Appendix A: Ohio River Navigation Dams

Mile Point	Name	Normal Pool Elevation (ft.)*	Year Placed in Operation**
6.2	Emsworth	710.0	1921
13.2	Dashields	692.0	1929
31.7	Montgomery	682.0	1936
54.4	New Cumberland	664.5	1959
84.2	Pike Island	644.0	1963
126.4	Hannibal (h)	623.0	1972
161.7	Willow Island	602.0	1972
203.9	Bellville	582.0	1965
237.5	Racine (h)	560.0	1967
279.2	Robert C. Byrd	538.0	1937
341.0	Greenup (h)	515.0	1962
436.2	Captain Anthony Meldahl	485.0	1964
531.5	Markland (h)	455.0	1963
606.8	McAlpine (h)	420.0	1961
720.7	Cannelton	383.0	1972
776.1	Newburgh	358.0	1975
846.0	John T. Myers	342.0	1975
918.5	Smithland	324.0	1980
938.9	Lock & Dam 52	302.0	1928
962.6	Lock & Dam 53	290.0	1929

* Height of water surface above mean sea level (National Geodedic Vertical Data)
** Defined as when the pool was raised
(h) Hydropower facilities

Information provided by the U.S. Army Corps of Engineers

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
0.1	ALLEGHENY RIVER	PA	325	11,700	150.0	LEITHS RUN	OH		
0.1	MONONGAHELA RIVER	PA	128	7,400	150.2	SPRING RUN	WV		
2.1	CHARTIERS CREEK	PA		277	151.0	REAS RUN	OH		
9.5	MONTOUR RUN	PA			154.0	MIDDLE ISLAND CREEK	WV	70	560
13.7	LITTLE SEWICKLEY CREEK	PA			156.9	DENAS RUN	OH		
15.5	BIG SEWICKLEY CREEK	PA			157.7	FRENCH RUN	WV		
25.4	BEAVER RIVER	PA	21	3,130	168.6	LITTLE MUSKINGUM RIVER	OH		315
29.6	RACCOON CREEK	PA		200	170.2	DUCK CREEK	OH	52	228
40.1	LITTLE BEAVER CREEK	PA	51	510	172.2	MUSKINGUM RIVER	OH	112	8,040
47.3	LITTLE YELLOW CREEK	OH			174.3	WILLIAMS CREEK	WV		
47.6	CONGO RUN	WV			184.8	LITTLE KANAWHA RIVER	WV	160	2,320
50.6	YELLOW CREEK	OH	34	240	188.7	DAVIS RUN	OH		
60.1	KINGS CREEK	WV			192.0	LITTLE HOCKING RIVER	OH	18	103
61.7	ISLAND RUN	OH			192.5	SAWER RUN	OH		
65.3	WILLS CREEK	OH			194.0	LITTLE SAND CREEK	WV		
66.5	HARMAN CREEK	WV			199.3	HOCKING RIVER	OH	100	1,190
71.6	CROSS CREEK	OH	27	128	200.4	INDIAN RUN	OH		
75.2	BUFFALO CREEK	WV		160	201.8	LEE CREEK	WV		
81.4	SHORT CREEK	OH	29	147	203.4	ROCK RUN	OH		
90.2	WHEELING CREEK	OH	30	108	210.2	SHADE RIVER	OH		221
90.2	WHEELING CREEK	WV		300	217.0	LITTLE SANDY CREEK	WV		
94.9	MCMAHON CREEK	OH	28	91	218.6	GROUNDHOG CREEK	OH		
101.6	LITTLE GRAVE CREEK	WV			220.9	SANDY CREEK	WV		115
102.4	BIG GRAVE CREEK	WV		75	223.4	CEDAR RUN	WV		
105.0	PIPE CREEK	OH			226.2	OLD TOWN CREEK	OH		
109.5	CAPTINA CREEK	OH	39	181	227.8	TANNERS RUN	OH		
113.7	FISH CREEK	WV		250	231.4	MILL CREEK	WV		230
117.5	SUNFISH CREEK	OH	31	114	231.5	LITTLE MILL CREEK	WV		
119.8	OPOSSUM CREEK	OH			232.3	JOHNS RUN	OH		
122.2	PROCTOR CREEK	WV			234.9	TOMBLESON RUN	WV		
128.6	FISHING CREEK	WV		220	235.8	SPRING RUN	WV		
137.7	MILLER RUN	OH			236.7	VIVIAN RUN	WV		
141.3	MILL CREEK	OH			240.6	WEST CREEK	WV		
148.8	BENS RUN	WV			241.0	DUNHAM RUN	OH		
149.0	SHEETS RUN	OH			245.0	BROAD CREEK	WV		

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
253.7	LEADING CREEK	OH	30	151	336.2	LITTLE SANDY RIVER	KY		724
255.0	STORES RUN	OH			337.4	COAL BRANCH	KY		
255.9	TEN MILE CREEK	WV			338.6	SMITH BRANCH	KY		
258.7	MILL CREEK	WV			338.9	GINAT RUN	OH		
260.6	KYGER CREEK	OH			340.8	FRANKLIN RUN	OH		
262.5	CAMPAIGN CREEK	OH			345.6	PINE CREEK	OH	48	185
263.2	OLD TOWN CREEK	WV			349.2	LITTLE SCIOTO RIVER	OH	41	233
264.2	GEORGES CREEK	OH			353.2	TYGARTS CREEK	KY		336
265.5	KANAWHA RIVER	WV	97	12200	356.4	SCIOTO RIVER	OH	237	6,510
267.3	TWO MILE CREEK	WV			361.5	TURKEY CREEK	OH		
276.0	CRAB CREEK	WV			363.2	NACE RUN	OH		
276.1	RACCOON CREEK	OH	109	684	368.4	KINNICONICK CREEK	KY		253
277.4	BURRELS RUN	OH			373.4	UPPER TWIN CREEK	OH		
279.0	TEENS RUN	OH			373.6	LOWER TWIN CREEK	OH		
282.3	SIXTEENMILE CREEK	WV			378.4	SALT LICK CREEK	KY		
284.3	EIGHTEEN MILE CREEK	WV			388.0	OHIO BRUSH CREEK	OH	57	435
287.4	LITTLE GUYANDOT RIVER	WV			389.4	SPRING RUN	OH		
296.7	TWO MILE CREEK	OH			391.0	LOWER SISTER CREEK	OH		
299.0	NINE MILE CREEK	WV			392.3	DONALDSON CREEK	OH		
303.9	PADDYS CREEK	OH			395.3	ISLAND CREEK	OH		
305.2	GUYANDOTTE RIVER	WV	66	1670	398.4	ISAACS CREEK	OH		
306.9	INDIAN GUYAN CREEK	OH			401.6	CROOKED CREEK	KY		
309.7	SYMMES CREEK	OH	70	356	402.3	ELK RUN	OH		
310.7	BUFFALO CREEK	OH			403.0	CABIN CREEK	KY		
314.0	TWELVEPOLE CREEK	WV		440	405.6	LITTLE THREE MILE CREEK	OH		
317.1	BIG SANDY RIVER	WV	27	4280	406.9	SLEEPY HOLLOW CREEK	KY		
317.4	CATLETTS CREEK	KY			409.0	FISH GUT CREEK	OH		
319.4	KEYES CREEK	KY			412.1	THREE MILE CREEK	OH		
320.1	SALLIDAY CREEK	OH			414.8	LAWRENCE CREEK	KY		
324.0	HOOD CREEK	KY			415.2	EAGLE CREEK	OH	31	154
324.3	ICE CREEK	OH			417.1	RED OAK CREEK	OH		
328.1	STORMS CREEK	OH			419.1	LEES CREEK	KY		
331.1	POND RUN	KY			422.6	STRAIGHT CREEK	OH		
332.8	UHLANDS RUND	KY			423.6	WHITE OAK CREEK	OH	49	234

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
425.1	HOG RUN	OH			521.4	PAINT LICK CREEK	KY		
426.4	BRACKEN CREEK	KY			522.7	LITTLE SUGAR CREEK	KY		
428.6	BIG TURTLE CREEK	KY			522.9	BIG SUGAR CREEK	KY		
430.5	WRANGLING RUN	KY			527.2	BRYANT CREEK	IN		
431.6	BULL SKIN CREEK	OH			529.1	TURTLE CREEK	IN		
431.7	BYERS RUN	KY			530.3	DAN CREEK	IN		
432.5	LITTLE LOCUST CREEK	KY			530.3	CRAIGS CREEK	KY		
432.8	BIG LOCUST CREEK	KY			532.0	STEPHENS CREEK	KY		
433.2	PATTERSONS RUN	OH			535.7	PLUM CREEK	IN		
433.6	CROOKED CREEK	OH			545.8	KENTUCKY RIVER	KY	255	6970
434.4	LITTLE SNAG CREEK	KY			546.4	GREEN VALLEY CREEK	IN		
435.7	BIG SNAG CREEK	KY			546.6	LITTLE KENTUCKY RIVER	KY	35	147
443.8	LITTLE INDIAN CREEK	OH			549.6	LOCUST CREEK	KY		
445.3	BIG INDIAN CREEK	OH			550.5	INDIAN KENTUCK CREEK	IN		150
451.5	TWELVEMILE CREEK	KY			553.2	BEE CAMP CREEK	IN		
455.1	TEN MILE CREEK	OH			555.5	EAGLE HALLOW	IN		
455.3	NINE MILE CREEK	OH			556.4	MARILYN CREEK	IN		
456.5	EIGHT MILE CREEK	OH			559.5	CROOKED CREEK	IN		
463.3	LITTLE MIAMI RIVER	OH	90	1670	560.3	BIG CLIFTY CREEK	IN		
470.1	LICKING RIVER	KY	320	3670	563.6	CHAIN MILL CREEK	IN		
472.5	MILL CREEK	OH	28	166	569.5	SALUDA CREEK	IN		
484.2	MUDDY CREEK	OH			570.6	CORN CREEK	KY		
491.1	GREAT MIAMI RIVER	OH	161	5400	573.2	BAREBONE CREEK	KY		
494.8	TANNERS CREEK	IN		136	574.4	MIDDLE CREEK	KY		
498.7	LAUGHERY CREEK	IN	39	350	574.4	KNOB CREEK	IN		
499.8	WOOLPER CREEK	KY			578.4	CAMP CREEK	IN		
501.5	ISLAND BRANCH	IN			580.7	EIGHTEEN MILE CREEK	KY		
504.6	MIDDLE CREEK	KY			584.4	BULL CREEK	IN		
508.7	ARNOLD CREEK	IN			585.6	OWEN CREEK	IN		
509.9	GRANT CREEK	IN			592.8	POND CREEK	KY		
512.2	LICK CREEK	KY			595.9	HARRODS CREEK	KY		
513.6	GUNPOWDER CREEK	KY			596.9	GOOSE CREEK	KY		
514.7	LANDING CREEK	KY			602.2	SOUTH FORK BEARGRASS CR	KY		
517.0	BIG BONE CREEK	KY			606.5	SILVER CREEK	IN		225

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
616.3	MILL CREEK CUTOFF	KY			706.3	SAMPLE RUN	IN		
617.5	KNOB CREEK	IN			707.4	ADAMS RUN	IN		
623.5	BRINLEY CREEK	IN			707.5	TOWN CREEK	KY		
624.4	EVERSOLE CREEK	IN			707.7	BULL CREEK	KY		
625.0	MILLS CREEK	KY			709.0	GOEHAGAN CREEK	KY		
629.2	FOURMILE CREEK	IN			710.6	SLICK CREEK	KY		
629.7	SALT RIVER	KY	125	2,890	710.8	CLOVER CREEK	KY		
633.3	ABRAHAMS RUN	KY			712.4	FAUCETT CREEK	KY		
634.6	MOSQUITO CREEK	IN			714.6	POND RUN	IN		
636.3	OTTER CREEK	KY			716.3	SANDY BRANCH	IN		
641.2	BIG RUN	IN			717.4	MILLSTONE CREEK	IN		
642.2	DOE RUN	KY			718.9	DEER CREEK	IN		
645.9	FLIPPINS RUN	KY			720.2	BLUE WELLS HOLLOW	IN		
647.3	BUCK CREEK	IN			721.4	INDIAN CREEK	KY		
648.1	LICK RUN	IN			724.0	CASSELBURY CREEK	IN		
651.5	FRENCH CREEK	KY			724.1	LEAD CREEK	KY		
656.9	New Amsterdam City Trib	IN			729.8	WINDY CREEK	IN		
657.0	BIG INDIAN CREEK	IN		253	731.3	ANDERSON RIVER	IN		234
659.9	COLD FRIDAY HOLLOW	KY			731.7	MUDDY GUT CREEK	KY		
661.3	POTATO RUN	IN			733.1	CROOKED CREEK	IN		
662.8	BLUE RIVER	IN		435	736.6	YELLOW CREEK	KY		
672.3	CEDAR BRANCH	KY			740.8	BIG SLOUGH	KY		
678.6	LITTLE BLUE RIVER	IN			741.3	LITTLE SANDY CREEK	IN		
684.8	BOONE HALLOW	KY			742.0	BLACKFORD CREEK	KY		124
686.3	WATSON RUN	KY			742.0	SANDY CREEK	IN		
686.5	SPRING CREEK	KY			744.2	HONEY CREEK	IN		
688.3	MILL CREEK	IN			746.8	HUFFMAN DITCH	IN		
692.5	KNOB CREEK	IN			750.5	PUP CREEK	KY		
698.6	LICK RUN	KY			752.0	YELLOW CREEK	KY		
700.8	SINKING CREEK	KY		154	757.7	PERSIMMONS DITCH	KY		
703.1	BEAR CREEK	IN			763.6	COWHIDE SLOUGH TRIB	KY		
703.9	FANNY CREEK	IN			765.2	COWHIDE SLOUGH			
704.3	BUCK CREEK	IN			769.4	FULKERSON DITCH	KY		
705.3	KINGLEY CREEK	IN			772.8	LITTLE PIGEON CREEK	IN		415

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
784.0	GREEN RIVER	KY	370	9,230	897.8	BIG GRAND PIERRE CREEK	IL		
787.2	WALKER SLOUGH				901.9	GIVENS CREEK	KY		
792.9	PIGEON CREEK			375	902.3	LUSK CREEK	IL		
796.8	BAYOU CREEK	IN			903.5	MC GILLIGAN CREEK	KY		
800.7	MOUND SLOUGH				910.1	BIG BAY CREEK	IL		
806.6	CANOE CREEK	KY			910.8	BARREN CREEK	IL		
813.2	LOGSDEN-STROOD BRANCH	IN			911.9	BAYOU CREEK	KY		
815.0	BAYOU CREEK	IN			913.7	PHELPS CREEK	KY		
827.7	CYPRESS SLOUGH				919.8	DYER HILL CREEK	KY		
827.8	MCFADDEN CREEK	IN			920.3	CUMBERLAND RIVER	KY	693	17920
832.4	SMITH CREEK	IN			923.2	DAVIS CREEK	KY		
833.6	BEAVERDAMN CREEK	IN			926.0	GOODLOW SLOUGH	KY		
840.7	BAYOU DRAIN	IN			927.6	DRAKE BRANCH			
841.9	HIGHLAND CREEK	KY			932.5	TENNESSEE RIVER	KY	652	40910
843.0	LOST CREEK	KY			933.3	ISLAND CREEK	KY		
846.9	SIBLEY CREEK	KY			935.8	BALLARD LAKE	IL		
847.8	WABASH RIVER	IL	474	33100	939.4	PERKINS CREEK	KY		
850.7	RUNNING SLOUGH	IL			940.4	SEVENMILE CREEK	IL		
867.2	SALINE RIVER	IL	27	1170	941.9	MASSAC CREEK	IL		
868.2	CANE CREEK	IL			942.7	MASSAC CREEK	KY		
868.7	DENNIS O'NAN DITCH	KY			947.5	BAYOU CREEK	KY		
873.4	TRADEWATER RIVER	KY	110	1000	947.5	ROCKY BRANCH	IL		
875.9	CAMP CREEK	KY			951.0	BAYOU CREEK			
877.0	CORNSTALK CREEK	KY			953.0	NEWTONS CREEK	IL		
877.6	HANEY CREEK	IL			953.3	BEAN BRANCH	KY		
877.7	ANTHONY CREEK	IL			956.2	REDSTONE CREEK	KY		
886.1	HURRICANE CREEK	KY			957.7	POST CREEK CUTOFF	IL		
886.4	PETERS CREEK	IL			962.9	GAR CREEK	KY		
887.3	FRANKLIN BRANCH				967.6	HUMPHREY'S CREEK	KY		
887.6	HOSICK CREEK	IL			968.9	HODGES BAYOU	IL		
889.5	BIG CREEK	IL			971.9	HESS BAYOU	IL		
892.9	DEER CREEK	KY			973.3	CACHE ISLAND	KY		
893.5	BUCK CREEK	KY			974.7	CACHE RIVER	IL		720
895.8	THREEMILE CREEK	IL			977.7	CROOKED CREEK			

Appendix A: Hydrologic Data for Water Years 2005-2009

Ohio River Monthly Flow Long Term Averages

23-year averages 1986-2009 from USACE Cascade Flow Model (cubic feet per second)

Month	Pike Island L&D Ohio River Mile 84.2	Markland L&D Ohio River Mile 531.5	Smithland L&D Ohio River Mile 918.5
January	59,029	149,206	249,809
February	56,890	154,878	267,321
March	67,964	179,798	296,562
April	61,690	156,456	264,738
May	45,627	128,348	225,085
June	28,486	85,057	160,933
July	21,250	56,560	95,724
August	17,681	44,177	70,916
September	21,008	45,833	69,569
October	21,060	47,256	76,598
November	34,653	74,166	116,983
December	51,151	114,818	185,468

Ohio River Monthly Flow Averages 2005-2009 from USACE Cascade Model

Flows in Cubic Feet per Second (cfs)

Percent long-term average calculated from 23-year record 1986-2009 from USACE Cascade Model

	Ohio River Mile 84.2 Pike Island L&D				Ohio River Mile 531.5 Markland L&D				Ohio River Mile 918.5 Smithland L&D			
Month and Year	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average
January 2005	309,275	39,490	125,575	213%	506,282	137,279	318,736	214%	837,633	216,423	566,368	227%
February 2005	110,812	22,376	59,641	105%	228,699	111,311	160,845	104%	367,300	202,966	277,367	104%
March 2005	146,193	27,423	58,377	86%	318,635	85,992	153,687	85%	324,125	138,563	215,795	73%
April 2005	146,601	19,626	65,572	106%	348,507	57,512	183,789	117%	440,797	103,324	276,570	104%
May 2005	56,376	15,612	29,549	65%	225,739	52,721	102,246	80%	312,544	86,669	176,361	78%
June 2005	21,080	6,742	12,832	45%	67,599	24,970	40,315	47%	107,468	30,124	70,812	44%
July 2005	24,422	5,092	11,188	53%	63,260	16,037	41,254	73%	99,293	9,482	58,573	61%
August 2005	27,650	3,205	8,475	48%	57,911	8,232	30,283	69%	91,661	11,483	46,653	66%
September 2005	25,919	2,302	9,485	45%	72,627	13,814	34,461	75%	185,869	9,150	65,038	93%
October 2005	41,304	3,367	14,500	69%	85,570	17,192	38,002	80%	101,116	19,809	53,998	70%
November 2005	89,729	11,475	28,150	81%	125,564	29,872	63,385	85%	186,093	42,160	98,243	84%
December 2005	131,697	15,498	46,187	90%	205,362	35,326	93,959	82%	234,150	38,341	114,511	62%
January 2006	107,555	37,667	72,334	123%	284,375	92,845	168,468	53%	422,954	149,534	261,186	46%
February 2006	65,049	11,420	42,799	75%	158,487	57,396	100,680	63%	295,734	129,292	186,280	67%
March 2006	99,445	15,679	35,785	53%	275,528	38,925	104,150	68%	544,864	62,079	253,578	118%
April 2006	71,777	13,417	36,386	59%	164,928	51,478	113,362	62%	278,004	96,803	203,774	74%
May 2006	63,195	8,376	30,356	67%	125,716	42,930	74,986	73%	203,642	85,313	152,268	86%
June 2006	71,220	3,890	27,225	96%	169,873	25,357	70,888	176%	196,585	62,220	122,014	172%
July 2006	56,077	14,343	31,221	147%	181,307	48,127	84,974	206%	207,754	65,495	127,401	218%
August 2006	54,697	5,625	17,573	99%	81,123	22,261	37,282	123%	92,641	37,979	62,306	134%
September 2006	54,111	13,417	31,283	149%	113,175	38,607	68,203	198%	320,157	35,514	131,820	203%
October 2006	122,340	19,439	58,087	276%	258,488	53,251	122,433	322%	298,386	60,694	167,061	309%
November 2006	139,763	29,203	66,974	193%	260,259	64,935	147,765	233%	364,725	152,359	261,172	266%
December 2006	62,648	24,335	37,245	73%	158,403	47,268	95,859	102%	328,265	112,828	196,089	171%
January 2007	183,606	32,491	85,276	144%	369,745	94,461	213,594	127%	604,793	261,614	422,671	162%
February 2007	73,366	9,808	29,105	51%	209,667	45,603	87,747	87%	268,721	79,598	158,961	85%
March 2007	208,948	49,048	109,194	161%	389,112	122,327	259,469	249%	501,705	214,959	368,628	145%
April 2007	120,619	38,927	68,087	110%	351,990	81,188	167,485	148%	428,787	173,083	291,695	143%
May 2007	62,197	8,286	26,387	58%	132,636	22,452	67,341	90%	208,265	33,688	120,589	79%
June 2007	21,780	4,994	12,089	42%	56,509	14,905	31,969	45%	104,873	2,810	49,638	41%
July 2007	26,553	3,206	10,936	51%	58,720	11,861	30,641	36%	82,930	2,781	48,268	38%
August 2007	77,692	5,765	23,054	130%	95,792	5,535	41,962	113%	97,507	9,737	54,890	88%
September 2007	16,322	4,145	9,106	43%	37,326	12,459	25,785	38%	73,505	10,097	35,988	27%
October 2007	29,310	4,001	10,754	51%	73,611	12,246	30,396	25%	203,534	3,162	58,505	35%
November 2007	84,254	9,853	28,281	82%	141,296	21,100	51,744	35%	139,298	26,532	66,699	26%
December 2007	195,596	39,940	91,162	178%	368,498	88,182	185,541	194%	532,655	153,213	299,856	153%

