from I-Chem®. Samples were placed on ice until delivery to the laboratory and maintained under refrigeration (4°C) until extraction. Sediment samples were restricted to the upper 5-10 cm of sediment soil, including depositional areas when found. Floodplain soils samples FP1 were collected next to the stream bank, while FP2 samples were taken 50-100 yards of the shoreline whenever possible. Both floodplain samples were collected 5-10 cm deep, in areas where flood debris was present. Any surface vegetation was removed prior to sampling floodplain soils. All sediment and floodplain samples were collected in acetone-rinsed 0.47 L glass jars with Teflon-lined lids. Stainless steel spoons and scoops used for collections were acetone-rinsed between sampling stations.

PCB Extraction and Analysis

Extraction and cleanup of water samples followed procedures described by Birge and Price (2002), and were completed within 7 days of collection. Wet sediment or floodplain soil extractions of PCB and sample cleanup were performed following U.S EPA SW-846 Method 3540C (U.S. EPA, 1997; Erickson, 1997) as described previously by Birge and Price (2002). Samples were analyzed for Aroclors 1248, 1254, and 1260 according to SW-846 Method 8082 (U.S. EPA, 1997). Analyses also were performed as described by Birge and Price (2002).

Quality Assurance

Permanent bench records were kept of all assays and annotated as required under Good Laboratory Practices (*Federal Register*, 40 CFR, Part 160, August 17, 1989). All printouts and graphic recordings were filed and are open for inspection. These bench records will be archived within two years after the close of the project but retrievable upon request.

RESULTS

Stream Water

Results for PCB analyses of water samples and effluents are given in Tables 1 and 2 for Big and Little Bayou Creeks, respectively. No PCBs were quantifiable in the water samples collected from Big Bayou Creek, observing a detection limit of 0.08 µg PCB/L. For Little Bayou Creek, Aroclor 1248 was detected at station LB3. Aroclor 1248 also was detected at effluent 001, while Aroclor 1260 was detected at station LB3, however, the

concentrations were below our minimum quantitation limit (MQL). All other water samples from Little Bayou Creek did not show any detectable PCB (Table 2).

Stream Sediments

PCB concentrations for individual wet-extracted sediments for Massac Creek and Big Bayou Creek are given in Table 3. Mean values for PCBs in sediments are given in Table 5. No PCBs were detected at the reference station MC or at stations BB1A through BB4 in Big Bayou Creek. PCBs were detected at stations BB5 and BB9 and effluents 008 and 001. Aroclor 1248 was not found in any of the stations and effluents from Big Bayou creek. Aroclor 1254 was detected at station BB9 (8.15 µg/Kg), and at effluents 008 (11.85 µg/Kg) and 001 (6.84 µg/Kg). Aroclor 1260 was detected at station BB5 (9.33 µg/Kg), and at effluents 008 (8.61 µg/Kg) and 001 (5.73 µg/Kg) (Table 5). Concerning mean PCB concentrations for Big Bayou creek given in Table 5, Aroclors 1254 and 1260 were highest at effluent 008.

PCB concentrations for Little Bayou Creek sediments are presented in Table 4 and mean sediment values are presented in Table 5. As in previous observations, PCBs were not detected at reference station LB1. Aroclor 1248 was only detected at station LB2A (44.32 µg/Kg). Aroclor 1254 was detected in sediments at downstream stations LB3 and LB4, with mean PCB concentrations of 140.58 and 6.84 µg/Kg, respectively. Aroclor 1254 concentration in sediments for station LB4 during the March 2005 collection was 14.20 µg/Kg (Birge and Price, 2005). In addition, Aroclor 1254 was observed in sediments from effluent 010+011 (5.95 µg/Kg), whereas during the March 2005 collection, Aroclor 1254 in sediments from effluent 010+011 was 3.54 µg/Kg (Birge and Price, 2005). Aroclor 1260

was detected in sediments from stations LB2A and LB3, with mean PCB concentrations of 19.71 and 89.43 µg/Kg, respectively.

