

Appendix I

High Volume Dioxin Data

**Dioxin High Volume Water Sampling Results
1997 - 2001**

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Allegheny River Mile 1.2

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/31/2000	6,063	F		11	<0.0036	0.0164	0.0182	0.0167	0.572	0.5887
4/23/2001	35,500			13.75	0.0008	0.0082	0.0090	0.0035	0.111	0.1145

Monongahela River Mile 2.3

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/1/2000	6,911	G		26.1	<0.0026	0.0176	0.0189	0.0132	0.333	0.3462
4/24/2001	13,800			14	0.0030	0.0105	0.0135	0.00547	0.164	0.1695

Ohio River Mile 4.0

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/2/2000	16,852	F		7	<0.0025	0.0124	0.0137	0.0111	0.222	0.2331
4/25/2001	38,706			10.25	0.0012	0.0113	0.0125	0.00485	0.112	0.1169

Ohio River Mile 10.9

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/3/2000	17,808	F		12	0.0045	0.0180	0.0225	0.0122	0.249	0.2612
4/26/2001	35,600			8.375	0.0014	0.0126	0.0140	0.00442	0.1	0.1044

Ohio River Mile 20.2

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/7/1998			19500	23.9	0.0037	0.0239	0.0276	0.0148	0.219	0.2338
8/4/1998			5,000	13.6	<0.00156	0.0259	0.0267	0.0131	0.143	0.1559
9/15/1998			7,700	13.3	<0.0009	0.0239	0.0244	0.0126	0.158	0.1706
8/4/2000	22,484	F		20.4	0.0042	0.0669	0.0711	0.0158	0.421	0.4368
4/27/2001	33,770			14.75	0.0020	0.0128	0.0148	0.00541	0.164	0.1694

Beaver River Mile 1.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/7/2000	3,811	F		39.1	<0.0033	0.0642	0.0659	0.0287	0.988	1.0167
4/28/2001	2,399			13.125	0.0023	0.0200	0.0223	0.0141	0.338	0.3521

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

**Dioxin High Volume Water Sampling Results
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Ohio River Mile 30.9

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/5/2000	25,615	P		11.7	0.0036	<0.0012	0.0042	0.0099	0.249	0.2589
4/30/2001	24,000			9.4375	0.0020	0.0149	0.0169	0.0067	0.145	0.1517

Ohio River Mile 40

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/8/1998			14700	35.2	0.0020	0.0280	0.0300	0.0185	0.2460	0.2645
8/5/1998			7300	15.1	<0.00097	0.0193	0.0198	0.0136	0.1318	0.1563
9/16/1998			7800	11.6	<0.0009	0.0174	0.0179	0.0158	0.1310	0.1468
8/8/2000	50,098	G		131.1	0.0034	0.0554	0.0588	0.0453	0.703	0.7483
5/1/2001	27,700			6.6875	0.0021	0.0153	0.0174	0.0067	0.122	0.1287

Ohio River Mile 44.6

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/9/1998			21700	26.5	0.0032	0.0151	0.0183	0.0174	0.1790	0.1964
8/6/1998			7800	15.1	<0.00049	0.0152	0.0154	0.0141	0.1408	0.1549
9/17/1998			7100	10.3	<0.0007	0.0163	0.0167	0.0160	0.1170	0.1330

Ohio River Mile 69.9

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/9/2000	37,837	G		51.8	<0.0026	0.0239	0.0252	0.0308	0.404	0.4348
5/2/2001	23,600			<5	0.0012	0.0105	0.0117	0.0066	0.0754	0.0820

Ohio River Mile 99.2

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/11/2000	26,439	F		15.2	0.0053	No data		0.0286	No data	
5/3/2001	18,828			<5	0.0013	0.0049	0.0061	0.00617	0.0541	0.0603

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

Dioxin High Volume Water Sampling Results 1997 - 2001

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Ohio River Mile 129

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/14/1998			17000	19.7	0.0025	0.0083	0.0107	0.0203	0.1070	0.1273
8/11/1998			10,500	14.0	<0.0006	0.0104	0.0107	0.0264	0.1100	0.1364
9/22/1998			10,100	12.9	0.0009	0.0118	0.0127	0.0085	0.1110	0.1195
8/12/2000	28,359	G		12.9	<0.0010	<0.0009	0.0010	0.025	0.170	0.1950
5/4/2001	15,700			5.9375	0.0024	0.0057	0.0080	0.00803	0.081	0.0886