Appendix A: Hydrologic Data for Water Years 2005-2009

	Ohio River Mile 84.2 Pike Island L&D				Ohio River Mile 531.5 Markland L&D				Ohio River Mile 918.5 Smithland L&D			
Month and Year	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average
January 2008	108,295	18,483	52,792	89%	288,128	45,548	120,965	57%	411,419	88,827	232,012	55%
February 2008	220,879	46,117	93,697	165%	407,862	120,566	214,601	245%	605,857	120,812	383,156	241%
March 2008	194,295	34,295	103,055	152%	454,952	132,945	303,637	117%	782,811	230,804	520,982	141%
April 2008	83,693	21,856	48,174	78%	320,860	68,246	154,114	92%	652,477	131,703	409,451	140%
May 2008	87,723	20,549	54,658	120%	244,600	55,883	145,718	216%	387,981	121,147	246,714	205%
June 2008	96,942	11,073	29,205	103%	302,248	33,886	97,060	304%	352,308	90,345	218,706	441%
July 2008	47,216	8,909	24,237	114%	96,356	19,484	62,687	205%	156,111	51,075	111,442	231%
August 2008	23,045	3,967	11,643	66%	45,124	10,376	27,228	65%	84,969	2,213	50,103	91%
September 2008	21,802	3,499	9,330	44%	50,111	2,092	23,568	91%	72,037	8,022	39,806	111%
October 2008	15,294	5,755	9,178	44%	35,794	10,414	23,333	77%	80,972	9,648	38,243	65%
November 2008	32,376	4,752	14,309	41%	55,404	13,507	29,949	58%	73,854	23,615	47,306	71%
December 2008	141,693	19,243	76,768	150%	259,794	38,216	131,700	71%	362,184	39,833	158,645	53%
January 2009	98,556	13,512	48,962	83%	279,963	43,749	129,248	107%	369,278	66,611	217,362	94%
February 2009	153,988	28,324	68,315	120%	271,220	75,843	151,334	71%	393,042	156,104	281,220	73%
March 2009	111,121	22,742	50,112	74%	152,606	52,792	106,936	35%	239,330	142,861	189,813	36%
April 2009	84,102	23,430	50,078	81%	188,734	69,815	139,574	91%	345,134	211,653	283,630	69%
May 2009	117,238	14,439	44,440	97%	302,562	45,382	141,585	97%	497,321	193,300	301,688	122%
June 2009	56,358	10,998	28,467	100%	119,835	43,971	88,732	91%	226,250	132,881	182,691	84%
July 2009	28,329	8,133	16,246	76%	80,744	2,313	39,285	63%	123,212	33,241	75,265	68%
August 2009	41,878	7,129	24,196	137%	147,129	11,616	67,125	247%	236,455	37,987	114,773	229%
September 2009	19,276	2,918	9,941	47%	84,980	9,002	33,263	141%	147,196	9,345	53,645	135%
October 2009	46,681	9,895	20,996	100%	93,207	28,795	53,100	228%	192,639	24,993	118,730	310%
November 2009	43,519	13,674	27,427	79%	113,472	45,152	78,105	261%	242,906	103,650	178,025	376%
December 2009*	90,700	16,200	45,673	89%	278,600	43,500	140,807	107%	393,400	75,200	226,290	143%

* December 2009 average flow provided by the NWS

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ORMP	Permit Number	Type	Corporation Name	Plant Name
0	PA0217611	M	CITY OF PITTSBURGH CSOS	CITY OF PITTSBURGH CSO OUTFALLS
1.9	PA0031933	I	ORION POWER MID WEST, L.P.	BRUNOT ISLAND POWER STATION
2.15	PA0031933	I	ORION POWER MID WEST, L.P.	BRUNOT ISLAND POWER STATION
2.4	PA0031933	I	ORION POWER MID WEST, L.P.	BRUNOT ISLAND POWER STATION
2.45	PA0031933	I	ORION POWER MID WEST, L.P.	BRUNOT ISLAND POWER STATION
2.9	PA0031933	I	ORION POWER MID WEST, L.P.	BRUNOT ISLAND POWER STATION
3.1	PA0025984	M	ALLEGHENY COUNTY SANITARY AUTHORITY	ALCOSAN WWTP
4.6	PA0217689	M	MUNICIPAL AUTHORITY OF THE BOROUGH OF WEST VIEW	JOSEPH A. BERKLEY WATER TREATMENT PLANT
5.1	PA0027928	I	GULF OIL LIMITED PARTNERSHIP	NEVILLE ISLAND PLANT
5.3	PA0091227	I	CALGON CARBON CORPORATION	NEVILLE ISLAND PLANT
6.4	PA0041602	I	EXXON COMPANY, U.S.A.	NEVILLE ISLAND TERMINAL
6.6	PA0004979	I	NEVILLE CHEMICAL COMPANY	
6.7	PA0204030	I	CALGON CARBON CORPORATION	NEVILLE ISLAND WEST PLANT
6.8	PA0003832	I	ARISTECH CHEMICAL CORPORATION	NEVILLE ISLAND PLANT
7	PA0094722	I	TAPCO, INC.	
8	PA0002437	I	SHENANGO, INC.	SHENANGO COKE DIVISION
8.1	PA0002445	I	SHENANGO, INC.	NEVILLE ISLAND FOUNDRY DIVISION
8.6	PA0097306	M	MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON	ROBINSON TOWNSHIP WTP
9.32	PA0028801	M	MOON TOWNSHIP MUNICIPAL AUTHORITY	MONTOUR RUN WWTP
10.9	PA0002984	I	STAR ENTERPRISE	PITTSBURGH SALES TERMINAL
11.2	PA0217751	M	BOROUGH OF OSBORNE AND SEWICKLEY	SEWICKLEY WATER AUTHORITY WTP
11.2	PA0003816	I	BP PRODUCTS NORTH AMERICA INC.	CORAOPOLIS TERMINAL
11.23	PA0026352	M	RIVERVIEW SANITARY AUTHORITY	RIVERVIEW SANITARY AUTHORITY WASTEWATER TREATMENT PLANT
11.6	PA0205991	M	MOON TOWNSHIP MUNICIPAL AUTHORITY	MOON TOWNSHIP MUNICIPAL AUTHORITY WTP
12.3	PA0020681	M	BOROUGH OF SEWICKLEY	SEWICKLEY WWTP
12.75	PA0203718	M	MUNICIPAL AUTHORITY OF THE BOROUGH OF EDGEWORTH	EDGEWORTH WTP
13.96	PA0023159	M	CRESCENT-SOUTH HEIGHTS MUNICIPAL AUTHORITY	CRESCENT-SOUTH HEIGHTS STP
14.15	PA0046906	M	MOON TOWNSHIP MUNICIPAL AUTHORITY	FLAUGHERTY RUN STP
14.2	PA0024589	M	MUNICIPAL AUTHORITY OF THE BOROUGH OF LEETSDALE	LEETSDALE STP
15	PA0001619	I	ORION POWER MIDWEST, L.P.	F.R. PHILIPS POWER STATION
15.1	PA0001619	I	ORION POWER MIDWEST, L.P.	F.R. PHILIPS POWER STATION
15.3	PA0001619	I	ORION POWER MIDWEST, L.P.	F.R. PHILIPS POWER STATION
15.5	PA0000566	I	HUSSEY COPPER LTD	
16	PA0006335	I	KOPPEL STEEL CORPORATION	AMBRIDGE PLANT
17.5	PA0003000	I	CENTRIA	AMBRIDGE PLANT
17.5	PA0006114	I	LTV STEEL COMPANY, INC.	ALIQUIPPA WORKS
17.51	PA0027146	M	BOROUGH OF AMBRIDGE MUNICIPAL AUTHORITY	AMBRIDGE BOROUGH STP
17.6	PA0090522	I	SACCO DISPOSAL SITE	AMBRIDGE LANDFILL
18.9	PA0204315	I	J & L STRUCTURAL, INC.	14" PRODUCTS MILL

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ORMP	Permit Number	Type	Corporation Name	Plant Name
20.3	PA0028410	M	MUNICIPAL AUTHORITY OF THE BOROUGH OF BADEN	BADEN STP
20.6	PA0025968	M	MUNICIPAL WATER AUTHORITY OF ALIQUIPPA	ALIQUIPPA WWTP
22.04	PA0036609	M	CONWAY BOROUGH MUNICIPAL AUTHORITY	CONWAY BOROUGH WWTP
22.7	PA0037940	M	CENTER TOWNSHIP SEWER AUTHORITY	ELKHORN RUN WWTP
23.8	PA0095796	I	PITTSBURGH TUBE COMPANY	MONACA DIVISION
24	PA0001295	I	ASHLAND PETROLEUM COMPANY	FREEDOM REFINERY
24.2	PA0034665	I	BEAVER VALLEY HEATING, INC.	MONACA PLANT
25	PA0218553	I	BEAVER CONCRETE AND GRAVEL COMPANY	
25.3	PA0026140	M	ROCHESTER AREA JOINT SEWER AUTHORITY	ROCHESTER AREA JOINT SEWER AUTHORITY WWTP
25.56	PA0020125	M	BOROUGH OF MONACA	MONACA WWTP AND CSOS
25.6	PA0020125	M	MONACA BOROUGH MUNICIPAL AUTHORITY	MONACA WWTP
25.6	PA0002046	I	PITTSBURGH TOOL STEEL, INC.	
26.2	PA0024694	M	BEAVER BOROUGH MUNICIPAL AUTHORITY	BEAVER BOROUGH WWTP
27.5	PA0204528	M	VANPORT TOWNSHIP MUNICIPAL AUTHORITY	VANPORT WATER TREATMENT PLANT
28.1	PA0023698	M	VANPORT TOWNSHIP MUNICIPAL AUTHORITY	VANPORT WWTP
28.3	PA0036684	I	SUN REFINING AND MARKETING COMPANY	BEAVER MARKETING TERMINAL
28.5	PA0002208	I	ZINC CORPORATION OF AMERICA	MONACA SMELTING DIVISION
29.28	PA0218154	I	LOCK 6 LANDING RESTAURANT AND LOUNGE	LOCK 6 WWTP
29.4	PA0001236	I	WESTINGHOUSE ELECTRIC CORPORATION	BEAVER PLANT
29.6	PA0006254	I	NOVA CHEMICALS	BEAVER VALLEY PLANT
29.6	PA0006254	I	NOVA CHEMICALS	BEAVER VALLEY PLANT
30	PA0006254	I	NOVA CHEMICALS	BEAVER VALLEY PLANT
33.3	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.4	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.5	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.6	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.7	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.8	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
33.9	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
34	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT
34.5	PA0252492	M	SHIPPINGPORT BOROUGH	SHIPPINGPORT STP
34.9	PA0025615	I	FIRST ENERGY NUCLEAR OPERATING COMPANY	BEAVER VALLEY POWER STATION
35	PA0027707	I	DUQUESNE LIGHT COMPANY	BEAVER VALLEY UNIT NO.2
35.7	PA0005754	I	J & L SPECIALTY STEEL, INC.	MIDLAND PLANT
36.4	PA0097870	I	LTV STEEL COMPANY	MIDLAND WORKS
37	PA0005754	I	J&L SPECIALTY STEEL, INC.	MIDLAND PLANT
37.4	PA0023701	M	MIDLAND BOROUGH MUNICIPAL AUTHORITY	MIDLAND BOROUGH MUNICIPAL AUTHORITY STP
38.7	PA0218219	I	C&C MARINE MAINTENANCE CO.	C&C MARINE MAINTENANCE CO.
40	PA0027481	I	PENNSYLVANIA POWER COMPANY	BRUCE MANSFIELD PLANT

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ORMP	Permit Number	Type	Corporation Name	Plant Name
40.1	OH0011410	I	THE HALL CHINA COMPANY	HALL CHINA COMPANY WWTP
40.3	OH0107298	I	VONROLL AMERICA	
42	WV0111759	I	GLOBE BUILDING MATERIALS, INC.	
42.4	WV0005223	I	THE CELOTEX CORPORATION	
43.3	WV0021768	M	CITY OF CHESTER	CHESTER WWTP
44.6	OH0024970	M	CITY OF EAST LIVERPOOL	EAST LIVERPOOL WWTP
44.8	OH0123617	I	BP OIL COMPANY	EAST LIVERPOOL BULK PLANT WWTP
45.3	OH0133447	I	DALE RUFENER	FARR HILL MOBILE HOME PARK
45.5	WV0004774	I	GLOBE REFRACTORIES, INC.	
45.67	WV0027502	I	THE NEWELL COMPANY	
46.2	OH0030341	M	CITY OF EAST LIVERPOOL	CITY OF EAST LIVERPOOL WTP
47.2	WV0005754	I	DIXON TICONDEROGA D.B.A. NEW CASTLE REFRACTORIES	
47.3	WV0112941	I	DTC ENVIRONMENTAL SERVICES, INC.	
47.4	WV0004626	I	QUAKER STATE OIL REFINING CORPORATION	CONGO PLANT
48	OH0012327	I	STERLING CHINA COMPANY	WWTP
48.5	OH0028045	M	VILLAGE OF WELLSVILLE	WELLSVILLE WWTP
49.15	OH0029068	I	MARATHON ASHLAND PETROLEUM LLC	WELLSVILLE TERMINAL
49.6	OH0064157	I	WELLSVILLE STORAGE & TRANSPORTATION TERMINAL	
51.6	WV0049361	I	BOC GASSES	NEWELL PLANT
53.9	OH0011525	I	OHIO EDISON COMPANY	W.H. SAMMIS PLANT
55.6	OH0050539	M	VILLAGE OF EMPIRE	EMPIRE WWTP
57.4	WV0079103	I	CM TECH, INC.	
57.5	OH0011568	I	OHIO EDISON COMPANY	TORONTO PLANT
57.6	WV0025119	M	CITY OF NEW CUMBERLAND	NEW CUMBERLAND WWTP
59.1	OH0059234	M	CITY OF TORONTO	TORONTO WTP
59.2	OH0011738	I	VALLEY CONVERTING COMPANTY, INC.	
60.2	OH0020214	M	CITY OF TORONTO	TORONTO WWTP
60.5	OH0010910	I	TITANIUM METALS CORPORATION	TIMET-TORONTO PLANT
61.8	WV0003336	I	WEIRTON STEEL CORPORATION	
61.9	WV0003336	I	WEIRTON STEEL CORPORATION	
62	WV0003336	I	WEIRTON STEEL CORPORATION	
62.4	WV0004391	I	AIR PRODUCTS AND CHEMICALS, INC.	
62.9	WV0003336	I	WEIRTON STEEL CORPORATION	
64.3	OH0108014	I	MARATHON ASHLAND PETROLEUM LLC	
64.9	WV0071129	I	APEX OIL COMPANY	
65.2	WV0070971	M	CITY OF WEIRTON	WEIRTON WTP
65.8	WV0003425	I	SIGNODE CONSUMABLE PRODUCTS OPERATION	
66	WV0091367	I	WEIRTON ICE AND COAL SUPPLY COMPANY	
66.2	WV0023108	M	CITY OF WEIRTON	WEIRTON WWTP

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ORMP	Permit Number	Type	Corporation Name	Plant Name
68.1	OH0027511	M	CITY OF STEUBENVILLE	STEUBENVILLE WWTP
68.7	OH0011347	I	WHEELING PITTSBURGH STEEL CORPORATION	STEUBENVILLE NORTH PLANT
68.85	WV0004499	I	WHEELING PITTSBURGH STEEL CORPORATION	STEUBENVILLE EAST COKE PLANT
68.9	WV0004499	I	WHEELING PITTSBURGH STEEL CORPORATION	STEUBENVILLE EAST COKE PLANT
69.4	WV0004588	I	KOPPERS INDUSTRIES, INC.	FOLLANSBEE PLANT
69.7	WV0023281	I	WHEELING PITTSBURGH STEEL CORPORATION	STUEBENVILLE EAST SINTER PLANT
70.35	WV0004502	I	WHEELING - NISSHIN INC.	
70.5	WV0020273	M	CITY OF FOLLANSBEE	FOLLANSBEE WWTP
70.7	OH0011355	I	WHEELING PITTSBURGH STEEL CORPORATION	MINGO JUNCTION SOUTH PLANT
71.6	OH0026565	M	VILLAGE OF MINGO JUNCTION	MINGO JUNCTION WWTP
72.5	WV1002554	I	STARVAGGI INDUSTRIES, INC.	WELLSBURG DOCK AND STOCKPILE FACILITY
73	WV0071196	I	EAGLE MANUFACTURING COMPANY	
73.6	WV0070289	I	GENPAK CORPORATION	
74.5	OH0099333	M	VILLAGE OF BRILLIANT WATER PLANT	BRILLIANT WTP
74.7	WV0026832	M	CITY OF WELLSBURG, WATER & SEWER BOARD	WELLSBURG WWTP
76.5	OH0012581	I	CARDINAL OPERATING COMPANY (AMERICAN ELECTRIC POWER)	CARDINAL POWER PLANT COMPLEX (BRILLIANT PLANT)
78.5	WV0084182	M	BROOKE COUNTY PUBLIC SERVICE DISTRICT	BEECH BOTTOM WWTP
79	WV0114375	I	ARROW CONCRETE COMPANY	
79.4	WV0004511	I	WHEELING PITTSBURGH STEEL CORPORATION	BEECH BOTTOM PLANT
80	WV0065790	I	WINDSOR POWER HOUSE COAL COMPANY	
80.7	OH0090891	M	VILLAGE OF TILTONSVILLE	TILTONSVILLE WWTP
83.7	OH0011371	I	WHEELING PITTSBURGH STEEL CORPORATION	YORKVILLE PLANT
84.5	OH0120588	I	OHIO COATINGS COMPANY	
86.4	WV0039764	I	WARWOOD TOOL COMPANY	
87.8	OH0011339	I	WHEELING - PITTSBURGH STEEL CORPORATION	MARTINS FERRY PLANT
88.3	WV0026387	I	UNO - VEN COMPANY	
90.2	OH0032433	M	CITY OF BRIDGEPORT	BRIDGEPORT WTP
90.6	WV0005282	I	L. NIEBERGALL ICE AND FREEZER STORAGE	
90.8	WV0023230	M	CITY OF WHEELING	WHEELING WWTP
92.7	OH0059889	I	OXFORD MINING COMPANY, INC.	BELLAIRE DOCK
93.1	OH0076864	I	MARIETTA COAL COMPANY	BELLAIRE REFUSE DISPOSAL SITE
93.2	WV0020648	M	CITY OF BENWOOD	BENWOOD WWTP
94	OH0049999	M	EASTERN OHIO REGIONAL WASTEWATER AUTHORITY	EASTERN OHIO REGIONAL WASTEWATER AUTHORITY WWTP
94.7	WV0116033	I	AUTOMATIC RECYCLING, INC.	
96.5	WV0020141	M	CITY OF MCMECHEN	McMECHEN WWTP
97	WV0103110	I	ARROW CONCRETE COMPANY	
97.6	OH0027383	M	VILLAGE OF SHADYSIDE	SHADYSIDE WWTP
99.3	WV0020036	M	CITY OF GLEN DALE	GLEN DALE WWTP