Floodplain Soils

Results for PCBs in individual floodplain soils from Massac Creek and Big Bayou Creek are presented in Table 6. Mean Aroclor concentrations are given in Table 8. During the March 2005 collection (Birge and Price, 2005), no Aroclor 1248 was detected in floodplain soils at any of the Big Bayou Creek stations, including effluents 001, 006, and 008. However, during this collection, Aroclor 1248 was observed in floodplain soils from station BB4. Aroclor 1254 was detected in floodplain soils at 6 of 11 stream stations, and mean concentrations ranged from 4.51 to 23.66 µg/Kg. Highest 1254 was observed for station BB6. As with the March 2005 collection, Aroclor 1260 was detected in floodplain soils at 9 of 11 stations, with concentrations ranging from 4.25 to 19.51 µg/Kg. Floodplain soils from effluent 008 had the highest Aroclor 1260 concentration (Table 8). During this collection the mean concentrations of Aroclor 1254 and 1260 in effluent 006 were 13.20 and 7.24 µg/Kg. Whereas, during the March 2005 collection, effluent 006 had mean concentrations of Aroclor 1254 and 1260 of 10.29 and 17.91 µg/Kg, respectively (Birge and Price, 2005).

Results for individual floodplain soils from Little Bayou Creek are shown in Table 7, and mean Aroclor values are given in Table 8. As with the sediments, no PCBs were detected upstream at the LB1 reference station. Aroclor 1248 in floodplain soils was detected at stations LB2A and LB2. Aroclors 1254 and 1260 were observed at all stream stations downstream of LB1. The highest concentrations of 1254 and 1260 were found in

station LB2A, with mean values of 110.42 and 76.39 $\mu\text{g}/\text{Kg}$ (Table 8). During the March 2005 collection, Aroclor 1260 ($\mu\text{g}/\text{Kg}$) was highest at station LB2A (187.45), station LB2 (186.55), and at 010+011 (236.12) (Birge and Price 2005). Mean total PCBs ranged from 31.04 to 283.89 $\mu\text{g}/\text{Kg}$ and were highest for station LB2A (Table 8).

SUMMARY

As with past sampling events, PCB contamination was not evident in water taken from the Bayou Creek system, however, significant concentrations of Aroclor 1248, 1254, and 1260 were still being observed in sediments and floodplain soils taken from Little Bayou creek. PCBs were present in floodplain soils above the confluence of 010+011 effluent in Little Bayou creek (i.e. station LB2A). These floodplain soils have the potential of reintroducing PCBs back into Little Bayou creek due to runoff and high-flow events. PCBs were found in water and sediments samples from station LB3, which indicated that PCB contamination was still present. During this collection, PCB levels were low for sediments and floodplain soils near outfall 010+011 as compared to the March 2005 collection, in which the highest values for total sediment PCB were found near 010+011.

Concerning Big Bayou creek, Aroclor 1248 was non-detectable at all stations. However, some Aroclor 1254 and 1260 was observed at sites below station BB4. Low PCB values were probably due to the high-flow stream conditions before and during sampling. The summer collection (low-flow conditions) will indicate whether these values are affected by seasonal variations. It is of interest to note that Aroclor 1254 and 1260 are still associated with sediments taken at effluent outfalls 008 and 001.

REFERENCES

Birge, W.J. and D.J. Price. 2002. Analysis of Polychlorinated Biphenyl (PCB) Residues and Metals in Sediment Samples Collected February 19-20, 2001 from the Bayou Creek System. Report submitted February 4, 2002 to Jon Maybriar, Division of Waste Management.

Birge, W.J. and D.J. Price. 2005. Polychlorinated Biphenyl (PCB) Residues in Water, Stream Sediments and Floodplain Soils Collected March 21-23, 2005 from the Bayou Creek System. Report submitted December 1, 2005 to LeRoy Chittenden and Jon Maybriar, Division of Waste Management.

Erickson, M.D. 1997. *Analytical Chemistry of PCBs*, 2nd edition. CRC Press, Boca Raton, FL. pp.667.

Federal Register. 1989. Good Laboratory Practice Standards. 40 CFR Part 160. August 17, 1989. Washington, DC.

U.S. EPA. 1997. Test methods for evaluating solid wastes, SW-846, Final Update 3. Office of Solid Waste and Emergency Response, Washington, D.C.

Table 1. PCBs in water samples from Big Bayou Creek collected May 23-25, 2006.