Ohio River Mile 149

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/13/2000	15,954	G		6.5	<0.0014	<0.0010	0.0012	0.0213	0.0894	0.1107
5/5/2001	21,500			5.375	0.0014	0.0085	0.0099	0.00651	0.0807	0.0872

Ohio River Mile 171.8

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/14/2000	19,291	F		6.5	<0.0010	0.0097	0.0102	0.0161	0.103	0.1191
5/7/2001	12,000			<5	0.0016	0.0057	0.0073	0.00681	0.0737	0.0805

Muskingum River Mile 0.8

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/15/2000	2,159	F		16.2	0.0022	<0.0015	0.0029	0.0176	0.224	0.2416
5/8/2001	3,950			28.5	0.0013	0.0161	0.0174	0.00792	0.273	0.2809

Ohio River Mile 175.1

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/15/1998			34600	31.5	0.0010	0.0194	0.0204	0.0088	0.2830	0.2918
8/12/1998			19,100	13.6	<0.00149	0.0155	0.0162	0.0130	0.1580	0.1710
9/23/1998			14,200	12.3	<0.0003	0.0078	0.0080	0.0075	0.1000	0.1075
8/16/2000	19,644	NA		6.7	<0.0010	<0.0010	0.0010	0.0152	0.000875	0.0161
5/9/2001	14,600			11.3125	0.0012	0.0061	0.0072	0.00566	0.103	0.1087

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Ohio River Mile 184.3

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
8/17/2000	17,313	NA		10.4	0.0069	<0.0012	0.0075	0.0293	0.239	0.2683
5/10/2001	25,700			17.25	0.0017	0.0252	0.0269	0.0135	0.914	0.9275

Ohio River Mile 207.7

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/16/1998			32500	11.1	0.0017	0.0095	0.0112	0.0198	0.2340	0.2538
8/13/1998			20,500	9.3	<0.0003	0.0078	0.0080	0.0223	0.2200	0.2423
9/24/1998			12,000	10.4	0.0035	0.0065	0.0100	0.0207	0.1310	0.1517
8/18/2000	17,212	F		9.3	<0.0012	<0.0010	0.0011	0.0168	0.189	0.2058
5/11/2001	13,100			12.25	0.0019	0.0190	0.0209	0.00986	0.331	0.3409

Ohio River Mile 264

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/16/1997	16,133		19000	11.0	0.0027	0.0140	0.0167	0.0184	0.3176	0.3360
8/20/1997		82,121	62700	30.0	0.0020	0.0098	0.0118	0.0152	0.5160	0.5312
9/24/1997			14500	9.0	<0.0010	0.0080	0.0085	0.0131	0.2683	0.2814
6/18/1998			93700	203.0	<0.0026	0.0697	0.0710	0.0473	1.7195	1.7668
11/3/1998			9100	10.8	0.0025	0.0043	0.0068	0.0119	0.0888	0.1007
8/19/2000	8,700	Estimate		9.9	<0.0010	<0.0009	0.0010	0.0155	0.171	0.1865
5/12/2001	22,100			11.875	0.0017	0.0086	0.0103	0.0105	0.265	0.2755

Kanawha River Mile 44.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/6/1999				6.4	0.0028	0.0062	0.0090	0.0094	0.0786	0.0880

Kanawha River Mile 41.3

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
6/9/1998			9300	13.4	0.0148	0.1150	0.1298	0.0275	0.2200	0.2475
7/21/1998				15.0	0.0274	0.3120	0.3394	0.0304	0.42483	0.4552
10/27/1998				14.1	0.0468	0.3650	0.4118	0.0503	0.467	0.5173

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Kanawha River Mile 36.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
6/10/1998			9000	11.3	0.0237	0.3510	0.3747	0.0319	0.4900	0.5219
7/22/1998				16.6	0.0327	0.2020	0.2347	0.0358	0.2898	0.3256
10/28/1998				10.9	0.0512	0.3250	0.3762	0.0547	0.4200	0.4747

Kanawha River Mile 29.7

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
6/11/1998			16200	12.8	0.0272	0.2310	0.2582	0.0360	0.4240	0.4600
7/23/1998				27.0	0.0228	0.2220	0.2448	0.0265	0.5068	0.5333
10/29/1998				16.6	0.0313	0.2750	0.3063	0.0339	0.4060	0.4399