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ORMP	Permit Number	Type	Corporation Name	Plant Name
100.5	WV0004693	I	TRIANGLE WIRE AND CABLE, INC.	GLEN DALE FACILITY
102.4	OH0011592	I	OHIO EDISON COMPANY	R.E. BURGER PLANT
102.5	WV0023264	M	CITY OF MOUNDSVILLE	MOUNDSVILLE WWTP
106.5	OH0076040	I	TONKOVICH TRUCKING COMPANY	FLYASH DISPOSAL FACILITY
107.6	WV0081612	M	MARSHALL COUNTY SEWER DISTRICT	MARSHALL COUNTY WWTP
109.5	OH0027219	M	VILLAGE OF POWHATAN POINT	POWHATAN POINT WWTP
110.9	WV0005291	I	OHIO POWER CO.	KRAMMER PLANT
110.9	WV0005291	I	OHIO POWER CO.	KRAMMER PLANT
110.9	WV0005291	I	OHIO POWER CO.	KRAMMER PLANT
110.9	WV0005291	I	OHIO POWER COMPANY	KAMMER PLANT
110.9	WV0005291	I	OHIO POWER CO.	KRAMMER PLANT
110.9	WV0005291	I	OHIO POWER CO.	KRAMMER PLANT
111.2	OH0011681	I	BELLAIRE CORPORATION	POWHATAN MINE NO. 1
111.8	WV0004642	I	VENCO L.L.C.	
112	WV0005304	I	AMERICAN ELECTRIC POWER	OHIO POWER COMPANY MITCHELL PLANT
112.1	WV0004642	I	VENCO L.L.C.	
112.3	WV0020818	I	CONSOLIDATION COAL COMPANY	McELROY MINE
112.4	WV0005304	I	AMERICAN ELECTRIC POWER	OHIO POWER COMPANY MITCHELL PLANT
112.6	WV0005304	I	AMERICAN ELECTRIC POWER	OHIO POWER COMPANY MITCHELL PLANT
112.8	WV0071897	I	HECKETT-MARSCO CORP.	REED MINERAL DIVISION
114.5	WV0076660	I	COLUMBIAN CHEMICALS COMPANY	
115.5	OH0012211	I	QUARTO MINING COMPANY	POWHATAN MINE NO. 4
119.7	WV0004359	I	PPG INDUSTRIES, INC.	NATRIUM PLANT
121	WV0004383	I	AIR PRODUCTS AND CHEMICALS, INC.	GEG EH & S FIELD SUPPORT
121.7	WV0005169	I	BAYER CORPORATION	
122.3	WV0077429	I	GRANDVIEW-DOOLIN PUBLIC SERVICE DISTRICT	
123.5	OH0011550	I	ORMET PRIMARY ALUMINUM CORPORATION	HANNIBAL REDUCTION DIVISION FACILITIES
123.7	OH0010855	I	ORMET ALUMINUM MILL PRODUCTS CORP.	HANNIBAL ROLLING MILL DIVISION
124.7	OH0124991	I	MARIETTA INDUSTRIAL ENTERPRISES, INC.	HANNIBAL DOCKSIDE WASTEWATER TREATMENT WORKS
126	WV0114367	I	ARROW CONCRETE COMPANY	
126.4	WV0114499	I	CITY OF NEW MARTINSVILLE	HYDROELECTRIC POWER PLANT
126.7	OH0125067	I	PAR MAR OIL COMPANY	STORE #13
127.8	OH0091103	M	OHIO DEPARTMENT OF TRANSPORTATION	DUFFEY OUTPOST BUILDING
129	WV0109185	I	WETZEL COUNTY LANDFILL	WETZEL COUNTY LANDFILL
133	WV0078352	I	PAUL WISSMACH GLASS COMPANY, INC	
133.2	WV0020613	M	CITY OF PADEN CITY	PADEN CITY WWTP
138.2	WV0021814	M	CITY OF SISTERSVILLE	SISTERSVILLE WWTP
142	WV0048861	M	FRIENDLY PUBLIC SERVICE DISTRICT	FRIENDLY PSD
142.8	OH0059323	M	FRONTIER BOARD OF EDUCATION	FRONTIER HIGH SCHOOL WWTP

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ORMP	Permit Number	Type	Corporation Name	Plant Name
144.7	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
145	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
145.3	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
145.4	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
145.6	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT\
145.7	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
145.9	WV0000094	I	GE SILICONES WV LLC	SISTERSVILLE PLANT
147	WV0048861	M	FRIENDLY PUBLIC SERVICE DISTRICT	FRIENDLY WWTP
150.9	WV0051268	M	WEST VIRGINIA DIVISION OF CORRECTIONS	ST. MARYS CORRECTIONAL CENTER
155.1	WV0020168	M	CITY OF ST. MARYS	ST. MARYS WWTP
155.5	WV0111490	I	ST MARYS REFINING COMPANY	
155.6	WV0111635	I	WATSON-HAAS LUMBER CORPORATION	
157.8	WV0024490	M	CITY OF BELMONT	BELMONT WWTP
159.5	OH0099449	I	OHIO OIL GATHERING CORP	BELLS RUN TERMINAL WWT WORKS
160	WV0000787	I	CYTEC INDUSTRIES	WILLOW ISLAND FACILITY
160.1	WV0000787	I	CYTEC INDUSTRIES	WILLOW ISLAND FACILITY
160.4	WV0000787	I	CYTEC INDUSTRIES	WILLOW ISLAND FACILITY
160.6	WV0000787	I	CYTEC INDUSTRIES	WILLOW ISLAND FACILITY
160.9	WV0000761	I	MONONGAHELA POWER COMPANY, DBA ALLEGHENY POWER	WILLOW ISLAND POWER STATION
161	WV0000761	I	MONONGAHELA POWER COMPANY, DBA ALLEGHENY POWER	WILLOW ISLAND POWER STATION
162.9	WV0112640	I	LAMBERT ENTERPRISES, INC.	
164	WV0001210	I	CABOT CORPORATION	OHIO RIVER VALLEY PLANT
166	WV0112089	I	CARR CONCRETE CORPORATION	
166.2	WV0112089	I	CARR CONCRETE CORPORATION	
168.8	OH0127621	I	ERGON TRUCKING, INC.	MARIETTA TERMINAL
171	OH0026344	M	CITY OF MARIETTA	MARIETTA WWTP
172.1	WV0022071	M	CITY OF WILLIAMSTOWN	WILLIAMSTOWN WWTP
172.2	OH0104035	I	SUPER AMERICA, INC.	STATION NO. 5237
172.7	WV0054259	I	FENTON ART GLASS COMPANY	
174.9	OH0048747	I	MARATHON ASHLAND PETROLEUM LLC	MARIETTA TERMINALS NOS. 1 AND 2
175	OH0005070	I	ASPHALT MATERIALS, INC.	MARIETTA PLANT 2
175.7	OH0003905	I	SOLVAY ADVANCED POLYMERS, LLC	SOLVAY MARIETTA PLANT
176.2	OH0003905	I	SOLVAY ADVANCED POLYMERS, LLC	SOLVAY MARIETTA PLANT
176.7	OH0099252	I	PRAXAIR, INCORPORATED	MARIETTA PLANT
176.8	OH0099538	I	AMERICAN MUNICIPAL POWER-OHIO, INC.	RH GORSUSH STATION WWTP
176.9	OH0004006	I	ELKEM METALS COMPANY	MARIETTA PLANT
179.2	OH0006751	I	CHEVRON ASPHALT COMPANY	MARIETTA TERMINAL

Appendix A: Ohio River Discharge Information

ORMP	Permit Number	Type	Corporation Name	Plant Name
180.3	WV0001422	I	MANVILLE BUILDING MATERIALS CORPORATION	
181.4	WV0023221	M	CITY OF VIENNA	VIENNA WWTP
182.1	OH0005665	I	DEGUSSA ENGINEERED CARBONS, LLC	BELPRE OHIO CARBON BLACK FACILITY
183.2	WV0025011	M	CITY OF PARKERSBURG	PARKERSBURG WTP
183.3	WV0023213	M	PARKERSBURG UTILITY BOARD	PARKERSBURG WWTP
185.7	OH0020621	M	CITY OF BELPRE	BELPRE WWTP
190.1	WV0001279	I	E.I. DU PONT DE NEMOURS AND COMPANY	WASHINGTON WORKS
190.4	WV0001279	I	E.I. DU PONT DE NEMOURS AND COMPANY	WASHINGTON WORKS
190.5	WV0001279	I	E.I. DU PONT DE NEMOURS AND COMPANY	WASHINGTON WORKS
190.6	WV0001279	I	E.I. DU PONT DE NEMOURS AND COMPANY	WASHINGTON WORKS
190.8	WV0001279	I	E.I. DU PONT DE NEMOURS AND COMPANY	WASHINGTON WORKS
191.5	WV0000841	I	GE PLASTICS	
191.6	WV0076538	I	E. I. DUPONT DE NEMOURS AND COMPANY	LOCAL LANDFILL
192.8	WV0076546	I	SENTINEL TRANSPORTATION CO.	PERMIT ISSUED TO CONOCO, INC. (NOW DUPONT COMPANY)
193	WV0001775	I	AGA GAS INC.	
195.5	WV0032590	M	LUBECK PSD	LUBECK PSD
210.8	OH0030643	I	TUPPERS PLAINS	CHESTER WATER PLANT
220.8	WV0021989	M	CITY OF RAVENSWOOD	RAVENSWOOD WWTP
222	WV0115932	I	PECHINEY ROLLED PRODUCTS, LLC	PECHINEY ROLLED PRODUCTS, LLC
226.9	WV0000779	I	CENTURY ALUMINUM OF WV, INC.	
229	WV0110175	I	PLASMA PROCESSING CORPORATION	
231.5	WV0046434	I	McCOY DEVELOPMENT CORP.	MILLWOOD SUBDIVISION WWTP
232	OH0005983	I	MARTIN MARIETTA AGGREGATES	APPLE GROVE PLANT
234.2	OH0004413	I	THE SHELLY COMPANY, RICHARDS AND SON, INC	
235.7	WV0092100	I	JESCO CORPORATION	SAND AND GRAVEL MINING
237.5	OH0059561	I	OHIO POWER COMPANY	RACINE HYDROELECTRIC PLANT
241.6	WV0000426	I	FOOTE MINERAL COMPANY	
241.9	WV0001058	I	APPALACHIAN POWER COMPANY	AEP - PHILLIP SPORN PLANT
242	WV0048500	I	APPALACHIAN POWER COMPANY	AEP - MOUNTAINEER PLANT
243	OH0050661	M	SYRACUSE - RACINE REGIONAL SEWER DISTRICT	SYRACUSE - RACINE WWTP
245	WV0032531	M	TOWN OF NEW HAVEN	NEW HAVEN WWTP
247.1	OH0114944	I	ASHLAND BRANDED MARKETING INC.	BULK PLANT #490
247.2	OH0127680	I	G & M FUEL COMPANY	BULK TERMINAL
250.2	OH0021725	M	VILLAGE OF POMEROY	POMEROY WWTP
250.7	WV0021849	M	TOWN OF MASON	MASON WWTP
255	OH0026514	M	VILLAGE OF MIDDLEPORT	MIDDLEPORT WWTP
256.4	WV0105619	M	MASON COUNTY PSD	
258.1	OH0023762	I	OHIO POWER COMPANY	GENERAL JAMES GAVIN PLANT
260	WV0075736	M	POINT PLEASANT WATER WORKS	POINT PLEASANT WTP

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ORMP	Permit Number	Type	Corporation Name	Plant Name
260.2	WV0086886	M	CAMP CONLEY PUBLIC SERVICE DISTRICT	CAMP CONLEY WWTP
262	OH0051063	I	GALLIPOLIS HOSPITALITY, INC.	HOLIDAY INN - GALLIPOLIS WWTP
263	OH0059692	I	MCCARTY CONSTRUCTION INC.	RIVER DOCK WASTEWATER TREATMENT WORKS
264.1	OH0060003	I	WATERLOO COAL COMPANY, INC	WATERLOO RIVER DOCK FACILITY #1
265	OH0060151	I	SANDS HILL COAL COMPANY, INC.	ZINN COAL DOCK WWTP
265.4	WV0112046	I	CUSTOM FUEL SERVICES	CUSTOM FUEL SERVICES
265.7	WV0022039	M	CITY OF POINT PLEASANT	POINT PLEASANT WWTP
266.2	OH0125016	I	O-KAN MARINE REPAIR INC.	
266.9	WV0114642	I	KANAWHA RIVER TOWING, INC.	
268.5	OH0006416	M	GALLIA COUNTY RURAL WATER ASSOCIATION	GALLIA COUNTY WTP
268.8	OH0120863	I	BP OIL COMPANY	GALLIPOLIS BULK PLANT
269.8	OH0020478	M	CITY OF GALLIPOLIS	GALLIPOLIS WWTP
273	WV0002496	I	RIPPLEWOOD PHOSPHORUS U.S. LLC	
274.5	WV0074799	M	MASON COUNTY PUBLIC SERVICE DISTRICT	MASON COUNTY WTP
280.2	WV0000132	I	M & G POLYMERS USA LLC	POINT PLEASANT POLYSTER PLANT-MASON COUNTY
282	WV0079120	I	APPLE GROVE PULP AND PAPER COMPANY, INC.	
282.1	WV0079138	I	APPLE GROVE LANDFILL	
300	WV0114383	I	ARROW CONCRETE COMPANY	
301	WV0104647	I	YMCA GLENBRIER	
303.5	WV0032484	I	CHEVRON HUNTINGTON LIGHT OIL	HUNTINGTON TERMINAL
304.6	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
305	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
306.1	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
306.6	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
306.9	WV0000159	I	WEST VIRGINIA-AMERICAN WATER COMPANY	HUNTINGTON WTP
307.2	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
307.8	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
308.2	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
308.4	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
308.9	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
309.6	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
310.2	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
310.9	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
311	WV0045241	I	DAWSON-THOMPSON OIL COMPANY	
311.2	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
312.5	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
313	WV0023159	M	CITY OF HUNTINGTON SANITARY BOARD	HUNTINGTON WWTP
313.1	OH0094684	M	LAWRENCE COUNTY, BOARD OF COMMISSIONERS	UNION-ROME TOWNSHIPS SUBSEWER DISTRICT WWTP
314.7	WV0064238	I	OGLEBAY NORTON COMPANY	

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ORMP	Permit Number	Type	Corporation Name	Plant Name
315	WV0115380	I	KOSMOS CEMENT CO	KOSMOS CEMENT CO
315.4	WV0035912	M	CITY OF KENOVA	KENOVA WWTP
315.4	WV0027090	I	SUN OIL COMPANY	
316.1	WV0035912	M	CITY OF KENOVA	KENOVA WWTP
316.8	WV0064360	I	AMERICAN COMMERCIAL TERMINALS	
317	OH0021814	M	VILLAGE OF SOUTH POINT	SOUTH POINT WWTP
317.1	KY0000388	I	ASHLAND PETROLEUM COMPANY	CATLETTSBURG REFINERY
317.1	KY0035467	M	CITY OF CATLETTSBURG	CATLETTSBURG WWTP
318.4	OH0076392	I	ASHLAND SERVICES COMPANY	FORMER SOUTH POINT ETHANOL SITE
320.3	KY0000558	I	AK STEEL CORPORATION	AK STEEL CORPORATION - COKE PLANT
321.1	KY0099651	I	PROGRESS METALS RECLAMATION CO.	
321.3	KY0022373	M	CITY OF ASHLAND	ASHLAND WWTP
321.5	KY0099651	I	PROGRESS METAL RECLAMATION COMPANY	
322	KY0060399	I	AK STEEL CORPORATION - WEST WORKS	NORTON LANDFILL
322.7	KY0094005	I	PACTIV CORPORATION	
323.5	KY0000485	I	AK STEEL CORPORATION	ASHLAND WORKS
323.8	OH0060097	I	OLIVER M. ELAM JR. COMPANY, INC.	
324	OH0029432	M	VILLAGE OF COAL GROVE	COAL GROVE WWTP
324.4	OH0076619	I	IRONTON COAL COMPANY, ADDINGTON INCORPORATED	IRONTON COAL LOADING FACILITY
324.9	OH0059897	I	RAIL RIVER TERMINAL	
325	OH0007544	I	HONEYWELL, INC.	IRONTON TAR PROCESSING PLANT
325.1	OH0099422	I	ADVANCED CAST PRODUCTS, INC. PEERLESS DIVISION	
326.4	KY0000124	I	CSX TRANSPORTATION	RUSSELL YARD
327.1	OH0008516	M	CITY OF IRONTON	IRONTON WTP
327.2	OH0025852	M	CITY OF IRONTON	IRONTON WWTP
327.5	KY0048348	M	GREENUP COUNTY ENVIRONMENTAL COMMISSION	GREENUP COUNTY WWTP
328.5	KY0022926	M	CITY OF WORTHINGTON	WORTHINGTON WWTP
330	OH0094358	I	COLLINS MINING COMPANY	
332.2	KY0094790	I	SUN CHEMICAL PCI, INCORPORATED	
332.3	KY0033553	M	CITY OF WURTLAND	WURTLAND WWTP
332.5	KY0000493	I	E.I. DU PONT DE NEMOURS AND COMPANY	WURTLAND PLANT
332.6	KY0000493	I	E.I. DU PONT DE NEMOURS AND COMPANY	WURTLAND PLANT
332.7	KY0000493	I	E.I. DU PONT DE NEMOURS AND COMPANY	WURTLAND PLANT
332.8	KY0000493	I	E.I. DU PONT DE NEMOURS AND COMPANY	WURTLAND PLANT
332.9	KY0000493	I	E.I. DU PONT DE NEMOURS AND COMPANY	WURTLAND PLANT
333.5	OH0099309	I	DOW CHEMICAL CO., USA	HANGING ROCK PLANT
336.1	OH0007391	I	SUNOCO CHEMICALS	HAVERHILL PLANT
336.4	KY0026450	M	CITY OF GREENUP	GREENUP WWTP
347.2	OH0060089	I	STANDARD LAFARGE COMPANY	WHEELERSBURG DOCK

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ORMP	Permit Number	Type	Corporation Name	Plant Name
349	OH0027201	M	CITY OF PORTSMOUTH	SCIOTOVILLE WWTP
349.2	OH0050962	I	BP AMOCO PLC	BP AMOCO SCIOTOVILLE TERMINAL
350.8	OH0008621	M	CITY OF PORTSMOUTH	PORTSMOUTH WTP
351.8	OH0020613	M	VILLAGE OF NEW BOSTON	NEW BOSTON WWTP
353.6	OH0027197	M	CITY OF PORTSMOUTH	PORTSMOUTH WWTP
353.8	KY0026131	M	CITY OF SOUTH SHORE	SOUTH SHORE WWTP
358	KY0075914	I	SAXONY VILLAGE APARTMENTS	
363.2	OH0048305	M	OHIO DEPARTMENT OF NATURAL RESOURCES	SHAWNEE STATE PARK MARINA WWTP
375	KY0100528	I	HOLLINEE LLC	HOLLINEE MANUFACTURING COMPANY
375.5	KY0092061	I	ELECTRIC PLANT BOARD	VANCEBURG LEWIS COUNTY INDUSTRIAL AUTHORITY
378.4	KY0021512	M	ELECTRIC PLANT BOARD	VANCEBURG WWTP
397.8	OH0020842	M	VILLAGE OF MANCHESTER	MANCHESTER WWTP
400	OH0023825	M	VILLAGE OF ABERDEEN	ABERDEEN WWTP
405.5	KY0105091	M	WESTERN LEWIS RECTORVILLE WATER COOPERATIVE	WESTERN LEWIS RECTORVILLE WATER COOP, MUN. WATER SUPPLY WELL
405.7	OH0004316	I	DAYTON POWER AND LIGHT COMPANY	J.M. STUART STATION
406.6	KY0100196	I	EPT, DRIVES AND COMPONENTS	COMPONENTS OPERATIONS
408.5	KY0000477	I	WALD MANUFACTURING COMPANY, INC.	
409.8	KY0091359	I	HARPER OIL PRODUCTS, INC.	HARPER OIL PRODUCTS, INCORPORATED
411.2	KY0020257	M	MAYSVILLE UTILITY COMMISSION	MAYSVILLE STP
413.2	KY0022250	I	EAST KENTUCKY POWER COOPERATIVE	HUGH L. SPURLOCK POWER STATION
413.4	KY0022250	I	EAST KENTUCKY POWER COOPERATIVE	HUGH L. SPURLOCK POWER STATION
413.5	KY0022250	I	EAST KENTUCKY POWER COOPERATIVE	HUGH L. SPURLOCK POWER STATION
413.7	KY0094463	I	INLAND CONTAINER CORP	MAYSVILLE MILL
417.1	OH0020966	M	VILLAGE OF RIPLEY	RIPLEY WWTP
417.2	OH0127175	M	BROWN COUNTY RURAL WATER ASSOCIATION, INC.	RURAL WATER WELLFIELD WTP
424.5	OH0134091	M	VILLAGE OF HIGGINSPORT	HIGGINSPORT WWTP
427.7	KY0021261	M	CITY OF AUGUSTA	AUGUSTA WWTP
441.5	KY0045284	I	DRAVO LIME COMPANY	BLACK RIVER DIVISION
442.7	OH0096571	M	VILLAGE OF MOSCOW	MOSCOW WWTP
443.2	OH0048836	I	CINCINNATI GAS AND ELECTRIC COMPANY	WILLIAM H. ZIMMER POWER STATION
445	KY0090603	I	SPANGLER APARTMENTS	
447.7	OH0010677	M	TATE MONROE WATER ASSOCIATION INC.	TATE MONROE WTP
449.9	OH0021156	M	VILLAGE OF NEW RICHMOND	NEW RICHMOND WWTP
453	OH0009865	I	CINCINNATI GAS AND ELECTRIC COMPANY	W.C. BECKJORD STATION
455.1	OH0049361	M	CLERMONT COUNTY BOARD OF COMMISSIONERS	NINE MILE CREEK WWTP
457.3	KY0088749	I	PRESTRESS SERVICES, INCORPORATED	
462.8	OH0009083	M	GREATER CINCINNATI WATERWORKS	RICHARD MILLER WTP