Station	Date	Sample	Aroclor Concentration ($\mu\text{g/L}$)		
			1248	1254	1260
MC	05/25/06	PWS1	<0.082	<0.082	<0.082
MC	05/25/06	PWS2	<0.081	<0.081	<0.081
BB1A	05/23/06	PWS1	<0.080	<0.080	<0.080
BB1A	05/23/06	PWS2	<0.080	<0.080	<0.080
BB1	05/23/06	PWS1	<0.081	<0.081	<0.081
BB1	05/23/06	PWS2	<0.081	<0.081	<0.081
BB2	05/23/06	PWS1	<0.080	<0.080	<0.080
BB2	05/23/06	PWS2	<0.082	<0.082	<0.082
BB2A	05/23/06	PWS1	<0.080	<0.080	<0.080
BB2A	05/23/06	PWS2	<0.081	<0.081	<0.081
BB3	05/23/06	PWS1	<0.080	<0.080	<0.080
BB3	05/23/06	PWS2	<0.080	<0.080	<0.080
BB4	05/23/06	PWS1	<0.080	<0.080	<0.080
BB4	05/23/06	PWS2	<0.080	<0.080	<0.080
BB5	05/23/06	PWS1	<0.080	<0.080	<0.080
BB5	05/23/06	PWS2	<0.080	<0.080	<0.080
BB6	05/23/06	PWS1	<0.081	<0.081	<0.081
BB6	05/23/06	PWS2	<0.081	<0.081	<0.081
BB7	05/25/06	PWS1	<0.082	<0.082	<0.082
BB7	05/25/06	PWS2	<0.082	<0.082	<0.082
BB8	05/25/06	PWS1	<0.082	<0.082	<0.082
BB8	05/25/06	PWS2	<0.081	<0.081	<0.081
BB9	05/25/06	PWS1	<0.080	<0.080	<0.080
BB9	05/25/06	PWS2	<0.081	<0.081	<0.081

Table 2. PCB results for water samples from Little Bayou Creek and effluents collected May 23-25, 2006.

Station	Date	Sample	Aroclor Concentration ($\mu\text{g/L}$)		
			1248	1254	1260
LB1	05/24/06	PWS1	<0.080	<0.080	<0.080
LB1	05/24/06	PWS2	<0.081	<0.081	<0.081
LB2A	05/24/06	PWS1	<0.081	<0.081	<0.081
LB2A	05/24/06	PWS2	<0.081	<0.081	<0.081
LB2	05/24/06	PWS1	<0.081	<0.081	<0.081
LB2	05/24/06	PWS2	<0.081	<0.081	<0.081
LB3	05/24/06	PWS1	0.112	<0.081	0.033*
LB3	05/24/06	PWS2	0.104	<0.081	0.035*
LB4	05/24/06	PWS1	<0.080	<0.080	<0.080
LB4	05/24/06	PWS2	<0.080	<0.080	<0.080
001	05/23/06	PWS1	0.038*	<0.081	<0.081
001	05/23/06	PWS2	0.050*	<0.080	<0.080
006	05/23/06	PWS1	<0.086	<0.086	<0.086
006	05/23/06	PWS2	<0.085	<0.085	<0.085
008	05/23/06	PWS1	<0.080	<0.080	<0.080
008	05/23/06	PWS2	<0.080	<0.080	<0.080
010+011	05/24/06	PWS1	<0.080	<0.080	<0.080
010+011	05/24/06	PWS2	<0.080	<0.080	<0.080

* PCBs detected, however below minimum quantitation limit (MQL).