Kanawha River Mile 1.3

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
6/25/1997		5721	7,600	13.0	0.0076	0.0865	0.0941	0.0118	0.1793	0.1911
7/15/1997		759	5,000	14.0	0.0097	0.0885	0.0982	0.0122	0.1969	0.2091
8/19/1997		3,153	5,000	20.0	0.0178	0.1050	0.1228	0.0242	0.2310	0.2552
9/23/1997			3700	11.0	0.0200	0.1140	0.1340	0.0230	0.2061	0.2291
10/22/1997			3200	13.0	0.0116	0.1750	0.1866	0.0150	0.2865	0.3015
6/17/1998			44900	209.0	0.0158	0.4470	0.4628	0.0526	1.4400	1.4926
11/2/1998			3600	18.0	0.0186	0.1500	0.1686	0.0238	0.2490	0.2728

Ohio River Mile 281.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/17/1997		18,557	21,300	14.0	0.0054	0.0323	0.0377	0.0165	0.2965	0.3130
8/21/1997		69,105	68,800	51.0	0.0033	0.0443	0.0476	0.0135	0.8920	0.9055
9/25/1997			17600	7.0	<0.0009	0.0306	0.0311	0.0073	0.2469	0.2542
6/19/1998			175400	110.0	0.0071	0.1360	0.1364	0.0466	1.2900	1.3366
11/4/1998			15900	12.1	0.0080	0.0236	0.0240	0.0183	0.1010	0.1193

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Ohio River Mile 302.9

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
7/18/1997		16,829	20,400	8.0	0.0059	0.0294	0.0353	0.0118	0.1996	0.2114
8/22/1997		47,885	61,300	32.0	<0.0004	0.0440	0.0442	0.0117	0.4830	0.4947
9/26/1997			21800	4.0	0.0049	0.0180	0.0229	0.0156	0.1169	0.1325
6/20/1998			103900	88.0	0.0071	0.1600	0.1671	0.0529	0.7330	0.7859
11/5/1998			17600	11.1	0.0065	0.0190	0.0255	0.0164	0.0909	0.1073

Guyandotte River Mile 1.1

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
12/16/1998				51.0	<0.0002	<0.0008	0.0005	0.0078	0.2480	0.2558
3/17/1999				54.2	0.0010	0.0191	0.0201	0.0046	0.2930	0.2976

Big Sandy River Mile 2.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
3/4/2003										
4/9/2003										
7/23/2003										

Ohio River Mile 321.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/7/1999	33,300	G	50,800	4.1	0.0069	0.0122	0.0191	0.0187	0.0651	0.0838
7/15/1999	9,890	F	16,600	3.0	0.0035	0.0118	0.0153	0.0119	0.0547	0.0666
4/20/2000	211,000	G	203,500	126.6	0.0042	0.2840	0.2882	0.0189	1.609	1.6279

Scioto River Mile 0.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/8/1999	2,380	Estimated	2,500	37	0.0019	0.0254	0.0273	0.00831	0.1370	0.1453
7/16/1999	Not available	Not available	600	44.1	<0.0033	0.0309	0.0326	0.0139	0.1330	0.1469
4/21/2000	9,470	F	5,800	45.6	0.0037	0.0672	0.0709	0.0147	0.4580	0.4727
9/4/2003										

Ohio River Mile 360.0

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/9/1999	48,700	G	52,300	8.3	0.0035	0.0220	0.0255	0.0105	0.1370	0.1475
7/17/1999		Not available	13,200	4.3	0.0043	0.0127	0.0170	0.00943	0.0673	0.0767
4/22/2000	175,000	F	162,800	77.6	0.0058	0.2300	0.2358	0.0173	1.0710	1.0883

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Ohio River Mile 438.6

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/10/1999	35,800	G	54,000	6.8	0.0033	0.0018	0.0051	0.0109	0.1020	0.1129
7/18/1999	12,200	F	12,700	7.6	0.0056	0.0171	0.0227	0.0147	0.1010	0.1157
4/23/2000	174,000	F	165,300	98.9	<0.0011	0.3800	0.3805	0.0171	1.4380	1.4551

Little Miami River Mile 1.7

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
4/7/2003										
5/6/2003										
5/8/2003										
7/2/2003										

Licking River Mile 2.1

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
3/12/2003										
3/25/2003										
10/2/2003										

Ohio River Mile 486.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/12/1999	38,400	G	57,100	6.6	0.0068	0.0141	0.0209	0.0149	0.0617	0.0766
7/19/1999	7,490	P	12,800	4.8	<0.0003	<0.0004	0.0004	0.0110	0.0228	0.0338
4/25/2000	177,000	G	162,000	60.3	0.0079	0.1370	0.1449	0.0311	0.6950	0.7261