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ORMP	Permit Number	Type	Corporation Name	Plant Name
465.2	OH0025453	M	HAMILTON COUNTY BOARD OF COMMISSIONERS-METROPOLTIAN SEWER	LITTLE MIAMI WWTP - MSD OF GREATER CINCINNATI
465.7	OH0085936	I	QUEEN CITY TERMINALS, INC.	
470	0H0010031	I	HILLTOP BASIC RESOURCES, INC.	RIVER TERMINAL PLANT
472.5	OH0025461	M	HAMILTON COUNTY COMMISSIONERS	MILL CREEK WWTP
474.4	OH0010120	I	PETER CREMER NORTH AMERICA LP	
474.5	KY0001406	I	BP OIL PIPELINE CO., BROMLEY	BROMLEY TERMINAL
475.3	KY0063274	I	TRANSMONTAIGNE, INCORPORATED	TRANSMONTAIGNE PRODUCT SERVICE, INC.
475.8	OH0047457	I	THE VALVOLINE COMPANY	WWTP
477	OH0009598	I	MARATHON ASHLAND PETROLEUM LLC	CINCINNATI LIGHT OIL TERMINAL
477.4	KY0021466	M	SANITATION DISTRICT NO.1 OF CAMPBELL & KENTON COUNTIES	DRY CREEK WWTP
479.4	OH0105716	I	RIVER TRANSPORTATION COMPANY	
482	KY0099694	I	McGINNIS, INCORPORATED	HEBRON DIVISION
483.8	KY0094072	M	SANITATION DISTRICT NO. 1	RIVERSHORE FARMS SUBDIVISION WWTP
484.4	OH0009946	I	LANXESS CORPORATION	ADDYSTON FACILITY, PORT PLASTICS PLANT
486	OH0024678	M	BOARD OF COMMISSIONERS HAMILTON COUNTY	INDIAN CREEK WWTP
489.8	OH0009571	I	VIGORO INDUSTRIES, INC.	ROYSTER-CLARK NITROGEN WWTP
490	OH0009873	I	CINCINNATI GAS AND ELECTRIC COMPANY	MIAMI FORT STATION
493	IN0024538	M	SOUTH DEARBORN REGIONAL SEWER DISTRICT	SOUTH DEARBORN REGIONAL WWTP
495	IN0003131	I	JOSEPH E. SEAGRAM AND SONS, INC.	
495.5	IN0002160	I	AMERICAN ELECTRIC POWER	AMERICAN ELECTRIC POWER, TANNER'S CREEK PLANT
497	IN0050903	M	CITY OF AURORA	CSO OVERFLOW POINTS
502.4	KY0075639	I	RIVER RIDGE PARK, INCORPORATED	RIVER RIDGE PARK WWTP
502.6	KY0080691	M	BOONE COUNTY WATER AND SEWER DISTRICT, SANITATION DISTRICT 1	CHARLES H. KELLY ELEMENTARY SCHOOL
503	KY0077917	I	ARLINGHAUS PROPERTIES	ARLINGHAUS PROPERTIES, RIVERSIDE DRIVE
506	IN0024431	M	CITY OF RISING SUN	RISING SUN WWTP
510.4	KY0040444	I	CINCINNATI GAS & ELECTRIC COMPANY	CINCINNATI GAS & ELECTRIC COMPANY-EAST BEND STATION
510.5	KY0040444	I	CINCINNATI GAS & ELECTRIC COMPANY	CINCINNATI GAS & ELECTRIC COMPANY-EAST BEND STATION
511.1	KY0040444	I	CINCINNATI GAS & ELECTRIC COMPANY	CINCINNATI GAS & ELECTRIC COMPANY-EAST BEND STATION
516.6	KY0004243	M	KENTUCKY DEPARTMENT OF PARKS	BIG BONE LICK STATE PARK WTP
519.5	IN0056391	M	PATRIOT, TOWN OF	PATRIOT WWTP
529.9	KY0075825	I	CHARLOTTE LOWENDICK	RIVER'S EDGE CAMPGROUND
530	KY0028118	M	CITY OF WARSAW	WARSAW STP
533.1	KY0100153	I	STEEL TECHNOLOGIES, LP	GHENT FACILITY
534.8	KY0098221	I	GALLATIN STEEL COMPANY	GALLATIN COUNTY STEEL PLANT
535	KY0082686	I	GALLATIN TERMINAL COMPANY	
535.3	KY0002038	I	KENTUCKY UTILITIES COMPANY	GHENT GENERATING STATION

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ORMP	Permit Number	Type	Corporation Name	Plant Name
537.5	IN0020231	M	TOWN OF VEVAY	VEVAY WWTP
538.7	KY0095877	I	NORTH AMERICAN STAINLESS, LP	
540.5	KY0001279	I	DOW CORNING CORPORATION	CARROLLTON PLANT
543.6	KY0001431	I	ELF ATOCHEM NORTH AMERICA, INC.	
543.7	KY0071757	I	HARPER OIL PRODUCTS, INC.	
550.5	IN0060470	M	TOWN OF BROOKSBURG WASTEWATER TREATMENT PLANT	BROOKSBURG WWTP
552	KY0102920	I	NUGENT SAND COMPANY	MILTON PLANT
552.4	KY0001732	I	AMERIFORM MANUFACTURING, INCORPORATED	
556.6	KY0088625	M	CITY OF MILTON	MILTON WWTP
558.6	IN0025666	M	CITY OF MADISON	MADISON WWTP
560	IN0001759	I	INDIANA - KENTUCKY ELECTRIC CORPORATION	CLIFTY CREEK STATION
562.5	IN0020702	M	TOWN COUNCIL OF HANOVER	HANOVER WWTP
571.3	KY0041971	I	LOUISVILLE GAS AND ELECTRIC COMPANY	TRIMBLE COUNTY GENERATING STATION
586	IN0053571	I	MULZER CRUSHED STONE, INC.	CHARLESTOWN QUARRY
589.5	KY0038580	M	OLDHAM COUNTY SANITATION DISTRICT	CARDINAL HARBOUR WWTP
592	IN0020508	M	CITY OF CHARLESTOWN	CHARLESTOWN WWTP
593.5	IN0001163	I	U.S. DEPARTMENT OF THE ARMY	INDIANA ARMY AMMUNITION PLANT
596.9	KY0044261	M	LOUISVILLE & JEFFERSON COUNTY MSD	GLENVIEW BLUFF SUBDIVISION WWTP
600	IN0060224	M	INDIANA-AMERICAN WATER CO., INC./SIOTC	JEFFERSONVILLE SOUTHERN INDIANA OPERATIONS & TREATMENT CNTR
600.5	KY0097241	I	RIVER ROAD TERMINAL, INC.	
600.7	KY0003123	M	LOUISVILLE WATER COMPANY	B.E. PAYNE WTP
600.8	KY0001830	M	LOUISVILLE WATER COMPANY	ZORN AVENUE WTP
601.1	KY0095702	I	LOUISIANA DOCK COMPANY LLC	
601.2	KY0098710	I	NUGENT SAND COMPANY	NUGENT SAND COMPANY EXTRUSION MILL
602	IN0023965	M	OAK PARK CONSERVANCY DISTRICT	OAK PARK CONSERVANCY DISTRICT WWTP
603	KY0105236	I	MUHAMMAD ALI CENTER	MUHAMMAD ALI CENTER
603	KY0054771	I	MARATHON ASHLAND PETROLEUM LLC	LOUISVILLE RIVER ROAD ASPHALT TERMINAL
603	KY0053783	I	JEFFERSON COUNTY MEDICAL CENTER	MEDICAL CENTER STEAM AND CHILLED WATER PLANT
603	KY0046027	I	MISSOURI PORTLAND CEMENT COMPANY	LOUISVILLE PLANT
603.3	KY0002101	I	LOUISVILLE GAS AND ELECTRIC COMPANY	WATERSIDE STATION
603.5	KY0080675	I	HOME SUPPLY COMPANY	GALT HOUSE HOTEL
603.5	KY0069809	I	HUMANA, INC.	HUMANA BUILDING
604.1	IN0023302	M	CITY OF JEFFERSONVILLE & ENVIRONMENTAL MANAGEMENT CORP.	JEFFERSONVILLE WWTP
604.4	IN0060186	I	NATIONWIDE TRUCK SERVICE	
604.5	IN0025313	I	MARATHON ASHLAND PETROLEUM COMPANY	CLARKSVILLE TERMINAL
605	IN0003638	I	COLGATE - PALMOLIVE COMPANY	
606	IN0047058	M	TOWN OF CLARKSVILLE	CLARKSVILLE WWTP
606	KY0002089	I	LOUISVILLE GAS AND ELECTRIC COMPANY	OHIO FALLS GENERATING STATION

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ORMP	Permit Number	Type	Corporation Name	Plant Name
606.2	KY0020320	M	U.S. ARMY CORPS OF ENGINEERS-LOUISVILLE	LOUISVILLE REPAIR STATION
606.4	IN0002666	I	CALDWELL-MOSER LEATHER CO., INC.	
606.8	KY0105163	I	TGM CONSTRUCTORS, DBA	MCALPINE LOCK & DAM
609.5	IN0023884	M	CITY OF NEW ALBANY	NEW ALBANY WWTP
610	IN0002798	I	PUBLIC SERVICE COMPANY OF INDIANA	GALLAGHER GENERATING STATION
610.5	KY0070301	I	HEYBURN PARTNERSHIP	HEYBURN BUILDING
611.2	KY0002291	I	MARATHON ASHLAND PETROLEUM , LLC	LOUISVILLE-ALGONQUIN TERMINAL
611.6	KY0089711	I	BP PRODUCTS NORTH AMERICA, INCORPORATED	BP LOUISVILLE TERMINAL
612	KY0022411	M	LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT	MORRIS FORMAN WWTP
612	KY0021610	I	ASHLAND INCORPORATED	
612.3	KY0097179	I	CARBIDE/GRAPHITE GROUP, INC	LOUISVILLE PLANT
612.5	KY0101257	I	FIVE M TRANSPORTATION	
612.9	KY0002305	I	ROHM AND HAAS COMPANY	
613	KY0002305	I	ROHM AND HAAS COMPANY	
613	KY0002071	I	LOUISVILLE GAS AND ELECTRIC COMPANY	PADDY'S RUN STATION
613.1	KY0001457	I	OXY VINYLS, LP	BF GOODRICH COMPANY
613.1	KY0002305	I	ROHM AND HAAS COMPANY	
613.1	KY0001007	I	REYNOLDS METALS COMPANY	LOUISVILLE PLANT NO. 3
613.1	KY0001457	I	OXY VINYLS, LP	OXY VINYLS, LP
613.1	KY0002305	I	ROHM AND HAAS COMPANY	
613.1	KY0001457	I	OXY VINYLS, LP	POLY ONE
613.1	KY0001589	I	AMERICAN SYNTHETIC RUBBER COMPANY, LLC	
613.1	KY0001457	I	OXY VINYLS, LP	ZEON CHEMICALS
613.4	KY0001350	I	E.I. DU PONT DE NUMOURS AND COMPANY, INC.	
613.6	KY0002976	I	CITGO PETROLEUM CORPORATION	LOUISVILLE TERMINAL
614.1	KY0064629	I	MARATHON OIL COMPANY	
614.4	KY0002780	I	ASTRAZENECA	ATKEMIX TEN, INCORPORATED
614.8	KY0001112	I	BORDEN, INCORPORATED	
617.4	IN0059781	M	RDI / CAESARS RIVERBOAT CASINO, L.L.C.	CAESARS INDIANA GAMING FACILITY WWTP
617.4	KY0002062	I	LOUISVILLE GAS AND ELECTRIC COMPANY	CANE RUN GENERATING STATION
617.6	KY0097659	I	ELG METALS, INCORPORATED	
618.7	KY0096504	I	DJ/NYPRO	DJ/NYPRO LOUISVILLE
619.2	KY0090875	I	LOUISVILLE AND JEFFERSON COUNTY RIVERPORT AUTHORITY	
619.4	KY0103993	I	THORNTON TRANSPORTATION	THORNTON TRANSPORTATION TERMINAL
619.7	KY0086665	I	INTERPOLYMER CORPORATION	
620.1	KY0021881	I	MARATHON ASHLAND PETROLEUM, LLC	LOUISVILLE CANE RUN ROAD ASHALT TERMINAL
620.5	KY0021881	I	MARATHON ASHLAND PETROLEUM LLC	LOUISVILLE ASPHALT TERMINAL

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ORMP	Permit Number	Type	Corporation Name	Plant Name
621.3	KY0100803	I	JOHNSTOWN ROAD ELEMENTARY SCHOOL	JOHNSTOWN SCHOOL WWTP
621.5	IN0054852	I	US SILICA COMPANY	
622.9	KY0078956	M	LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT	WEST COUNTY WWTP
626	KY0003221	I	LOUISVILLE GAS AND ELECTRIC COMPANY	MILL CREEK STATION
626.9	KY0001210	I	KOSMOS CEMENT COMPANY	KOSMOS CEMENT COMPANY-LOUISVILLE PLANT
627.8	KY0087386	I	LOUISVILLE ENVIRONMENTAL SERVICES	WEST POINT FACILITY
631.4	KY0022152	M	CITY OF WEST POINT	WEST POINT WWTP
637.4	KY0074268	M	OTTER CREEK PARK LODGE	OTTER CREEK PARK WWTP
642	KY0002119	I	OLIN CORPORATION	DOE RUN, KENTUCKY PLANT
642.3	KY0043478	I	DOE VALLEY UTILITIES, INC.-	DOE VALLEY WWTP
642.9	KY0021474	M	CITY OF BRANDENBURG	BRANDENBURG WWTP
648	IN0060895	I	MULZER CRUSHED STONE, INC.	NEW AMSTERDAM QUARRY
664	IN0021121	M	TOWN OF LEAVENWORTH	LEAVENWORTH WWTP
674	IN0001139	I	MULZER CRUSHED STONE, INC.	CAPE SANDY QUARRY
710	KY0023272	I	CLOVER CREEK BRICK AND TILE	
711.3	KY0026701	M	CITY OF CLOVERPORT	CLOVERPORT WWTP
719.9	KY0001716	I	WEYERHAEUSER COMPANY	HAWESVILLE OPERATION-BLEACHED PULP MILL
720.5	KY0001716	I	WEYERHAEUSER COMPANY	HAWESVILLE OPERATIONS-BLEACHED PULP MILL
725.6	KY0092118	I	ARVIN ROLL COATER, INCORPORATED	
726.1	KY0065838	M	HANCOCK RIVERPORT PROPERTIES	
726.1	KY0101141	I	ALCOA AUTOMOTIVE CASTINGS	KENTUCKY CASTING CENTER
726.2	IN0001406	I	MAXON MARINE, INC.	
726.3	KY0101206	I	ALCOA	HAWESVILLE WORKS
726.5	IN0043460	M	TELL CITY WATER DEPARTMENT	TELL CITY WTP
726.6	IN0021016	M	CITY OF TELL CITY	TELL CITY WWTP
727.1	KY0002747	I	SOUTHWIRE COMPANY	
727.2	KY0001821	I	NATIONAL SOUTHWIRE ALUMINUM COMPANY	DIVISION OF SOUTHWIRE COMPANY
728	IN0059692	I	MULZER CRUSHED STONE, INC.	CAPE SANDY BARGE WATER DISCHARGE
728.1	KY0001937	I	WESTERN KENTUCKY ENERGY CORPORATION	KENNETH C. COLEMAN STATION
728.2	KY0001937	I	WESTERN KENTUCKY ENERGY CORPORATION	KENNETH C. COLEMAN STATION
728.3	KY0001937	I	WESTERN KENTUCKY ENERGY CORPORATION	KENNETH C. COLEMAN STATION
737.7	KY0052744	M	CITY OF LEWISPORT	LEWISPORT WTP
738.1	KY0023281	I	DAL-TILE INTERNATIONAL	
738.6	KY0025241	M	CITY OF LEWISPORT	LEWISPORT WWTP
743.5	IN0038300	M	TOWN OF GRANDVIEW	GRANDVIEW WWTP
744.7	IN0051845	I	AMERICAN ELECTRIC POWER POWER	ROCKPORT GENERATING FACILITY
745.5	IN0059650	I	AK STEEL CORPORATION	ROCKPORT WORKS
746.2	IN0021067	M	CITY OF ROCKPORT	ROCKPORT WWTP

Appendix A: Ohio River Discharge Information

ORMP	Permit Number	Type	Corporation Name	Plant Name
749.7	KY0104566	I	KINDER MORGAN BULK TERMINALS, INC.	OWENSBORO GATEWAY TERMINAL
750.9	KY0100471	I	OWENSBORO HARBOR SERVICE	WRIGHTS LANDING
751.3	KY0001953	I	W.R. GRACE AND COMPANY	
751.9	KY0101109	I	DARAMIC, INCORPORATED	
752	KY0099911	I	SPECIALTY PAPERBOARD, INC.	ENDURA PRODUCTS DIVISION
752.8	KY0001295	M	OWENSBORO MUNICIPAL UTILITIES	ELMER SMITH ELECTRIC GENERATING STATION
753	KY0083771	I	KENTUCKY FRIED CHICKEN	KENTUCKY FRIED CHICKEN WWTP
753.2	KY0095711	I	SOUTHERN STATES COOPERATIVE, INCORPORATED	SOUTHERN STATES RIVER TERMINAL COMPANY
753.3	KY0095711	I	SOUTHERN STATES COOPERATIVE, INCORPORATED	SOUTHERN STATES RIVER TERMINAL COMPANY
753.5	KY0001571	I	GREEN RIVER STEEL CORPORATION	
753.9	KY0076147	I	BUEHLER-RUCKRIEGEL	LONG JOHN SILVER'S SEAFOOD RESTAURANT, NO.3 WWTP
754	KY0033421	I	BROOKHAVEN EAST 60 APARTMENTS	EAST 60 APARTMENTS WWTP
754.5	KY0023817	I	WYNDALL'S CENTER	WYNDALL'S CENTER WWTP
754.5	KY0071684	I	KROGER COMPANY	KROGER FOOD STORE L-336
754.6	KY0056103	I	OSCAR HORNSBY, INC.	SUPER TEST FOOD MART #22
754.6	KY0073377	M	CITY OF OWENSBORO	OWENSBORO WWTP EAST
754.9	KY0069752	I	MCDONALD'S CORPORATION	MCDONALD'S WWTP
755.3	KY0046019	I	LAFARGE CORPORATION	
755.5	KY0090280	I	OWENSBORO GRAIN COMPANY, INCORPORATED	
755.5	KY0001031	I	BARTON BRANDS, LTD.	
756	KY0095729	I	OWENSBORO GRAIN COMPANY - GROUNDWATER REMEDIATION	
757.5	KY0001520	I	FIELD PACKING COMPANY	
757.8	KY0020095	M	REGIONAL WATER RESOURCE AGENCY	OWENSBORO - WEST WWTP
757.9	KY0101184	I	DES-BROTHERS MOTEL ASSOCIATES	HOLIDAY INN - OWENSBORO
759	KY0093734	I	DART POLYMERS, INCORPORATED	
759.5	KY0099724	I	EAST/WEST MARINE TERMINALS	
768.7	KY0095192	I	KIMBERLY CLARK CORPORATION	OWENSBORO FACILITY
770	IN0055212	I	WARRICK MINERALS, INC.	
772.5	IN0048429	I	YANKEETOWN DOCK CORPORATION	
773	IN0002259	I	SOUTHERN INDIANA GAS AND ELECTRIC COMPANY	F.B. CULLEY STATION
773.1	IN0002259	I	SIGECO	F.B. CULLEY SATION
773.5	IN0001155	I	ALUMINUM COMPANY OF AMERICA (ALCOA)	WARRICK OPERATIONS
778	IN0023892	M	TOWN OF NEWBURGH	NEWBURGH WWTP
784.9	KY0099422	I	OHIO VALLEY MARINE SERVICES, INC.	
790	IN0025348	I	MARATHON ASHLAND PETROLEUM COMPANY	EVANSVILLE TERMINAL
791.5	IN0043117	M	CITY OF EVANSVILLE	EVANSVILLE WTP
792.5	IN0033073	M	CITY OF EVANSVILLE & ENVIRONMENTAL MANAGEMENT CORP.	EVANSVILLE EAST WWTP