Table 3. PCB results for stream sediment samples from Big Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample ¹	Sample		% Moisture	Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)		1248	1254	1260	Total
MC	05/25/06	PSED1	50.278	38.808	22.8	<5.15	<5.15	<5.15	<5.15
MC	05/25/06	PSED2	50.741	40.901	19.4	<4.89	<4.89	<4.89	<4.89
BB1A	05/23/06	PSED1	51.039	40.469	20.7	<4.94	<4.94	<4.94	<4.94
BB1A	05/23/06	PSED2	51.506	40.076	22.2	<4.99	<4.99	<4.99	<4.99
BB1	05/23/06	PSED1	50.665	43.295	14.5	<4.62	<4.62	<4.62	<4.62
BB1	05/23/06	PSED2	50.122	43.082	14.0	<4.64	<4.64	<4.64	<4.64
BB2A	05/23/06	PSED1	50.966	43.756	14.1	<4.57	<4.57	<4.57	<4.57
BB2A	05/23/06	PSED2	51.759	40.979	20.8	<4.88	<4.88	<4.88	<4.88
BB2	05/23/06	PSED1	50.277	41.077	18.3	<4.87	<4.87	<4.87	<4.87
BB2	05/23/06	PSED2	50.636	39.346	22.3	<5.08	<5.08	<5.08	<5.08
BB3	05/23/06	PSED1	50.350	40.820	18.9	<4.90	<4.90	<4.90	<4.90
BB3	05/23/06	PSED2	50.909	40.059	21.3	<4.99	<4.99	<4.99	<4.99
008	05/23/06	PSED1A	50.224	37.814	24.7	<5.29	11.85	13.02	24.87
008	05/23/06	PSED1B	50.433	41.513	17.7	<4.82	<4.82	4.20	4.20
BB4	05/23/06	PSED1	50.275	40.465	19.5	<4.94	<4.94	<4.94	<4.94
BB4	05/23/06	PSED2	50.109	39.469	21.2	<5.07	<5.07	<5.07	<5.07

¹ PSED1 and PSED2 are separate samples from the station. PSED1A and 1B are duplicate samples.

Table 3, continued. PCB results for stream sediment samples from Big Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample ¹	Sample		% Moisture	Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)		1248	1254	1260	Total
006	05/23/06	PSED1A	50.226	38.856	22.6	<5.15	<5.15	<5.15	<5.15
006	05/23/06	PSED1B	50.040	38.490	23.1	<5.20	<5.20	<5.20	<5.20
BB5	05/23/06	PSED1	50.251	40.711	19.0	<4.91	<4.91	9.33	9.33
BB5	05/23/06	PSED2	50.398	40.458	19.7	<4.94	<4.94	<4.94	<4.94
001	05/23/06	PSED1A	50.772	30.442	40.0	<6.57	6.84	5.73	12.57
001	05/23/06	PSED1B	50.167	28.287	43.6	<7.07	<7.07	<7.07	<7.07
BB6	05/23/06	PSED1	50.682	41.532	18.1	<4.82	<4.82	<4.82	<4.82
BB6	05/23/06	PSED2	50.118	39.718	20.8	<5.04	<5.04	<5.04	<5.04
BB7	05/25/06	PSED1	50.136	39.556	21.1	<5.06	<5.06	<5.06	<5.06
BB7	05/25/06	PSED2	50.301	40.521	19.4	<4.94	<4.94	<4.94	<4.94
BB8	05/25/06	PSED1	50.125	38.695	22.8	<5.17	<5.17	<5.17	<5.17
BB8	05/25/06	PSED2	50.153	39.203	21.8	<5.10	<5.10	<5.10	<5.10
BB9	05/25/06	PSED1	50.505	37.585	25.6	<5.32	<5.32	<5.32	<5.32
BB9	05/25/06	PSED2	50.361	34.871	30.8	<5.74	8.15	<5.74	8.15

¹ PSED1 and PSED2 are separate samples from the station. PSED1A and 1B are duplicate samples.

Table 4. PCB results for stream sediment samples from Little Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample ¹	Sample		% Moisture	Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)		1248	1254	1260	Total
LB1	05/24/06	PSED1	50.635	33.565	33.7	<5.96	<5.96	<5.96	<5.96
LB1	05/24/06	PSED2	49.998	31.998	36.0	<6.25	<6.25	<6.25	<6.25
LB2A	05/24/06	PSED1	50.125	41.255	17.7	65.85	<4.85	19.01	84.86
LB2A	05/24/06	PSED2	50.600	40.820	19.3	22.78	<4.90	20.41	43.19
010+011	05/24/06	PSED1A	51.233	38.543	24.8	<5.19	5.95	<5.19	5.95
010+011	05/24/06	PSED1B	50.535	37.315	26.2	<5.36	<5.36	<5.36	<5.36
LB2	05/24/06	PSED1	50.673	40.033	21.0	<5.00	<5.00	<5.00	<5.00
↳ LB2	05/24/06	PSED2	50.183	39.633	21.0	<5.05	<5.05	<5.05	<5.05
LB3	05/24/06	PSED1	50.186	39.596	21.1	<5.05	253.47	148.06	401.54
LB3	05/24/06	PSED2	50.627	40.747	19.5	<4.91	27.68	30.80	58.48
LB4	05/24/06	PSED1	50.775	42.045	17.2	<4.76	6.71	<4.76	6.71
LB4	05/24/06	PSED2	50.829	40.449	20.4	<4.94	6.97	<4.94	6.97

¹ PSED1 and PSED2 are separate samples from the station. PSED1A and 1B are duplicate samples.