Great Miami River Mile 1.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/13/1999	3,390	F	Not available	49.9	0.0022	<0.0006	0.0025	0.0100	0.1390	0.1490
7/20/1999	1,170	F	Not available	32.1	<0.0003	0.0101	0.0103	0.0306	0.1210	0.1516
4/24/2000			Not available	45.8	0.0046	0.0383	0.0429	0.0288	0.3540	0.3828

Ohio River Mile 494.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/14/1999	43,000	G	54,400	16.3	0.0032	0.0122	0.0154	0.0110	0.0870	0.0980
7/21/1999	15,600	F	12,300	7.9	<0.0002	0.0108	0.0109	0.0144	0.0633	0.0777
4/26/2000	180,000	G	160,800	61.5	0.0089	0.1220	0.1309	0.0333	0.62	0.6533

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Kentucky River Mile 14.6

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
3/18/2003										
4/16/2003										
11/6/2003										

Ohio River Mile 548.3

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/15/1999	48,000	G	60,300	5.9	0.0017	0.0075	0.0092	0.00499	0.0491	0.0541
7/22/1999	11,200	P	14,400	4.1	<0.0003	0.0051	0.0052	0.0155	0.0280	0.0435
4/27/2000	199,000	G	188,600	35.3	0.0039	0.0472	0.0511	0.0142	0.2891	0.3033

Ohio River Mile 625.7

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/17/1999	54,800	P	61,000	7.5	0.0031	0.0166	0.0197	0.0124	0.1160	0.1284
7/23/1999	23,600	G	16,900	3.1	<0.0004	0.0047	0.0049	0.0112	0.0356	0.0468
4/28/2000	210,000	G	197,500	66.0	0.0081	0.2290	0.2371	0.0307	1.0140	1.0447
9/11/2003										

Salt River Mile 1.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
3/19/2003										
4/15/2003										
11/5/2003										

Ohio River Mile 670.7

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/18/1999	54,700	F	68,600	10	0.0043	0.0152	0.0195	0.0140	0.1040	0.1180
7/27/1999	17,700	F	18,900	3.7	0.0020	0.0057	0.0076	0.0081	0.0371	0.0452
5/1/2000	146,000	F	142,600	56.4	0.0060	0.1270	0.1330	0.0261	0.6780	0.7041
11/4/2003										

Ohio River Mile 717.4

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/19/1999	34,800	P	66,200	4.6	0.0029	0.0076	0.0105	0.0114	0.0488	0.0602
7/28/1999	4,080	P	19,400	4.4	0.0028	0.0107	0.0135	0.0133	0.0604	0.0737
5/2/2000	126,000	G	131,700	23.1	0.0043	0.0615	0.0658	0.0146	0.3530	0.3676
9/17/2003										

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

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Ohio River Mile 722.5

Date sampled	USGS Flow (CFS)	Discharge Rating	NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
5/20/1999	57,800	F	59,400	9.4	0.0033	0.0084	0.0117	0.0123	0.0669	0.0792
7/29/1999	35,400	G	18,700	5.1	0.0032	0.0059	0.0091	0.0124	0.0452	0.0576
5/3/2000	95,500	G	106,500	28.3	0.0032	0.0654	0.0686	0.0102	0.4050	0.4152
9/16/2003										

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)

**Dioxin High Volume Water Sampling Results
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ALCOSAN WWTP, Pittsburgh, PA

Date sampled			NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
2/17/2000			50,800	13.4	<0.0011	0.0122	0.0128	0.0021	0.2130	0.2151
11/1/2000			10,200	9.2	0.00131	0.0141	0.0154	0.0050	0.2200	0.2250

Nitro WWTP, Nitro, WV

Date sampled			NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
3/9/2000			2,500	13.7	0.00310	0.07930	0.08240	0.00862	1.05400	1.0626
4/12/2001				6.6	0.00265		0.00265	0.0069		0.0069

Morris Foreman WWTP, Louisville, KY

Date sampled			NWS Flow (CFS)	Mean TSS @ Intake (mg/L)	2,3,7,8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)		
					Dissolved	Particulate	Total	Dissolved	Particulate	Total
2/10/2000			52,300	16.8	0.00281	0.00283	0.0056	0.01030	0.06320	0.0735
5/31/2001				29.7	0.00187	0.0060	0.0078	0.0092	0.2010	0.2102

* Non-detects reported as less than the detection limit (1/2 detection limit used for all calculations)