Appendix A: Ohio River Discharge Information

ORMP	Permit Number	Type	Corporation Name	Plant Name
793.5	IN0002241	I	SOUTHERN INDIANA GAS AND ELECTRIC COMPANY	OHIO RIVER GENERATING STATION
793.6	IN0047091	I	EVANSVILLE TERMINAL CORPORATION	BLACK BEAUTY COAL CO.
794	IN0032956	M	CITY OF EVANSVILLE & ENVIRONMENTAL MANAGEMENT CORP.	EVANSVILLE WEST WWTP
794.5	KY0099511	I	EVANSVILLE MARINE SERVICE, INCORPORATED	EVANSVILLE MARINE SERVICE
801	KY0095435	I	TRANSMONTAIGNE TERMINALING, INC.	
804	KY0002178	I	HENDERSON MUNICIPAL POWER AND LIGHT	
805.6	KY0020711	M	HENDERSON WATER UTILITY	HENDERSON WWTP #1
807.3	KY0002534	I	IMC-AGRICO CHEMICAL COMPANY	IMC-AGRICO CHEMICAL COMPANY
807.5	KY0024643	I	POLYMERIC RESOURCES CORPORATION	CUSTOM RESINS, INCORPORATED
807.5	KY0092126	I	HENDERSON COUNTY RIVERPORT AUTHORITY	
807.5	KY0100277	I	CONSOLIDATED GRAIN & BARGE MARINE SERVICES	CGB MARINE SERVICES
808	KY0026514	I	HENDERSON TEMINALING CO.	HENDERSON TERMINALING COMPANY
817	IN0052191	I	SOUTHERN INDIANA GAS AND ELECTRIC COMPANY	A.B. BROWN GENERATING STATION
828.2	KY0100773	I	MT. VERNON BARGE SERVICE, INC.	MT. VERNON BARGE SERVICE INC
829.3	IN0035696	M	CITY OF MOUNT VERNON	MT. VERNON WWTP
829.3	IN0003921	M	CITY OF MOUNT VERNON WATER WORKS	MOUNT VERNON WATER WORKS
829.3	IN0003921	M	CITY OF MT. VERNON	MT. VERNON WWTP
829.7	IN0002470	I	COUNTRYMARK CO-OP INC.	INDIANA FARM BUREAU REFINERY
830.1	IN0001970	I	MG INDUSTRIES	
830.4	IN0049948	I	MARATHON PETROLEUM COMPANY	MT VERNON TERMINAL
830.8	IN0002895	I	BABCOCK AND WILCOX COMPANY	
831.1	IN0059773	I	CF INDUSTRIES, INC.	MT VERNON TERMINAL
831.2	IN0002101	I	GENERAL ELECTRIC COMPANY	
842.1	KY0025844	M	CITY OF UNIONTOWN	UNIONTOWN WWTP
852.7	KY0001996	I	ISLAND CREEK COAL COMPANY	MORGANFIELD PLANT
859.5	IL0021776	M	CITY OF SHAWNEETOWN	CITY OF SHAWNEETOWN STP
880.5	IL0055581	M	VILLAGE OF CAVE IN ROCK	CAVE IN ROCK STP
889	IL0028690	M	VILLAGE OF ELIZABETHTOWN	ELIZABETHTOWN WWTP
891.5	IL0034207	M	CITY OF ROSICLARE	CITY OF ROSICLARE STP
891.7	IL0004251	I	OZARK - MAHONING COMPANY	JOHNSON WORKS, ROSICLARE TAILINGS PONDS
903	IL0028991	M	CITY OF GOLCONDA	GOLCONDA WWTP
929.1	KY0096776	I	MCGINNIS, INCORPORATED, DBA	NATIONAL MAINTENANCE & REPAIR OF KENTUCKY, INCORPORATED
929.5	KY0096776	I	MCGINNIS, INCORPORATED, DBA	NATIONAL MAINTENANCE & REPAIR OF KENTUCKY, INCORPORATED
934.3	KY0073113	M	PADUCAH WATER WORKS	PADUCAH WTP
934.6	KY0021695	I	MID WEST TERMINAL, INC.	
936	KY0022799	M	PADUCAH-McCRACKEN COUNTY JOINT SEWER AGENCY	PADUCAH WWTP
937.5	IL0027782	M	CITY OF BROOKPORT	BROOKPORT STP
942.9	IL0073717	I	MID-SOUTH TOWING COMPANY	METROPOLIS LOCATION

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ORMP	Permit Number	Type	Corporation Name	Plant Name
943.5	KY0099368	I	MID-SOUTH TOWING COMPANY	PADUCAH LOCATION
943.8	KY0042838	I	TYLER MOUNTAIN WATER COMPANY	RAINBOW DIVISION
944	IL0029874	M	CITY OF METROPOLIS	METROPOLIS WWTP
944.5	IL0076252	M	CITY OF METROPOLIS	METROPOLIS WATER TREATMENT PLANT
945	IL0004421	I	HONEYWELL INTERNATIONAL INCORPORATED	METROPOLIS WORKS
946	KY0004219	I	TENNESSEE VALLEY AUTHORITY	SHAWNEE FOSSIL PLANT
946	KY0004049	I	DEPARTMENT OF ENERGY	PADUCAH GASEOUS DIFFUSION PLANT
949.5	IL0004081	I	LAFARGE CORPORATION	CEMENT GROUP/ JOPPA PLANT
952	IL0004171	I	ELECTRIC ENERGY, INC.	JOPPA GENERATING STATION
952	ILG580156	M	JOPPA SANITARY DISTRICT	JOPPA STP
952.5	IL0042773	I	OHIO POWER COMPANY	COOK COAL TERMINAL
973	IL0071439	I	CGB WATERFRONT SERVICES	CONSOLIDATED GRAIN & BAGE WATERFRONT SERVICES
973.9	IL0041891	M	CITY OF MOUND CITY	MOUND CITY STP
974	IL0077674	I	MOUNDS PRODUCTION COMPANY, LLC	MOUNDS PRODUCTION COMPANY, LLC
974.5	KY0100269	I	CGB MARINE SERVICES	CONSOLIDATED GRAIN & BAGE WATERFRONT SERVICES
978	IL0046698	I	GARDEN INN MOTEL AND CAMPGROUND	GARDEN INN WWTP
979	IL0023825	M	CITY OF CAIRO	CAIRO STP
980	IL0071102	I	CGB MARINE SERVICES	CONSOLIDATED GRAIN & BARGE WATERFRONT SERVICES

Appendix B: Sampling Sites and Monitoring Locations for ORSANCO Programs

BIMONTHLY AND CLEAN METALS SAMPLING LOCATIONS				
Station Name	River	River Mile Point	Bordering States	STORET Code
New Cumberland	Ohio	54.4	OH - WV	OR926.6M
Pike Island	Ohio	84.2	OH - WV	OR896.8M
Hannibal	Ohio	126.4	OH - WV	OR8546M
Willow Island	Ohio	161.7	OH - WV	OR8192M
Belleville	Ohio	203.9	OH - WV	OR7771M
R.C. Byrd	Ohio	279.2	OH - WV	OR7018M
Greenup	Ohio	341	OH - KY	OR640M
Meldahl	Ohio	436.2	OH - KY	OR5448M
Anderson Ferry	Ohio	477.5	OH - KY	OR502.2M
Markland	Ohio	531.5	IN - KY	OR4495M
Louisville	Ohio	600.6	IN - KY	OR374.2M
West Point	Ohio	625.9	IN - KY	OR3551M
Cannelton	Ohio	720.7	IN - KY	OR2603M
Newburgh	Ohio	776.1	IN - KY	OR204.9M
J.T. Myers	Ohio	846	IN - KY	OR1350M
Smithland	Ohio	918.5	IL - KY	OR62.5M
Lock & Dam 52	Ohio	938.9	IL - KY	OR42.1M

Appendix B: Sampling Sites and Monitoring Locations for ORSANCO Programs

CONTACT RECREATION BACTERIA SAMPLING LOCATIONS		
Metropolitan Area	**Site**	**Location Description**
Pittsburgh	Site 1	Mile point 1.4L, above Brunot Island
		A left descending bank sample is collected by boat at this location
	Site 2	Mile point 1.4M, above Brunot Island
		A midstream sample is collected by boat at this location
	Site 3	Mile point 1.4R, above Brunot Island
		A right descending bank sample is collected by boat at this location
	Site 4	Mile point 4.3, above Davis and Neville Islands
		A midstream surface grab is collected by boat at this location
Wheeling	Site 1	Mile point 84.2, Ohio Fishing Pier at Pike Island
		A grab sample is collected from the park downstream of Pike Island Dam on the right descending bank
	Site 2	Milepoint 86.8, at the Wheeling Water Department Intake
		A grab sample is collected from the raw water intake
	Site 3	Mile point 91.4, below Wheeling Island
		A surface grab sample is collected from the right descending bank
	Site 4	Mile point 92.8, at the 48th Street Boat Club
		A surface grab sample is collected from the dock on the left descending bank
Huntington	Site 1	Mile point 305.1, at the Guyan Marina
		A surface grab sample is collected from a dock on the left descending bank
	Site 2	Mile point 308.1, at the Riverfront Public Launching Ramp
		A surface grab sample is collected from a dock on the left descending bank
	Site 3	Mile point 314.8, at the Kosmos Cement Company
		A bailer is lowered from a barge morring on the left descending bank.
Cincinnati	Site 1	Mile point 462.6, at the California Yacht Club
		A surface grab sample is collected from a dock on the right descending bank
	Site 2	Mile point 463.9, at AquaRamp Harbor and Marina
		A surface grab sample is collected from a dock on the left descending bank
	Site 3	Mile point 469.9, at Who-Dey Shuttle Dock
		A surface grab sample is collected from a dock on the left descending bank
	Site 4	Mile point 470.0, at the Serpentine Wall
		A surface grab sample is collected on the right descending bank
	Site 5	Mile point 477.5, at the Anderson Ferry
		A midstream surface grab sample is collected by boat at this locations
Louisville	Site 1	Mile point 594.0, at the Upper Louisville Water Company intake
		A grab sample is collected from the raw water intake at the water company
	Site 2	Mile point 608.7, at Jaycee's Boat Ramp
		A surface grab sample is collected from a dock on the right descending bank
	Site 3	Mile point 619.3 at the Greenwood Road Public Access Site
		A surface grab sample is collected from a dock on the left descending bank
Evansville	Site 1	Mile point 791.5, at the Evansville Water Plant
		A grab sample is collected from the raw water intake at the water plant
	Site 2	Mile point 793.7, at the Bristol-Myers parking lot
		A surface grab sample is collected on the righ descending bank.
	Site 3	Mile point 797.3 at the US Army Corps of Engineers ramp
		A surface grab sample is collected from a dock on the right descending bank

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	**River**	**State**	**Sample Type**	**Ohio River Confluence Mile Point**
1.0	Allegheny		Trib	
1.0	Monongahela		Trib	
1.5	Ohio	PA	POTW	1.29
3.3	Ohio	PA	POTW	3.1
6.2			Emsworth L&D	
6.4	Ohio		Standard	
9.5	Ohio	PA	POTW	9.32
11.4	Ohio	PA	POTW	11.23
12.5	Ohio	PA	POTW	12.3
13.2			Dashields L&D	
14.4	Ohio	PA	POTW	14.2
17.7	Ohio	PA	POTW	17.5
20.5	Ohio	PA	POTW	20.3
20.8	Ohio	PA	POTW	20.6
21.8	Ohio	PA	POTW	21.6
22.9	Ohio	PA	POTW	22.7
25.5	Ohio	PA	POTW	25.3
1.0	Beaver		Trib	
25.8	Ohio	PA	POTW	25.6
26.4	Ohio	PA	POTW	26.2
28.3	Ohio	PA	POTW	28.1
31.7			Montgomery L&D	
32.9	Ohio		Standard	
37.6	Ohio	PA	POTW	37.4
41.2	Ohio		Standard	
44.8	Ohio	OH	POTW	44.6
48.7	Ohio	OH	POTW	47.6
52.5	Ohio		Standard	
54.4			New Cumberland L&D	
56.4	Ohio		Standard	
60.3	Ohio	OH	POTW	60.1
66.4	Ohio	WV	POTW	66.2
66.9	Ohio	OH	POTW	66.7
70.7	Ohio	WV	POTW	70.5
71.8	Ohio	OH	POTW	71.6
74.9	Ohio	WV	POTW	74.7
80.2	Ohio		Standard	
84.2			Pike Island L&D	
85.6	Ohio		Standard	
91.2	Ohio	WV	POTW	90.8
94.2	Ohio	OH	POTW	94
97.8	Ohio		POTW	97.6
102.6	Ohio	WV	POTW	102.4
107.7	Ohio		Standard	
113.0	Ohio		Standard	
118.3	Ohio		Standard	
123.7	Ohio	OH	WWTP	123.5
124.9	Ohio	WV	POTW	124.7
126.4			Hannibal L&D	

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	River	State	Sample Type	Outfall/ Confluence Mile Point
129.1	Ohio		Standard	
133.4	Ohio	WV	POTW	133.2
138.7	Ohio		Standard	
144.2	Ohio		Standard	
149.6	Ohio		Standard	
155.0	Ohio		Standard	
160.4	Ohio		Standard	
161.7			Willow Island L&D	
165.8	Ohio		Standard	
171.2	Ohio	OH	POTW	171
1.0	Muskingum		Trib	172.1
175.1	Ohio		Standard	
179.4	Ohio		Standard	
183.5	Ohio	WV	POTW	183.3
1.0	L. Kanawha		Trib	184.6
185.9	Ohio	OH	POTW	185.7
190.8	Ohio		Standard	
195.7	Ohio	WV	POTW	195.5
1.0	Hocking		Trib	199.3
200.7	Ohio		Standard	
203.9			Belleville L&D	
205.7	Ohio		Standard	
210.7	Ohio		Standard	
215.7	Ohio		Standard	
220.4	Ohio	WV	POTW	220.2
225.4	Ohio		Standard	
230.4	Ohio		Standard	
235.6	Ohio		Standard	
237.5			Racine L&D	
240.4	Ohio		Standard	
245.4	Ohio		Standard	
250.4	Ohio		Standard	
255.5	Ohio		Standard	
260.6	Ohio		Standard	
265.7	0.7	WV	POTW	265.7
1.3	Kanawha		Trib	265.7
269.8	Ohio	OH	POTW	269.8
275.2	Ohio		Standard	
279.2			R.C. Byrd L&D	
279.2			R.C. Byrd L&D	
280.8	Ohio		Standard	
285.9	Ohio		Standard	
291.4	Ohio		Standard	
296.6	Ohio		Standard	
302.0	Ohio		Standard	
1.0	Guyandotte		Trib	305.2
307.7	Ohio		Standard	
313.3	Ohio	OH/WV	POTW	313.1
0.5	Big Sandy	KY	POTW	317.1
1.0	Big Sandy		Trib	317.1

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	River	State	Sample Type	Outfall/ Confluence Mile Point
317.2	Ohio	OH	POTW	317
321.5	Ohio	KY	POTW	321.3
327.4	Ohio	OH	POTW	327.2
327.7	Ohio	KY	POTW	327.5
328.0	Ohio	KY	POTW	327.8
332.5	Ohio	KY	POTW	332.3
1.0	Little Sandy		Trib	336.3
338.1	Ohio		Standard	
341.0			Greenup L&D	
343.5	Ohio		Standard	
349.2	Ohio	OH	POTW	349
352.0	Ohio	OH	POTW	351.8
353.8	Ohio	OH	POTW	353.6
0.5	Scioto		Trib	356.5
359.3	Ohio		Standard	
364.6	Ohio		Standard	
369.8	Ohio		Standard	
375.0	Ohio		Standard	
380.4	Ohio		Standard	
385.4	Ohio		Standard	
390.6	Ohio		Standard	
395.0	Ohio		Standard	
400.4	Ohio		Standard	
405.8	Ohio		Standard	
411.4	Ohio	KY	POTW	411.18
416.4	Ohio		Standard	
421.6	Ohio		Standard	
426.4	Ohio		Standard	
431.4	Ohio		Standard	
436.2			Meldahl L&D	
436.8	Ohio		Standard	
441.5	Ohio		Standard	
446.5	Ohio		Standard	
451.6	Ohio	KY	POTW	451.4
455.3	Ohio	OH	POTW	455.1
460.0	Ohio		Standard	
1.0	Little Miami		Trib	464.1
465.0	Ohio	OH	POTW	464.5
468.7	Ohio		Standard	
1.0	Licking		Trib	470.2
0.4	Mill Creek		Trib	472.5
472.7	Ohio	OH	POTW	472.5
477.6	Ohio	KY	POTW	477.4
482.2	Ohio	OH	POTW	482
486.2	Ohio	OH	POTW	486
489.7	Ohio		Standard	
1.0	Great Miami		Trib	491.1
493.2	Ohio	IN	POTW	493
498.0	Ohio		Standard	
503.1	Ohio		Standard	

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	River	State	Sample Type	Outfall/ Confluence Mile Point
508.3	Ohio		Standard	
513.4	Ohio		Standard	
518.5	Ohio		Standard	
523.4	Ohio		Standard	
528.4	Ohio		Standard	
531.7			Markland L&D	
533.2	Ohio		Standard	
538.5	Ohio		Standard	
543.5	Ohio		Standard	
1.5	Kentucky		Trib	545.8
548.3	Ohio		Standard	
553.6	Ohio		Standard	
558.8	Ohio	IN	POTW	558.6
562.7	Ohio	IN	POTW	562.5
567.6	Ohio		Standard	
572.5	Ohio		Standard	
577.4	Ohio		Standard	
582.9	Ohio		Standard	
587.8	Ohio		Standard	
592.2	Ohio	IN	POTW	592
597.1	Ohio		Standard	
602.2	Ohio	IN	POTW	602
604.3	Ohio	IN	POTW	604.1
607.5	Ohio	IN	POTW	606
606.8			McAlpine L&D	
609.7	Ohio	IN	POTW	609.5
612.2	Ohio	KY	POTW	612
617.6	Ohio		Standard	
623.1	Ohio	KY	POTW	622.9
628.1	Ohio		Standard	
1.5	Salt		Trib	
630.0	Ohio		Standard	
631.6	Ohio	KY	POTW	631.4
637.6	Ohio	KY	POTW	637.4
643.1	Ohio	KY	POTW	642.9
648.9	Ohio		Standard	
654.0	Ohio		Standard	
659.0	Ohio		Standard	
664.2	Ohio	IN	POTW	664
669.1	Ohio		Standard	
674.5	Ohio		Standard	
680.4	Ohio		Standard	
685.6	Ohio		Standard	
690.7	Ohio		Standard	
695.6	Ohio		Standard	
700.9	Ohio		Standard	
706.2	Ohio		Standard	
711.5	Ohio	KY	Standard	711.3
717.4	Ohio		Standard	
720.7			Cannelton L&D	

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	River	State	Sample Type	Outfall/ Confluence Mile Point
721.5	Ohio		Standard	
726.8	Ohio	IN	POTW	726.6
732.5	Ohio		Standard	
738.8	Ohio	KY	POTW	738.6
742.4	Ohio	IN	POTW	742.2
746.4	Ohio	IN	POTW	746.2
750.6	Ohio		Standard	
754.8	Ohio	KY	POTW	754.6
758.0	Ohio	KY	POTW	757.8
763.2	Ohio		Standard	
769.1	Ohio		Standard	
773.6	Ohio		Standard	
776.1			Newburgh L&D	
778.2	Ohio	IN	POTW	778
782.8	Ohio		Standard	
2.0	Green		Maj Trib	784.2
787.0	Ohio		Standard	
792.7	Ohio	IN	POTW	792.5
794.2	Ohio	IN	POTW	794
800.0	Ohio		Standard	
805.8	Ohio	KY	POTW	805.6
811.3	Ohio		Standard	
817.0	Ohio		Standard	
823.2	Ohio		Standard	
829.5	Ohio	IN	POTW	829.3
832.2	Ohio		Standard	
837.2	Ohio		Standard	
842.3	Ohio	KY	POTW	842.1
846.0			J.T. Meyers	
846.5	Ohio		Standard	
2.0	Wabash		Maj Trib	848
851.3	Ohio		Standard	
855.5	Ohio		Standard	
859.7	Ohio	IL	POTW	859.5
864.4	Ohio		Standard	
1.4	Saline		Maj Trib	867.3
869.8	Ohio		Standard	
1.2	Tradewater		Maj Trib	873.5
875.7	Ohio		Standard	
880.7	Ohio	IL	POTW	880.5
885.0	Ohio		Standard	
889.2	Ohio	IL	POTW	889
891.7	Ohio	IL	POTW	891.5
897.5	Ohio		Standard	
903.2	Ohio	IL	POTW	903
908.0	Ohio		Standard	
912.6	Ohio		Standard	
917.6	Ohio		Standard	
918.5			Smithland L&D	
3.3	Cumberland		Maj Trib	920.4