Table 5. Mean PCB results for stream sediment samples from the Bayou Creek system collected May 23-25, 2006.

Station	Aroclor Conc. ($\mu\text{g}/\text{Kg}$)			
	1248	1254	1260	Total
MC	N.D.	N.D.	N.D.	N.D.
BB1A	N.D.	N.D.	N.D.	N.D.
BB1	N.D.	N.D.	N.D.	N.D.
BB2A	N.D.	N.D.	N.D.	N.D.
BB2	N.D.	N.D.	N.D.	N.D.
BB3	N.D.	N.D.	N.D.	N.D.
008	N.D.	11.85	8.61	14.53
BB4	N.D.	N.D.	N.D.	N.D.
006	N.D.	N.D.	N.D.	N.D.
BB5	N.D.	N.D.	9.33	9.33
001	N.D.	6.84	5.73	12.57
BB6	N.D.	N.D.	N.D.	N.D.
BB7	N.D.	N.D.	N.D.	N.D.
BB8	N.D.	N.D.	N.D.	N.D.
BB9	N.D.	8.15	N.D.	8.15
LB1	N.D.	N.D.	N.D.	N.D.
LB2A	44.32	N.D.	19.71	64.03
010+011	N.D.	5.95	N.D.	5.95
LB2	N.D.	N.D.	N.D.	N.D.
LB3	N.D.	140.58	89.43	230.01
LB4	N.D.	6.84	N.D.	6.84

Table 6. PCB results for floodplain soils from Big Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
MC	05/25/06	PFP1	50.287	37.107	26.2	<5.39	<5.39	<5.39	<5.39
MC	05/25/06	PFP2	50.127	44.367	11.5	<4.51	<4.51	<4.51	<4.51
BB1A	05/23/06	PFP1	50.393	43.863	13.0	<4.56	<4.56	<4.56	<4.56
BB1A	05/23/06	PFP2	50.203	36.393	27.5	<5.50	<5.50	<5.50	<5.50
BB1	05/23/06	PFP1	50.239	39.519	21.3	<5.06	5.06	4.93	9.99
BB1	05/23/06	PFP2	40.250	21.450	46.7	<9.32	26.38	21.04	47.43
BB2A	05/23/06	PFP1	50.465	38.505	23.7	<5.19	<5.19	<5.19	<5.19
ω BB2A	05/23/06	PFP2	50.068	37.508	25.1	<5.33	5.33	<5.33	5.33
BB2	05/23/06	PFP1	50.169	41.999	16.3	<4.76	<4.76	4.95	4.95
BB2	05/23/06	PFP2	50.285	36.935	26.5	<5.42	<5.42	<5.42	<5.42
BB3	05/23/06	PFP1	50.127	43.787	12.6	<4.57	<4.57	<4.57	<4.57
BB3	05/23/06	PFP2	50.121	41.601	17.0	<4.81	<4.81	4.25	4.25
008	05/23/06	PFP1A	50.028	41.018	18.0	<4.88	17.90	73.72	91.63
008	05/23/06	PFP1B	50.091	36.141	27.8	<5.53	24.21	59.68	83.89
BB4	05/23/06	PFP1	50.019	43.429	13.2	13.06	9.11	5.91	28.08
BB4	05/23/06	PFP2	50.316	36.936	26.6	18.43	12.90	6.59	37.92

¹ PFP1 and PFP2 are separate samples from the station. PFP1A and 1B are duplicate samples.

Table 6, continued. PCB results for floodplain soils from Big Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample	Sample		% Moisture	Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)		1248	1254	1260	Total
006	05/23/06	PFP1A	50.559	41.069	18.8	<4.87	<4.87	5.52	5.52
006	05/23/06	PFP1B	50.281	41.831	16.8	<4.78	13.20	8.96	22.16
BB5	05/23/06	PFP1	50.121	42.731	14.7	<4.68	7.67	9.11	16.78
BB5	05/23/06	PFP2	50.158	41.178	17.9	<4.86	6.41	8.60	15.00
001	05/23/06	PFP1A	50.383	42.253	16.1	<4.73	<4.73	<4.73	<4.73
001	05/23/06	PFP1B	50.163	34.273	31.7	<5.84	12.31	11.44	23.75
BB6	05/23/06	PFP1	50.033	41.593	16.9	<4.81	41.64	33.51	75.15
¹⁴ BB6	05/23/06	PFP2	50.312	44.232	12.1	<4.52	5.68	5.50	11.18
BB7	05/25/06	PFP1	50.527	38.347	24.1	<5.22	<5.22	<5.22	<5.22
BB7	05/25/06	PFP2	50.226	40.376	19.6	<4.95	<4.95	4.38	4.38
BB8	05/25/06	PFP1	50.249	38.049	24.3	<5.26	<5.26	<5.26	<5.26
BB8	05/25/06	PFP2	50.214	37.724	24.9	<5.30	4.51	5.75	10.26
BB9	05/25/06	PFP1	50.147	39.177	21.9	<5.11	<5.11	4.86	4.86
BB9	05/25/06	PFP2	50.479	40.109	20.5	<4.99	8.17	4.41	12.58

¹ PFP1 and PFP2 are separate samples from the station. PFP1A and 1B are duplicate samples.

Table 7. PCB results for floodplain soils from Little Bayou Creek, collected May 23-25, 2006.

Station	Date	Sample	Sample			Aroclor Conc. (µg/Kg)			
			Wet Wt. (g)	Dry Wt. (g)	% Moisture	1248	1254	1260	Total
LB1	05/24/06	PFP1	50.451	39.621	21.5	<5.05	<5.05	<5.05	<5.05
LB1	05/24/06	PFP2	50.606	38.626	23.7	<5.17	<5.17	<5.17	<5.17
LB2A	05/24/06	PFP1	50.041	34.781	30.5	106.94	162.60	112.84	382.38
LB2A	05/24/06	PFP2	50.540	39.450	21.9	87.23	58.25	39.93	185.41
010+011	05/24/06	PFP1A	50.374	27.824	44.8	<7.19	<7.19	<7.19	<7.19
010+011	05/24/06	PFP1B	50.409	32.909	34.7	<6.08	12.50	18.54	31.04
LB2	05/24/06	PFP1	50.928	39.908	21.6	<5.01	5.54	7.76	13.31
¹ LB2	05/24/06	PFP2	50.083	39.723	20.7	17.40	32.24	36.31	85.96
LB3	05/24/06	PFP1	50.038	41.688	16.7	<4.80	60.43	82.68	143.11
LB3	05/24/06	PFP2	50.061	37.531	25.0	<5.33	32.31	31.01	63.32
LB4	05/24/06	PFP1	50.292	41.502	17.5	<4.82	26.56	32.09	58.65
LB4	05/24/06	PFP2	50.378	36.238	28.1	<5.52	23.02	31.99	55.01

¹ PFP1 and PFP2 are separate samples from the station. PFP1A and 1B are duplicate samples.

Table 8. Mean PCB results for floodplain soil samples from Bayou Creek system collected May 23-25, 2006.

Station	Aroclor Conc. ($\mu\text{g}/\text{Kg}$)			
	1248	1254	1260	Total
MC	<4.51	<4.51	<4.51	<4.51
BB1A	<4.56	<4.56	<4.56	<4.56
BB1	<5.06	15.72	12.98	28.71
BB2A	<5.19	5.33	<5.19	5.33
BB2	<4.76	<4.76	4.95	4.95
BB3	<4.57	<4.57	4.25	4.25
008	<4.88	21.06	66.70	87.76
BB4	15.74	11.01	6.25	33.00
006	<4.78	13.20	7.24	13.84
BB5	<4.68	7.04	8.85	15.89
001	<4.73	12.31	11.44	23.75
BB6	<4.52	23.66	19.51	43.16
BB7	<4.95	<4.95	4.38	4.38
BB8	<5.26	4.51	5.75	10.26
BB9	<4.99	8.17	4.64	8.72
LB1	<5.05	<5.05	<5.05	<5.05
LB2A	97.09	110.42	76.39	283.89
010+011	<6.08	12.50	18.54	31.04
LB2	17.40	18.90	22.04	49.63
LB3	<4.80	46.37	56.85	103.22
LB4	<4.82	24.79	32.04	56.83