LONGITUDINAL BACTERIA SURVEY SAMPLING LOCATIONS				
Mile Point	River	State	Sample Type	Outfall/ Confluence Mile Point
923.4	Ohio		Standard	
927.9	Ohio		Standard	
932.2	Ohio		Standard	
4.3	Tennessee		Maj Trib	934.5
936.2	Ohio	KY	POTW	936
937.7	Ohio	IL	POTW	937.5
938.9			L&D 52	
940.9	Ohio		Standard	
944.2	Ohio	IL	POTW	944
947.5	Ohio		Standard	
952.2	Ohio	IL	POTW	952
957.7	Ohio		Standard	
962.6			L&D 53	
963.0	Ohio		Standard	
969.2	Ohio		Standard	
974.1	Ohio	IL	POTW	973.9
979.2	Ohio	IL	POTW	979

Appendix B: Longitudinal Sampling Locations

Mile Point	River
1.0	Monongahela
1.0	Allegheny
1.5	Ohio
3.3	Ohio
6.2	Emsworth L&D
6.4	Ohio
9.5	Ohio
11.4	Ohio
12.5	Ohio
13.2	Dashields L&D
14.4	Ohio
17.7	Ohio
20.5	Ohio
20.8	Ohio
21.8	Ohio
22.9	Ohio
25.5	Ohio
1.0	Beaver
25.8	Ohio
26.4	Ohio
28.3	Ohio
31.7	Montgomery L&D
32.9	Ohio
37.6	Ohio
41.2	Ohio
44.8	Ohio
48.7	Ohio
52.5	Ohio
54.4	New Cumberland L&D
56.4	Ohio
60.3	Ohio
66.4	Ohio
68.2	Ohio
70.7	Ohio
71.8	Ohio
74.9	Ohio
80.2	Ohio
84.2	Pike Island L&D
85.6	Ohio
91.2	Ohio
94.2	Ohio
97.8	Ohio
102.6	Ohio
107.7	Ohio
113	Ohio
118.3	Ohio
123.7	Ohio
124.9	Ohio
126.4	Hannibal L&D
129.1	Ohio
133.4	Ohio
138.7	Ohio
144.2	Ohio
149.6	Ohio
155	Ohio
160.4	Ohio
161.7	Willow Island L&D
165.8	Ohio
171.2	Ohio
1	Muskingum
175.1	Ohio
179.4	Ohio
183.5	Ohio
1	L. Kanawha
185.9	Ohio
190.8	Ohio
195.7	Ohio
1	Hocking
200.7	Ohio
203.9	Belleville L&D

Mile Point	River
205.7	Ohio
210.7	Ohio
215.7	Ohio
220.4	Ohio
225.4	Ohio
230.4	Ohio
235.6	Ohio
237.5	Racine L&D
240.4	Ohio
245.4	Ohio
250.4	Ohio
255.5	Ohio
260.6	Ohio
265.7	0.7
1.3	Kanawha
269.8	Ohio
275.2	Ohio
279.2	R.C. Byrd L&D
280.8	Ohio
285.9	Ohio
291.4	Ohio
296.6	Ohio
279.2	R.C. Byrd L&D
280.8	Ohio
285.9	Ohio
291.4	Ohio
296.6	Ohio
302.0	Ohio
1.0	Guyandotte
307.7	Ohio
313.3	Ohio
0.5	Big Sandy
1.0	Big Sandy
317.2	Ohio
321.5	Ohio
327.4	Ohio
327.7	Ohio
328.0	Ohio
332.5	Ohio
1.0	Little Sandy
338.1	Ohio
341.0	Greenup L&D
343.5	Ohio
349.2	Ohio
352.0	Ohio
353.8	Ohio
0.5	Scioto
359.3	Ohio
364.6	Ohio
369.8	Ohio
375.0	Ohio
380.4	Ohio
385.4	Ohio
390.6	Ohio
395.0	Ohio
400.4	Ohio
405.8	Ohio
411.4	Ohio
416.4	Ohio
421.6	Ohio
426.4	Ohio
431.4	Ohio
436.2	Meldahl L&D
436.8	Ohio
441.5	Ohio
446.5	Ohio
451.6	Ohio
455.3	Ohio
460.0	Ohio
1.0	Little Miami

Mile Point	River
465.4	Ohio
468.7	Ohio
1.0	Licking
0.3	Mill Creek
472.7	Ohio
477.6	Ohio
482.2	Ohio
486.2	Ohio
489.7	Ohio
1.0	Great Miami
493.2	Ohio
498.0	Ohio
503.1	Ohio
508.3	Ohio
513.4	Ohio
518.5	Ohio
523.4	Ohio
528.4	Ohio
531.7	Markland L&D
533.2	Ohio
538.5	Ohio
543.5	Ohio
1.5	Kentucky
548.3	Ohio
553.6	Ohio
558.8	Ohio
562.7	Ohio
567.6	Ohio
572.5	Ohio
577.4	Ohio
582.9	Ohio
587.8	Ohio
592.2	Ohio
597.1	Ohio
602.2	Ohio
604.3	Ohio
606.8	McAlpine L&D
607.5	Ohio
609.7	Ohio
612.2	Ohio
617.6	Ohio
623.1	Ohio
628.1	Ohio
1.5	Salt
631.6	Ohio
637.6	Ohio
643.1	Ohio
648.9	Ohio
607.5	Ohio
609.7	Ohio
612.2	Ohio
617.6	Ohio
623.1	Ohio
628.1	Ohio
1.5	Salt
631.6	Ohio
637.6	Ohio
643.1	Ohio
648.9	Ohio
654.0	Ohio
659.2	Ohio
664.2	Ohio
669.1	Ohio
674.5	Ohio
680.4	Ohio
684.9	Ohio
690.7	Ohio
695.6	Ohio
700.9	Ohio
706.2	Ohio

Mile Point	River
711.5	Ohio
717.2	Ohio
720.7	Cannelton L&D
721.5	Ohio
727.0	Ohio
732.5	Ohio
739.2	Ohio
742.4	Ohio
746.4	Ohio
750.6	Ohio
754.8	Ohio
758.0	Ohio
763.2	Ohio
769.1	Ohio
773.6	Ohio
776.1	Newburgh L&D
778.2	Ohio
782.8	Ohio
2.3	Green
787.0	Ohio
792.7	Ohio
794.2	Ohio
799.5	Ohio
805.8	Ohio
811.3	Ohio
817.0	Ohio
823.2	Ohio
829.5	Ohio
832.2	Ohio
837.2	Ohio
842.3	Ohio
846.0	J.T. Meyers
846.5	Ohio
2.0	Wabash
851.3	Ohio
855.5	Ohio
859.7	Ohio
864.4	Ohio
1.4	Saline
869.8	Ohio
1.2	Tradewater
875.7	Ohio
880.7	Ohio
885.0	Ohio
889.2	Ohio
891.7	Ohio
897.5	Ohio
903.2	Ohio
908.0	Ohio
912.6	Ohio
917.6	Ohio
918.5	Smithland L&D
3.3	Cumberland
923.4	Ohio
927.9	Ohio
932.2	Ohio
4.3	Tennessee
936.2	Ohio
937.7	Ohio
938.9	L&D 52
940.9	Ohio
944.2	Ohio
947.5	Ohio
952.2	Ohio
957.7	Ohio
962.6	L&D 53
963.0	Ohio
969.2	Ohio
974.1	Ohio
979.2	Ohio

Appendix C: Summary of Clean Metals Results 2005-2009

Dissolved Metals Summary Statistics

Site	Mile	Stat	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
New Cumberland	54.4	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	26	28	2	3	28	28	28	0	0	10	1	27
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		28.7	0.85	58.6	44.0		1.62	7.28	61.1	5.30	29.9	160.9	5.81			0.970	0.100	7.30
		75th Percentile		16.7	0.64	43.7	34.1		0.91	3.82	61.1	5.30	9.4	98.3	2.77			0.915	0.104	3.96
		Median		14.5	0.41	34.9	27.4		0.57	2.55	55.9	1.91	7.4	44.5	2.34			0.795	0.104	3.06
		25th Percentile		11.3	0.33	31.7	23.3		0.34	1.58	50.6	1.54	6.2	4.7	2.08			0.691	0.104	2.03
Pike Island	84.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	24	28	1	3	28	28	28	0	0	17	2	24
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		34.7	1.27	54.0	43.4		1.59	3.73	53.0	4.83	12.5	153.0	5.43			1.100	0.120	8.58
		75th Percentile		16.1	0.74	45.6	36.1		1.06	2.35	53.0	4.83	10.0	103.0	3.07			1.011	0.122	2.70
		Median		13.9	0.40	35.0	28.6		0.73	1.62	53.0	3.34	7.9	33.8	2.18			0.749	0.117	2.01
		25th Percentile		11.5	0.29	31.4	23.3		0.29	1.07	53.0	2.56	6.1	5.2	1.86			0.600	0.111	1.45
Hannibal	126.4	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	25	28	2	4	28	28	28	0	0	16	0	23
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		31.0	1.10	55.3	42.9		1.95	4.31	61.9	5.27	13.4	141.8	4.69			1.110		6.22
		75th Percentile		18.6	0.72	42.8	33.9		0.76	2.49	61.9	4.60	9.5	92.1	3.10			0.995		2.34
		Median		13.9	0.42	35.6	30.6		0.51	1.42	61.0	3.45	8.3	29.1	2.27			0.790		1.85
		25th Percentile		11.1	0.29	32.3	25.4		0.24	1.15	60.0	2.75	7.1	2.8	1.80			0.609		1.34
Willow Island	161.8	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	24	28	2	4	28	28	28	1	0	17	1	23
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		29.5	0.89	57.9	42.8		1.97	5.09	67.0	2.31	14.5	119.5	4.29	0.11		1.340	0.100	3.76
		75th Percentile		16.7	0.66	46.1	35.9		0.68	2.19	67.0	2.14	10.2	85.7	2.97	0.11		0.890	0.101	2.49
		Median		13.0	0.42	37.2	30.3		0.41	1.46	58.8	1.95	8.3	22.2	2.23	0.11		0.666	0.101	1.82
		25th Percentile		10.0	0.30	32.6	25.8		0.21	1.10	50.5	1.91	6.9	2.7	1.78	0.11		0.600	0.101	1.38
Belleville	203.9	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	26	28	4	5	28	28	28	3	0	15	0	20
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		20.2	1.02	52.7	46.5		2.41	4.28	58.2	3.40	15.8	104.8	2.99	0.13		1.350		4.45
		75th Percentile		13.3	0.82	44.4	38.1		0.96	2.05	57.9	2.63	12.3	53.8	2.45	0.13		0.908		2.36
		Median		11.5	0.52	34.1	34.5		0.60	1.52	57.3	2.01	9.9	11.0	2.03	0.10		0.695		1.72
		25th Percentile		7.1	0.35	33.1	30.4		0.34	1.19	57.0	1.91	8.4	3.8	1.65	0.10		0.610		1.46
R.C. Byrd	279.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	27	28	28	0	23	28	5	5	28	28	28	1	0	12	0	17
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		12.7	0.96	54.7	39.9		1.91	2.34	71.0	5.40	14.6	261.8	2.23	0.16		1.250		2.64
		75th Percentile		10.7	0.78	45.1	31.6		0.93	1.84	66.0	3.18	10.9	69.8	1.96	0.16		0.853		1.64
		Median		9.5	0.42	34.4	26.8		0.41	1.12	61.1	2.17	7.5	56.5	1.43	0.16		0.745		1.48
		25th Percentile		7.5	0.31	30.3	23.0		0.31	0.89	61.0	2.12	6.4	34.4	1.27	0.16		0.597		1.12
Greenup	341	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	19	28	1	3	28	28	28	1	0	18	0	20
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		16.3	1.08	53.0	51.2		2.76	3.05	53.0	6.44	14.2	68.8	7.62	0.10		1.090		4.96
		75th Percentile		10.8	0.68	41.3	33.8		0.87	1.91	53.0	6.45	10.9	33.9	1.96	0.10		0.831		2.71
		Median		8.6	0.39	34.1	28.6		0.54	1.39	53.0	3.50	9.2	14.0	1.85	0.10		0.779		1.85
		25th Percentile		7.2	0.30	30.9	25.0		0.25	0.92	53.0	2.64	8.2	4.9	1.37	0.10		0.570		1.27
Meldahl	436.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	23	28	3	3	28	28	28	0	0	16	0	17
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		14.6	0.97	58.3	49.6		2.17	2.37	71.0	4.87	15.5	25.2	2.26			1.160		13.13
		75th Percentile		9.6	0.80	43.4	32.5		0.71	1.82	71.0	4.87	11.5	10.8	1.85			0.865		2.50
		Median		8.2	0.46	35.4	30.3		0.40	1.20	58.0	2.66	9.5	4.6	1.56			0.725		1.90
		25th Percentile		6.0	0.36	31.3	26.9		0.18	1.04	52.3	2.01	8.3	2.1	1.16			0.651		1.34
Anderson Ferry	477.5	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	25	28	2	3	28	28	28	3	0	16	1	20
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		22.0	1.10	57.5	61.5		1.72	2.93	59.3	6.90	14.9	127.7	2.57	0.13		1.030	0.100	6.90
		75th Percentile		11.2	0.80	47.4	37.4		0.75	1.87	59.3	6.90	12.7	29.6	1.83	0.13		0.926	0.104	2.79
		Median		9.7	0.56	36.9	32.7		0.56	1.46	58.7	2.30	10.8	9.9	1.51	0.11		0.725	0.104	1.92
		25th Percentile		7.6	0.42	31.8	28.5		0.22	1.18	58.0	2.15	9.0	5.7	1.37	0.11		0.631	0.104	1.55
Markland	531.5	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	26	28	2	5	28	28	28	1	0	18	0	24
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		17.9	1.53	61.2	45.2		1.63	3.19	67.9	7.10	17.1	32.6	2.85	0.13		1.500		13.69
		75th Percentile		10.5	0.93	44.0	37.4		0.66	1.90	67.9	2.51	12.9	10.5	1.85	0.13		0.858		2.20
		Median		7.7	0.53	35.6	33.5		0.45	1.49	59.0	2.45	11.0	5.3	1.46	0.13		0.710		1.69
		25th Percentile		6.4	0.40	31.9	28.6		0.26	1.16	50.0	2.12	9.2	2.5	1.21	0.13		0.526		1.27
Louisville	600.6	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	23	28	3	2	28	28	28	3	0	16	1	15
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		72.6	1.17	66.2	55.1		2.90	3.44	113.2	2.42	18.7	203.6	3.31	0.18		1.290	0.110	3.24
		75th Percentile		11.2	1.01	45.6	39.2		1.09	2.08	113.2	2.42	14.4	23.0	1.66	0.18		0.923	0.113	2.18
		Median		8.1	0.62	35.3	36.6		0.61	1.54	73.3	1.97	11.1	15.3	1.47	0.14		0.793	0.113	1.32
		25th Percentile		6.6	0.50	30.0	32.5		0.25	1.09	59.0	1.52	9.8	8.7	1.17	0.12		0.662	0.113	1.12

Appendix C: Summary of Clean Metals Results 2005-2009

Dissolved Metals Summary Statistics																				
Site	Mile	Stat	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	3	25	28	1	17	28	28	28	2	0	25	4	22
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Point	625.9	Maximum		18.6	1.35	66.8	62.3	0.15	1.85	5.10	67.4	9.23	21.8	91.0	4.05	0.13		3.220	0.110	4.97
		75th Percentile		11.7	1.07	48.9	45.8	0.15	0.63	2.47	67.4	4.67	15.2	39.2	2.73	0.13		2.538	0.111	2.78
		Median		9.2	0.69	37.8	41.1	0.12	0.47	1.83	67.4	2.73	12.5	22.2	1.75	0.12		1.690	0.108	1.77
		25th Percentile		7.7	0.54	31.5	35.0	0.11	0.31	1.25	67.4	2.44	9.8	9.1	1.50	0.12		0.894	0.105	1.36
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	22	28	2	3	28	28	28	0	0	17	0	14
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cannelton	720.7	Maximum		13.1	1.13	62.6	73.8		2.89	2.64	54.0	17.34	19.0	18.9	3.33			1.360		8.44
		75th Percentile		8.7	0.92	46.9	39.3		0.85	1.85	54.0	17.34	13.1	6.7	1.67			1.099		2.26
		Median		7.1	0.63	32.2	34.5		0.47	1.47	52.8	1.87	10.6	3.0	1.33			0.815		1.48
		25th Percentile		6.1	0.45	31.0	32.2		0.36	1.17	51.5	1.59	9.2	1.5	1.19			0.612		1.30
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	1	24	28	2	8	28	28	28	2	0	20	1	15
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Newburgh	776	Maximum		12.0	1.20	62.4	56.0	0.10	1.82	2.36	68.9	12.87	21.9	21.6	3.68	0.17		1.490	0.120	3.91
		75th Percentile		8.2	0.95	46.4	39.4	0.10	0.56	2.01	68.9	10.06	12.9	9.2	1.78	0.17		0.957	0.117	2.08
		Median		6.9	0.64	35.2	35.7	0.10	0.39	1.53	62.5	3.30	11.3	4.5	1.33	0.14		0.788	0.117	1.40
		25th Percentile		5.8	0.48	30.9	34.1	0.10	0.23	1.19	56.0	1.82	10.2	1.5	1.17	0.10		0.592	0.117	1.07
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	23	28	1	4	28	28	28	0	0	17	0	10
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J.T. Myers	846	Maximum		12.2	1.16	60.6	59.2		2.75	2.29	63.0	18.09	19.8	9.5	3.76			1.090		2.10
		75th Percentile		8.2	0.88	43.1	39.5		0.64	1.82	63.0	13.29	13.1	4.0	1.52			0.867		1.48
		Median		6.4	0.69	34.3	36.9		0.39	1.53	63.0	6.62	11.3	1.7	1.24			0.728		1.34
		25th Percentile		5.5	0.47	30.8	35.0		0.18	1.24	63.0	3.14	9.4	0.9	1.12			0.627		1.14
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	24	28	3	7	28	28	28	1	0	20	0	10
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Smithland	918.5	Maximum		11.6	1.27	52.2	61.7		2.78	2.60	57.4	14.99	18.9	10.1	2.17	0.11		1.070		3.15
		75th Percentile		5.2	1.03	42.8	43.5		0.54	1.77	57.4	8.61	14.3	4.5	1.59	0.11		0.921		1.85
		Median		4.3	0.79	38.1	41.0		0.34	1.48	56.0	2.63	13.1	2.3	1.34	0.11		0.696		1.36
		25th Percentile		3.2	0.64	32.8	37.6		0.23	1.32	56.0	1.71	11.0	1.1	1.22	0.11		0.556		1.22
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	0	22	28	2	6	28	28	28	0	0	20	0	11
		# Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L&D 52	939.9	Maximum		12.0	1.63	52.5	49.9		1.74	2.60	85.8	23.44	16.9	73.9	2.47			1.100		4.69
		75th Percentile		6.1	1.06	41.2	42.5		0.84	1.63	85.8	7.12	14.3	7.7	1.47			0.783		1.85
		Median		4.6	0.82	36.7	39.6		0.40	1.54	70.9	4.43	12.7	4.2	1.33			0.720		1.15
		25th Percentile		3.4	0.65	33.2	33.8		0.29	1.33	56.0	1.87	10.5	1.2	1.11			0.587		1.05

Appendic C: Summary of Clean Metals Results 2005-2009

Total Recoverable Metals Summary Statistics

Site	Mile	Stat	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
New Cumberland	54.4	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	4	27	28	28	19	28	28	28	27	0	14	3	28
		# violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		1022	1.27	56.6	44.8	0.13	2.53	8.7	2271	8.52	11.9	282.1	6.54	3.18		1.21	0.12	20.4
		75th Percentile		362	0.83	46.9	35.1	0.13	1.57	5.0	763	3.83	9.4	148.0	4.46	0.85		0.80	0.12	10.1
		Median		162	0.57	41.1	28.4	0.12	1.30	3.5	349	2.45	7.7	98.8	2.78	0.53		0.72	0.11	6.4
		25th Percentile		96	0.45	38.4	25.0	0.11	1.00	2.7	206	1.86	6.7	50.1	2.24	0.38		0.59	0.10	4.9
Pike Island	84.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	2	28	28	28	17	28	28	28	28	0	16	3	28
		# violations	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		Maximum		1217	1.34	58.3	47.0	0.21	2.94	6.5	3232	15.11	12.7	355.4	9.73	4.65		1.80	0.17	40.4
		75th Percentile		443	0.73	49.0	36.8	0.21	1.89	3.2	912	5.23	10.1	167.7	4.99	1.22		1.08	0.17	12.3
		Median		140	0.58	42.0	29.5	0.20	1.41	2.6	311	3.45	8.1	87.2	2.88	0.48		0.77	0.14	5.0
		25th Percentile		71	0.44	38.8	25.4	0.20	1.01	1.9	156	2.41	6.5	43.4	2.25	0.30		0.60	0.11	3.5
Hannibal	126.4	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	27	28	28	3	28	28	28	22	28	28	28	28	0	19	1	28
		# violations	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		Maximum		1530	1.59	58.8	49.4	0.17	3.28	4.9	3335	50.82	13.6	370.9	9.41	4.15		1.42	0.10	36.6
		75th Percentile		423	0.73	49.6	35.8	0.17	1.61	3.5	883	4.36	9.8	157.7	4.56	1.05		0.95	0.10	9.8
		Median		162	0.58	44.4	32.2	0.13	1.35	2.6	412	3.00	8.5	92.9	3.13	0.50		0.72	0.10	5.0
		25th Percentile		95	0.45	38.6	28.0	0.13	0.90	2.0	176	2.03	7.3	47.4	2.26	0.31		0.61	0.10	3.3
Willow Island	161.8	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	27	28	28	4	28	28	28	19	28	28	28	27	0	21	0	28
		# violations	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
		Maximum		998	1.05	61.2	47.7	0.15	2.88	4.8	2068	27.09	14.6	282.7	6.99	2.54		1.36		32.3
		75th Percentile		540	0.81	49.6	36.4	0.14	1.70	3.1	1181	5.99	9.8	161.6	4.96	1.31		0.96		11.1
		Median		160	0.64	45.5	32.3	0.12	1.33	2.5	388	4.73	8.7	88.5	2.99	0.54		0.73		6.0
		25th Percentile		97	0.40	39.8	27.3	0.11	1.05	2.0	154	2.28	7.3	40.2	2.17	0.30		0.60		3.1
Belleville	203.9	# Samples	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
		# Detects	0	27	27	27	27	2	27	27	27	21	27	27	27	26	0	21	1	27
		# violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		1315	1.46	58.9	52.8	0.12	3.31	3.5	2604	10.82	15.4	202.0	5.80	2.36		1.65	0.13	20.5
		75th Percentile		536	1.00	49.5	43.0	0.12	2.00	2.7	1058	5.43	12.7	137.1	4.15	1.23		0.86	0.13	9.5
		Median		178	0.85	43.7	35.9	0.11	1.51	2.3	499	3.14	10.3	81.8	2.78	0.59		0.63	0.13	4.6
		25th Percentile		85	0.61	38.6	31.9	0.10	1.21	2.0	140	2.24	9.3	36.4	1.96	0.23		0.59	0.13	2.3
R.C. Byrd	279.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	1	28	28	28	23	28	28	28	28	0	16	0	28
		# violations	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		Maximum		947	1.25	58.6	42.3	0.11	2.82	3.5	1823	12.95	13.3	352.9	4.04	2.18		1.25		12.1
		75th Percentile		418	0.89	51.8	35.8	0.11	1.83	2.7	868	3.94	11.1	114.8	2.97	1.03		0.88		6.5
		Median		336	0.59	41.7	27.3	0.11	1.50	2.2	691	2.72	8.2	100.2	2.47	0.68		0.70		5.4
		25th Percentile		258	0.48	37.7	24.2	0.11	1.30	1.6	504	2.30	7.0	79.4	2.24	0.57		0.59		4.1
Greenup	341	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	26	28	28	1	28	28	28	21	28	28	28	27	0	23	1	28
		# violations	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		Maximum		2745	2.29	67.6	40.9	0.25	6.21	7.7	7446	18.00	14.1	515.5	10.26	7.47		1.12	0.11	68.2
		75th Percentile		391	0.89	49.5	36.5	0.25	2.01	2.9	694	5.36	11.3	97.8	3.64	1.44		0.94	0.11	12.1
		Median		252	0.57	43.8	30.3	0.25	1.45	2.2	529	2.41	9.9	63.0	2.36	0.59		0.74	0.11	5.8
		25th Percentile		138	0.46	37.1	26.5	0.25	1.21	1.7	292	1.87	9.1	45.7	1.99	0.37		0.63	0.11	3.5
Meldahl	436.2	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	27	28	28	2	28	28	28	18	28	28	28	28	0	21	0	28
		# violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum		1763	1.61	60.9	42.9	0.12	3.24	4.3	3527	9.18	14.7	293.1	6.34	3.86		1.36		32.8
		75th Percentile		485	1.00	51.3	37.4	0.12	1.77	2.7	796	3.92	12.4	95.8	3.45	1.23		1.07		7.8
		Median		256	0.75	43.8	32.0	0.12	1.44	2.2	439	2.60	10.4	43.5	2.34	0.62		0.86		4.7
		25th Percentile		158	0.50	37.5	28.9	0.11	1.05	1.6	282	1.87	9.5	34.0	1.89	0.36		0.62		3.3
Anderson Ferry	477.5	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	1	28	27	28	28	6	28	28	28	23	28	28	28	28	0	22	2	28
		# violations	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
		Maximum	0.11	5117	2.97	114.5	45.2	0.44	9.85	15.8	11817	33.89	14.7	1132.1	22.31	18.96		1.66	0.17	90.1
		75th Percentile	0.111	1193	1.25	56.3	37.7	0.16	2.75	3.8	1948	10.07	12.2	133.0	4.68	2.34		0.93	0.17	13.6
		Median	0.111	415	0.85	46.9	33.6	0.14	1.55	2.9	769	3.43	10.8	74.2	2.77	1.05		0.73	0.16	6.9
		25th Percentile	0.1105	178	0.71	42.7	30.2	0.12	1.18	2.4	337	2.76	9.6	48.9	2.30	0.46		0.61	0.16	4.3
Markland	531.5	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	4	28	28	28	21	28	28	28	27	0	21	2	28
		# violations	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		Maximum		3390	1.67	68.2	44.6	0.20	4.94	6.7	5536	15.37	16.7	342.5	9.55	5.74		1.27	0.17	25.7
		75th Percentile		933	1.15	51.2	39.2	0.17	2.10	3.3	1838	6.64	13.0	108.4	3.99	2.12		0.86	0.17	12.2
		Median		352	0.88	45.5	36.4	0.14	1.63	2.5	525	3.76	11.9	61.4	2.88	0.89		0.81	0.14	5.9
		25th Percentile		155	0.68	41.3	31.8	0.13	1.26	2.0	249	2.24	10.2	38.2	1.80	0.31		0.60	0.11	3.0
Louisville	600.6	# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	4	28	28	28	20	28	28	28	28	0	20	2	28
		# violations	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
		Maximum		5926	2.04	82.9	45.4	0.18	8.08	9.3	8827	28.50	15.6	639.7	13.12	9.28		1.41	0.12	46.2
		75th Percentile		1041	1.33	58.3	41.2	0.17	2.55	3.5	1624	7.05	13.8	111.5	4.24	1.80		0.99	0.12	9.8
		Median		546	0.87	47.4	36.7	0.15	1.76	2.6	948	5.34	11.4	72.2	2.76	0.94		0.76	0.11	6.0
		25th Percentile		280	0.70	38.4	34.3	0.13	1.39	2.2	393	3.70	10.7	42.4	2.27	0.42		0.59	0.10	3.6

Appendic C: Summary of Clean Metals Results 2005-2009

Total Recoverable Metals Summary Statistics																				
Site	Mile	Stat	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	1	28	28	28	28	13	28	28	28	28	28	28	28	28	0	26	7	28
		# violations	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0
West Point	625.9	Maximum	0.1	9006	4.41	150.1	74.5	0.76	18.00	20.5	19591	122.44	21.2	1236.9	35.29	23.23		3.19	0.25	113.7
		75th Percentile	0.104	1669	1.39	60.1	49.5	0.18	3.31	5.3	2859	31.02	16.2	210.7	6.05	3.44		2.61	0.15	18.1
		Median	0.104	706	1.18	50.9	42.8	0.16	1.97	3.7	1358	24.47	13.3	107.8	3.89	1.32		1.59	0.13	8.2
		25th Percentile	0.1043	326	0.88	45.2	37.1	0.13	1.63	3.1	508	14.76	11.0	71.0	3.15	0.69		1.03	0.11	5.4
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	4	28	28	28	21	28	28	28	28	0	22	2	28
		# violations	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Cannelton	720.7	Maximum		4678	2.47	95.1	60.6	0.25	7.49	10.9	9319	29.46	16.0	718.8	15.82	9.93		1.25	0.16	47.5
		75th Percentile		1331	1.21	56.0	39.5	0.22	2.45	3.7	2339	10.68	13.0	142.9	4.54	2.30		0.91	0.16	13.2
		Median		416	0.91	47.3	36.3	0.18	1.60	2.3	661	5.54	10.9	46.8	2.62	0.77		0.75	0.13	4.3
		25th Percentile		154	0.74	41.3	33.7	0.15	1.11	2.0	251	2.33	9.8	30.7	2.06	0.27		0.61	0.11	2.3
		# Samples	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
		# Detects	0	27	27	27	27	5	27	27	27	24	27	27	27	26	0	21	2	27
		# violations	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
Newburgh	776	Maximum		3368	2.25	76.2	46.2	0.22	6.02	9.3	6778	25.73	16.6	572.6	12.75	8.38		1.39	0.12	39.6
		75th Percentile		1801	1.40	59.3	41.8	0.20	2.92	4.6	3169	14.70	14.2	256.6	5.92	3.78		0.96	0.12	18.2
		Median		528	0.96	50.6	36.8	0.15	1.93	2.8	775	5.73	11.6	57.8	2.77	0.89		0.84	0.11	5.0
		25th Percentile		169	0.75	42.5	34.5	0.11	1.48	2.2	250	2.83	10.7	33.0	2.13	0.30		0.66	0.10	2.1
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	3	28	28	28	22	28	28	28	28	0	23	2	27
		# violations	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
J.T. Myers	846	Maximum		3255	1.62	73.4	44.4	0.23	5.70	9.8	6966	43.76	16.6	570.0	13.05	8.39		1.43	0.14	35.1
		75th Percentile		1747	1.31	54.9	40.5	0.23	3.10	4.4	3174	9.51	13.1	172.8	5.47	3.18		0.98	0.14	16.9
		Median		638	1.04	48.8	37.1	0.16	1.82	2.6	841	5.22	11.3	72.9	2.99	0.96		0.72	0.13	5.5
		25th Percentile		222	0.92	43.1	34.6	0.11	1.44	2.0	334	2.40	10.1	35.6	2.06	0.34		0.62	0.12	2.9
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	3	28	28	28	20	28	28	28	28	0	22	0	28
		# violations	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
Smithland	918.5	Maximum		3245	2.17	71.3	48.8	0.22	5.19	8.2	5701	33.87	17.2	406.9	11.36	6.62		1.36		30.3
		75th Percentile		1789	1.39	54.6	44.6	0.22	3.30	4.0	2703	13.58	15.1	125.0	4.77	2.80		0.91		14.8
		Median		545	0.99	47.7	41.4	0.11	1.61	2.4	822	7.65	13.5	50.3	2.43	0.67		0.80		4.9
		25th Percentile		185	0.85	43.4	39.0	0.11	1.26	1.9	266	3.01	11.7	29.7	1.95	0.23		0.63		2.3
		# Samples	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
		# Detects	0	28	28	28	28	7	28	28	28	24	28	28	28	28	0	22	2	28
		# violations	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
L&D 52	939.9	Maximum		5762	2.56	98.2	50.4	0.22	8.62	10.5	9875	36.00	16.9	712.8	15.72	10.48		1.43	0.16	82.8
		75th Percentile		2456	1.54	59.9	43.7	0.22	3.95	5.1	3956	14.65	14.1	224.0	6.28	3.95		0.87	0.16	20.6
		Median		976	1.25	48.5	41.2	0.13	2.03	3.2	1634	7.62	13.0	99.4	3.47	2.02		0.75	0.13	9.1
		25th Percentile		360	1.00	45.9	35.6	0.12	1.58	1.8	545	3.11	11.6	54.0	1.97	0.45		0.63	0.11	3.0

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Ag	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/04/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	<0.1	<0.1
			09/17/07	<0.1	<0.1
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	<0.1
			07/15/09	<0.1	<0.1
Pike Island	84.2	Ag	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/04/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	<0.1	<0.1
			09/17/07	<0.1	<0.1
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	<0.1
			07/15/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Ag	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/04/06	<0.1	<0.1
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	<0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
Willow Island	161.8	Ag	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	<0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Ag	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	<0.1
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	<0.1
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1
R.C. Byrd	279.2	Ag	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	<0.1
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	<0.1
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Ag	01/26/05	<0.1	<0.1
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/25/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	
			07/26/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/29/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/15/09	<0.1	<0.1
Meldahl	436.2	Ag	01/25/05	<0.1	<0.1
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/28/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Ag	01/25/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/27/05	<0.1	<0.1
			11/16/05	<0.1	<0.1
			01/20/06	<0.1	<0.1
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/11/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	0.11
			03/27/07	<0.1	<0.1
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	<0.1
			05/13/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/23/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/14/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1
Markland	531.5	Ag	01/26/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/27/05	<0.1	<0.1
			11/16/05	<0.1	<0.1
			01/20/06	<0.1	<0.1
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/13/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	<0.1
			03/27/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	<0.1
			05/13/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Ag	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/26/07	<0.1	<0.1
			01/15/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/20/08	<0.1	<0.1
			07/14/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1
West Point	625.9	Ag	01/27/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/19/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/26/07	<0.1	<0.1
			01/15/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/20/08	<0.1	<0.1
			07/14/08	<0.1	0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Ag	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/27/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/18/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/21/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
Newburgh	776	Ag	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	<0.1
			03/25/08	<0.1	
			05/21/08	<0.1	<0.1
			07/15/08	<0.1	<0.1
			09/29/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/20/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Ag	01/26/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	<0.1
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/22/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1
Smithland	918.5	Ag	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	<0.1
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	<0.1
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	<0.1
			07/22/08	<0.1	<0.1
			09/30/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Ag	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	<0.1
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	<0.1
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/16/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/11/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1
New Cumberland	54.4	Al	01/20/05	16.19	555.34
			03/16/05	16.78	340.62
			05/12/05	24.93	107.41
			07/14/05	14.48	127.58
			09/07/05	10.73	68.06
			11/08/05	9.12	83.98
			01/04/06	10.57	1021.67
			03/07/06	11.37	94.01
			05/04/06	16.22	97.85
			07/13/06	14.54	14.92
			09/14/06	12.78	226.11
			11/01/06	14.79	757.08
			01/12/07	16.7	433.38
			03/12/07	14.86	325.67
			05/07/07	28.71	156.73
			07/10/07	15.68	125.98
			09/17/07	11.21	72.28
			11/05/07	10.07	72
			01/08/08	13.95	260.64
			03/18/08	14.43	382.85
			05/28/08	25.27	179.98
			07/16/08	21.42	167.61
			09/24/08	9.64	73.39
			11/12/08	14.07	303.89
			02/09/09	10.15	629.78
			03/16/09	14.2	697.44
			05/18/09	18.59	141.17
			07/15/09	17.5	126.39

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Al	01/20/05	14.96	581.07
			03/16/05	16.04	457.07
			05/12/05	34.67	147.04
			07/14/05	16.07	71.88
			09/07/05	12.92	82.39
			11/08/05	11.86	68.37
			01/04/06	11.06	1216.9
			03/07/06	10.02	92.26
			05/04/06	15.05	70.17
			07/13/06	16.14	144.62
			09/14/06	8.6	253.36
			11/01/06	13.9	976.64
			01/12/07	14.91	766.09
			03/12/07	15.04	364.78
			05/07/07	30.32	135.22
			07/10/07	16.2	67.04
			09/17/07	10.11	49.06
			11/05/07	9.91	69.7
			01/08/08	12.16	282.73
			03/18/08	13.7	429.05
			05/28/08	29.28	199.74
			07/16/08	27.64	127.2
			09/24/08	11.86	60.13
			11/12/08	9.58	62.05
			02/09/09	10.8	700.15
			03/16/09	13.88	778.22
			05/18/09	22.27	125.8
			07/15/09	11.97	99.56
Hannibal	126.4	Al	01/20/05	19.05	884.21
			03/16/05	17.32	469.52
			05/12/05	30.97	129.89
			07/14/05	18.58	79.71
			09/15/05	15.12	74.62
			11/15/05	9.85	104.93
			01/04/06	10.84	1346.11
			03/13/06	9.98	520
			05/03/06	19.24	66.66
			07/18/06	13.26	91.88
			09/06/06	11.98	336.54
			11/07/06	15.57	250.74
			01/02/07	13.59	139.87
			03/13/07	15.85	338.25
			05/10/07	29.91	133.5
			07/12/07	14.26	51.95
			09/24/07	9.22	85.4
			11/28/07	8.74	713.03
			01/09/08	13.36	250.33
			03/26/08	18.52	531.16
			05/15/08	20.44	376.62
			07/17/08	21.94	79.77
			09/17/08	13.32	131.86
			11/19/08	9.97	110.52
			02/10/09	11.34	346.29
			03/10/09	13.15	1530.3
			05/19/09	18.01	184.57
			07/22/09	8.87	97.87

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Al	01/04/05	13.13	809.96
			03/15/05	17.87	430.91
			05/04/05	18.61	156.57
			07/12/05	16.43	72.73
			09/15/05	11.39	46.02
			11/15/05	10.89	92.18
			01/03/06	14.8	622.43
			03/13/06	10.23	729
			05/03/06	16.3	104.44
			07/18/06	11.92	101.03
			09/06/06	9.79	329.79
			11/07/06	12.08	299.09
			01/02/07	12.61	154.47
			03/13/07	16.98	496.95
			05/10/07	29.54	105.73
			07/12/07	9.8	81.28
			09/24/07	6.2	52.68
			11/28/07	7.68	663.79
			01/09/08	13.9	564.53
			03/26/08	17.16	614.42
			05/15/08	14.03	454.14
			07/17/08	19.62	83.54
			09/08/08	9.18	83.85
			11/19/08	8.92	163.29
			02/10/09	12.94	515.11
			03/10/09	14.66	998.18
			05/19/09	17.03	143.54
			07/22/09	4.43	145.31
Belleville	203.9	Al	01/04/05	12.27	1033.12
			03/15/05	20.23	516
			05/04/05	17.63	341.75
			07/12/05	11.95	85.48
			09/13/05	5.85	43.4
			11/03/05	6.36	157.58
			01/03/06	10.01	888.48
			03/09/06	10.11	177.89
			05/11/06	12.83	71.14
			07/12/06	9.28	150.79
			09/19/06	7.2	396.21
			11/24/06	12.48	535.61
			01/04/07	10.96	151.26
			03/15/07	15.61	589.61
			05/09/07	18.64	270.61
			07/17/07	5.77	34.12
			09/19/07	5.48	62.95
			11/08/07	6.04	102.96
			01/07/08	10.04	258.39
			03/13/08	13.13	1314.91
			05/19/08	20.09	981.09
			07/23/08	13.1	104.45
			09/08/08	7.06	69.81
			11/13/08	4.65	142.83
			01/22/09	13.03	
			03/09/09	13.59	639.41
			05/13/09	13.37	466.28
			07/13/09	7.75	85.15

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Al	01/04/05	9.99	380.09
			03/15/05	10.74	380.76
			05/04/05	9.44	397.17
			07/12/05	12.69	318.82
			09/13/05	8.05	179.24
			11/03/05	6.66	239.05
			01/03/06	7.85	317.1
			03/09/06	10.71	332.89
			05/11/06	7.58	323.58
			07/12/06	7.51	647.33
			09/19/06	5.2	706.24
			11/24/06	7.45	338.26
			01/04/07	8.56	145.51
			03/15/07	10.4	855.32
			05/09/07	12.36	661.81
			07/17/07	9.83	182.56
			09/19/07	7.86	158.22
			11/08/07	7.24	423.68
			01/07/08	11.24	219.44
			03/13/08	10.27	946.87
			05/19/08	12.27	512.95
			07/23/08	12.38	397.07
			09/17/08	6.24	190.28
			11/13/08	5.48	388.16
			01/22/09	9.49	277.62
			03/09/09	12.56	293.41
			05/13/09	6.87	411.39
			07/13/09	10.07	287.33
Greenup	341	Al	01/26/05	9.05	2745.46
			03/23/05	14.93	902
			05/24/05	16.29	227.76
			07/14/05	12.22	59.18
			09/20/05	5.77	136.96
			11/08/05	4.74	138.12
			01/19/06	8.48	1078.46
			03/07/06	7.38	137
			05/10/06	7.22	88.57
			07/25/06	9.08	261.76
			09/12/06	6.99	332.72
			11/28/06	8.66	223.2
			01/30/07	9.14	340.58
			03/15/07	13.67	609.45
			05/09/07	11.21	
			07/26/07	7.33	89.06
			09/13/07	6.89	113.07
			11/29/07	4.5	605.03
			01/29/08	10.36	241.82
			03/20/08	7.99	1452.35
			05/29/08	13.58	224.38
			07/21/08	8.28	105.31
			09/25/08	7.18	197.14
			11/15/08	4.88	428.65
			01/22/09	9.7	306.64
			03/09/09	11.7	283.9
			05/28/09	8.48	311.82
			07/15/09	9.31	353.75

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Al	01/25/05	9.57	1759.56
			03/23/05	14.55	257.88
			05/24/05	14.45	262.33
			07/14/05	8.21	652.8
			09/20/05	8.84	92.56
			11/08/05	3.2	518.37
			01/19/06	7.3	818.11
			03/07/06	6.45	183.94
			05/10/06	5.84	132.79
			07/12/06	6.66	180.8
			09/12/06	6.18	450.63
			11/28/06	8.43	264.45
			01/30/07	8.19	337.8
			03/15/07	9.01	702.33
			05/09/07	10.21	440.69
			07/25/07	5.85	58.86
			09/13/07	5.31	100.52
			11/29/07	3.24	544.01
			01/28/08	11.08	223.23
			03/26/08	10.29	1763.3
			05/29/08	12.34	163.27
			07/21/08	5.49	93.47
			09/25/08	9.48	123.71
			11/15/08	5.42	254.96
			01/22/09	8.97	296.1
			03/09/09	9.68	231.88
			05/28/09	7.16	192.26
			07/29/09	7.9	152.81
Anderson Ferry	477.5	Al	01/25/05	11.26	1445.61
			03/24/05	22.02	885.83
			05/23/05	17.24	570.66
			07/13/05	10.58	104.49
			09/27/05	17.77	151.82
			11/16/05	5.06	1416.84
			01/20/06	7.87	1326.45
			03/06/06	7.48	103.69
			05/09/06	9.33	325.65
			07/12/06	10.06	204.48
			09/11/06	5.03	327.27
			11/09/06	9.2	654.37
			01/24/07	7.21	5117.31
			03/27/07	13.18	1426.05
			05/08/07	14.34	541.14
			07/24/07	10.97	107.2
			09/18/07	6.28	104.05
			11/28/07	4.14	351.79
			01/09/08	10.28	518.61
			03/24/08	9.88	2837.73
			05/13/08	3.57	1507.98
			07/17/08	9.52	396.91
			09/23/08	11.82	123.81
			11/19/08	8.21	80.73
			01/14/09	7.76	1059.16
			03/09/09	11.17	433.12
			05/28/09	9.81	374.67
			07/29/09	9.68	249.12

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Al	01/26/05	10.96	962.1
			03/24/05	17.9	904
			05/23/05	13.14	316.19
			07/13/05	15.99	95.63
			09/27/05	7.58	132.04
			11/16/05	4.76	820.47
			01/20/06	7.08	1168.96
			03/06/06	5.94	201.51
			05/09/06	7.17	85.46
			07/13/06	6.33	169.85
			09/13/06	5.52	599.97
			11/09/06	7.96	394.68
			01/24/07	9.22	1104.74
			03/27/07	14.82	1511.53
			05/22/07	10.98	176.47
			07/25/07	6.84	53.62
			09/18/07	6.39	99.59
			11/28/07	3.19	281.75
			01/09/08	11.55	387.25
			03/24/08	6.51	3389.98
			05/13/08	8.32	995.05
			07/21/08	8.06	165.58
			09/24/08	7.76	126.75
			11/19/08	5.58	396.97
			02/02/09	6.15	981.64
			03/09/09	10.03	594.28
			05/28/09	7.81	241.38
			07/16/09	7.67	144.38
Louisville	600.6	Al	01/26/05	12.44	1664.48
			03/22/05	14.1	401.83
			05/23/05	11.51	922.29
			07/13/05	8.44	146.97
			09/21/05	12.63	307.61
			11/10/05	4.32	305.79
			01/25/06	5.39	1167.4
			03/09/06	5.08	179.57
			05/17/06	6.32	342.26
			07/12/06	6.59	254.96
			09/20/06	5.83	593.72
			11/15/06	8.14	524.81
			01/31/07	9.95	542.98
			03/22/07	10.96	3623.05
			05/22/07	14.62	1858.89
			07/24/07	8.24	93.33
			09/18/07	7.87	122.19
			11/26/07	3.6	149.16
			01/15/08	7.55	1080.63
			03/20/08	6.66	5926.45
			05/20/08	8.8	697.71
			07/14/08	14.14	2721.17
			09/24/08	6.95	89.46
			11/19/08	6.84	1001.23
			01/22/09	7.59	348.54
			03/12/09	72.64	614.79
			05/28/09	9.77	735.45
			07/16/09	8.04	548.18

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Al	01/27/05	9.65	1712.15
			03/22/05	14.71	636.87
			05/23/05	11.55	1626.73
			07/13/05	11.43	166.41
			09/21/05	18.55	130.95
			11/10/05	7.12	353.76
			01/25/06	5.37	2623.98
			03/09/06	5.56	1100
			05/17/06	7.96	358.07
			07/12/06	11.35	322.97
			09/20/06	6.4	586.11
			11/15/06	9.74	895.32
			01/19/07	9.25	1116.32
			03/22/07	7.55	3826.81
			05/22/07	14.25	436.08
			07/25/07	11.76	97.88
			09/18/07	14.81	110.97
			11/26/07	7.23	329.99
			01/15/08	7.76	1887.68
			03/20/08	7.5	4651.04
			05/20/08	7.77	9006.45
			07/14/08	8.44	8167.55
			09/24/08	13.7	91.32
			11/19/08	8.82	514.03
			01/22/09	7.84	775.5
			03/12/09	9.75	941.98
			05/28/09	9.08	1225.72
			07/16/09	11.87	317.95
Cannelton	720.7	Al	01/26/05	11.16	2576.04
			03/22/05	13.12	558.72
			05/23/05	6.33	735.29
			07/13/05	6.03	155.61
			09/21/05	8.8	110.52
			11/10/05	5.27	150.58
			01/25/06	8.07	3191.65
			03/09/06	4.33	114.43
			05/09/06	6.91	152.92
			07/27/06	7.05	264.45
			09/14/06	7.49	488.6
			11/01/06	5.95	2880.02
			01/31/07	9.88	712.01
			03/22/07	10.67	4677.99
			05/08/07	8.56	343.57
			07/24/07	6.64	62.26
			09/19/07	7.63	115.66
			11/27/07	3.76	231.15
			01/23/08	7.13	572.72
			03/18/08	9.91	1835.33
			05/21/08	7.4	1706.09
			07/23/08	5.16	142.53
			09/18/08	9.03	205.85
			11/18/08	4.84	201.83
			02/03/09	6.26	1368.73
			03/10/09	8.21	1293.16
			05/21/09	6.17	838.74
			07/22/09	7.09	268.06

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Al	01/26/05	9.92	2589.39
			03/22/05	11.95	974.66
			05/23/05	8.25	3367.73
			07/13/05	6.17	94.47
			09/21/05	6.91	83.95
			11/09/05	5.13	169.43
			01/25/06	6.89	2979.51
			03/09/06	4.9	182.64
			05/10/06	11.67	347.65
			07/12/06	6.49	658.61
			09/20/06	6.02	430.54
			11/15/06	9.97	640.79
			01/31/07	8.56	1495.39
			03/22/07	7.22	3197.74
			05/22/07	5.11	425.25
			07/24/07	7.57	45.59
			09/19/07	6.53	60.06
			11/27/07	3.78	277.94
			01/23/08	6.68	2442.66
			03/25/08	7.53	
			05/21/08	7.06	1904.49
			07/15/08	8.09	111.18
			09/29/08	10.64	70.33
			11/18/08	5.65	527.63
			02/03/09	4.62	1801.42
			03/10/09	7.32	793.98
			05/20/09	5.02	1165.66
			07/22/09	6.44	310.97
J.T. Myers	846	Al	01/26/05	8.87	1803.47
			03/21/05	10.91	1003
			05/24/05	8.41	844.71
			07/12/05	12.19	129.05
			09/20/05	5.59	216.24
			11/09/05	5.38	228.09
			01/24/06	5.49	3254.5
			03/08/06	3.68	191.58
			05/16/06	7.33	391.15
			07/11/06	6.44	571.6
			09/19/06	4.99	518.59
			11/15/06	6.4	1279.07
			01/30/07	7.82	2039.18
			03/22/07	6.9	2416.66
			05/21/07	4.42	350.41
			07/25/07	6.43	93.15
			09/20/07	6.79	135.13
			11/28/07	5.47	704.19
			01/24/08	6.3	1060.54
			03/18/08	8.36	1690.32
			05/21/08	5.81	2440.66
			07/22/08	8.05	64.17
			09/17/08	10.83	264.96
			11/17/08	7.12	245.48
			02/02/09	6.18	2924.19
			03/10/09	6.08	1303.16
			05/19/09	4.61	1941.24
			07/21/09	8.47	210.37

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Al	01/27/05	3.64	2964.63
			03/21/05	11.18	847.29
			05/24/05	6.12	659.83
			07/12/05	11.62	105.62
			09/20/05	2.54	154.35
			11/09/05	2.2	167.44
			01/24/06	4.35	3244.87
			03/08/06	2.57	205.17
			05/16/06	4.35	739.63
			07/11/06	4.97	302.18
			09/19/06	3.27	431.15
			11/14/06	5.21	847.4
			01/30/07	4.65	1963.53
			03/21/07	7.04	2718.38
			05/21/07	2.23	100.89
			07/25/07	3.96	206.46
			09/20/07	2.38	45.69
			11/28/07	4.03	234.62
			01/24/08	3.59	1769.03
			03/17/08	5.21	1601.33
			05/22/08	5.76	3059.1
			07/22/08	3.92	375.5
			09/30/08	3.16	196.17
			11/17/08	1.14	125.23
			02/02/09	5.21	2012.37
			03/10/09	4.83	1561.34
			05/19/09	4.17	1809.28
			07/21/09	5.02	174.65
L&D 52	939.9	Al	01/27/05	6.6	1824.25
			03/21/05	8.27	1375
			05/24/05	6.56	1013.36
			07/12/05	11.95	241.9
			09/20/05	2.86	192.99
			11/09/05	1.87	577.01
			01/24/06	4.8	2527.12
			03/08/06	2.53	467
			05/16/06	5.16	835.76
			07/11/06	5.65	937.72
			09/19/06	2.99	4495.52
			11/14/06	6.98	1178.01
			01/30/07	4.69	2537.9
			03/21/07	6.97	2968.71
			05/21/07	4.52	227.65
			07/25/07	4.09	208.15
			09/20/07	3.12	84.83
			11/28/07	3.4	703.87
			01/24/08	3.82	2516.76
			03/17/08	4.84	1553.62
			05/22/08	4.91	5761.81
			07/21/08	3.92	273.81
			09/16/08	4.31	500.41
			11/17/08	1.97	366.27
			02/02/09	4.97	2395.04
			03/11/09	4.36	2838.06
			05/19/09	3.31	1388.92
			07/21/09	7.1	353.96

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	As	01/20/05	0.3	0.91
			03/16/05	0.21	0.55
			05/12/05	0.4	0.13
			07/14/05	0.73	0.57
			09/07/05	0.73	0.83
			11/08/05	0.54	0.61
			01/04/06	0.37	0.9
			03/07/06	0.15	0.11
			05/04/06	0.39	0.44
			07/13/06	0.63	0.56
			09/14/06	0.65	0.83
			11/01/06	0.5	1.27
			01/12/07	0.42	0.99
			03/12/07	0.41	0.6
			05/07/07	0.32	0.46
			07/10/07	0.85	0.43
			09/17/07	0.7	0.65
			11/05/07	0.62	0.41
			01/08/08	0.25	0.49
			03/18/08	0.28	0.33
			05/28/08	0.35	0.38
			07/16/08	0.62	0.62
			09/24/08	0.75	0.75
			11/12/08	0.82	1.01
			02/09/09	0.28	0.55
			03/16/09	0.38	0.91
			05/18/09	0.36	0.54
			07/15/09	0.6	0.47
Pike Island	84.2	As	01/20/05	0.27	0.55
			03/16/05	0.23	0.6
			05/12/05	0.38	0.17
			07/14/05	0.8	0.66
			09/07/05	0.92	0.63
			11/08/05	0.61	0.33
			01/04/06	0.34	1.2
			03/07/06	0.18	0.15
			05/04/06	0.3	0.36
			07/13/06	0.53	0.68
			09/14/06	0.56	0.85
			11/01/06	0.52	1.33
			01/12/07	0.31	0.99
			03/12/07	0.35	0.49
			05/07/07	0.34	0.54
			07/10/07	0.74	0.4
			09/17/07	0.73	0.67
			11/05/07	0.83	0.48
			01/08/08	0.19	0.22
			03/18/08	0.27	0.48
			05/28/08	0.19	0.25
			07/16/08	0.75	0.66
			09/24/08	1.27	1.34
			11/12/08	0.74	0.56
			02/09/09	0.22	0.54
			03/16/09	0.42	1.03
			05/18/09	0.33	0.62
			07/15/09	0.82	0.78

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	As	01/20/05	0.14	0.72
			03/16/05	0.19	0.58
			05/12/05	0.37	0.13
			07/14/05	0.75	0.6
			09/15/05	0.78	1.02
			11/15/05	0.69	<0.1
			01/04/06	0.38	1.19
			03/13/06	0.2	0.27
			05/03/06	0.5	0.28
			07/18/06	0.55	0.57
			09/06/06	0.73	1
			11/07/06	0.3	0.73
			01/02/07	0.4	0.64
			03/13/07	0.4	0.48
			05/10/07	0.3	0.7
			07/12/07	0.76	0.45
			09/24/07	0.72	0.69
			11/28/07	0.65	0.63
			01/09/08	0.32	0.23
			03/26/08	0.25	0.53
			05/15/08	0.44	0.56
			07/17/08	0.55	0.45
			09/17/08	1.1	1.13
			11/19/08	0.82	0.92
			02/10/09	0.21	0.44
			03/10/09	0.2	1.59
			05/19/09	0.29	0.58
			07/22/09	0.88	0.54
Willow Island	161.8	As	01/04/05	0.28	0.94
			03/15/05	0.25	0.61
			05/04/05	0.37	0.15
			07/12/05	0.73	0.53
			09/15/05	0.81	0.97
			11/15/05	0.76	<0.1
			01/03/06	0.48	0.71
			03/13/06	0.22	0.4
			05/03/06	0.41	0.33
			07/18/06	0.7	0.8
			09/06/06	0.76	0.99
			11/07/06	0.43	0.86
			01/02/07	0.37	0.81
			03/13/07	0.28	0.65
			05/10/07	0.36	0.35
			07/12/07	0.59	0.35
			09/24/07	0.54	0.55
			11/28/07	0.64	0.81
			01/09/08	0.34	0.51
			03/26/08	0.25	0.55
			05/15/08	0.31	0.43
			07/17/08	0.52	0.35
			09/08/08	0.89	0.78
			11/19/08	0.68	0.91
			02/10/09	0.23	0.64
			03/10/09	0.31	1.05
			05/19/09	0.26	0.37
			07/22/09	0.63	0.68

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	As	01/04/05	0.56	1.46
			03/15/05	0.22	0.49
			05/04/05	0.4	0.48
			07/12/05	0.82	0.68
			09/13/05	1	1.15
			11/03/05	0.9	0.63
			01/03/06	0.43	1
			03/09/06	0.25	0.28
			05/11/06	0.5	0.65
			07/12/06	0.86	1.2
			09/19/06	0.82	1.13
			11/24/06	0.39	0.92
			01/04/07	0.54	1
			03/15/07	0.3	0.9
			05/09/07	0.49	0.85
			07/17/07	0.76	0.37
			09/19/07	0.82	0.86
			11/08/07	1.02	0.83
			01/07/08	0.31	0.13
			03/13/08	0.32	0.86
			05/19/08	0.36	0.8
			07/23/08	0.81	0.61
			09/08/08	0.86	0.98
			11/13/08	0.93	1.01
			01/22/09	0.18	
			03/09/09	0.34	0.9
			05/13/09	0.43	0.59
			07/13/09	0.7	0.69
R.C. Byrd	279.2	As	01/04/05	0.33	0.56
			03/15/05	<0.1	0.57
			05/04/05	0.25	0.23
			07/12/05	0.84	0.73
			09/13/05	0.81	0.99
			11/03/05	0.96	0.63
			01/03/06	0.34	0.4
			03/09/06	0.18	0.2
			05/11/06	0.42	0.58
			07/12/06	0.59	1.25
			09/19/06	0.71	1.18
			11/24/06	0.31	0.72
			01/04/07	0.32	0.46
			03/15/07	0.18	0.89
			05/09/07	0.45	0.9
			07/17/07	0.82	0.4
			09/19/07	0.73	1.03
			11/08/07	0.86	1.01
			01/07/08	0.35	0.59
			03/13/08	0.27	0.57
			05/19/08	0.28	0.37
			07/23/08	0.78	0.58
			09/17/08	0.93	1.04
			11/13/08	0.66	0.82
			01/22/09	0.21	0.5
			03/09/09	0.34	0.55
			05/13/09	0.37	0.47
			07/13/09	0.67	0.72

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	As	01/26/05	0.29	2.29
			03/23/05	0.26	0.89
			05/24/05	0.41	<0.1
			07/14/05	0.67	0.48
			09/20/05	0.77	1.16
			11/08/05	0.78	0.56
			01/19/06	0.3	1.01
			03/07/06	0.15	0.11
			05/10/06	0.32	0.42
			07/25/06	0.68	0.77
			09/12/06	0.55	0.95
			11/28/06	0.33	0.46
			01/30/07	0.3	0.52
			03/15/07	0.19	0.78
			05/09/07	0.36	
			07/26/07	0.68	0.3
			09/13/07	1.08	0.96
			11/29/07	0.69	0.87
			01/29/08	0.3	<0.1
			03/20/08	0.23	0.83
			05/29/08	0.31	0.38
			07/21/08	0.56	0.27
			09/25/08	0.77	0.55
			11/15/08	0.74	1.2
			01/22/09	0.22	0.51
			03/09/09	0.35	0.7
			05/28/09	0.42	0.59
			07/15/09	0.63	0.55
Meldahl	436.2	As	01/25/05	0.41	1.61
			03/23/05	0.31	0.47
			05/24/05	0.46	0.31
			07/14/05	0.86	1.14
			09/20/05	0.96	1.24
			11/08/05	0.91	1.05
			01/19/06	0.48	1
			03/07/06	0.2	<0.1
			05/10/06	0.42	0.65
			07/12/06	0.61	0.75
			09/12/06	0.77	1.2
			11/28/06	0.36	0.65
			01/30/07	0.35	0.8
			03/15/07	0.36	0.91
			05/09/07	0.37	0.67
			07/25/07	0.82	0.31
			09/13/07	0.97	0.81
			11/29/07	0.83	0.84
			01/28/08	0.31	0.4
			03/26/08	0.34	1.08
			05/29/08	0.36	0.45
			07/21/08	0.65	0.47
			09/25/08	0.93	0.5
			11/15/08	0.65	0.78
			01/22/09	0.21	0.52
			03/09/09	0.41	0.51
			05/28/09	0.46	0.8
			07/29/09	0.63	0.66

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	As	01/25/05	0.44	1.48
			03/24/05	0.3	0.89
			05/23/05	0.56	0.33
			07/13/05	0.97	0.78
			09/27/05	1.04	1.42
			11/16/05	0.99	1.76
			01/20/06	0.46	1.26
			03/06/06	0.17	<0.1
			05/09/06	0.46	0.64
			07/12/06	0.78	0.73
			09/11/06	0.78	1.21
			11/09/06	0.55	0.96
			01/24/07	0.47	2.97
			03/27/07	0.39	1.25
			05/08/07	0.42	0.75
			07/24/07	0.79	0.48
			09/18/07	1.1	1
			11/28/07	0.81	0.85
			01/09/08	0.42	0.78
			03/24/08	0.4	1.21
			05/13/08	0.53	1.28
			07/17/08	0.81	0.81
			09/23/08	1.03	0.69
			11/19/08	0.73	0.71
			01/14/09	0.22	0.93
			03/09/09	0.37	0.67
			05/28/09	0.6	0.65
			07/29/09	0.66	0.75
Markland	531.5	As	01/26/05	0.52	0.95
			03/24/05	0.35	1.02
			05/23/05	0.61	0.64
			07/13/05	1.03	0.83
			09/27/05	1.3	1.67
			11/16/05	0.98	0.93
			01/20/06	0.49	0.95
			03/06/06	0.28	0.17
			05/09/06	0.54	0.71
			07/13/06	0.71	0.9
			09/13/06	0.64	1.2
			11/09/06	0.49	0.91
			01/24/07	0.41	1.19
			03/27/07	0.34	1.27
			05/22/07	0.37	0.8
			07/25/07	0.87	0.61
			09/18/07	1.16	1.16
			11/28/07	0.86	0.65
			01/09/08	0.45	0.3
			03/24/08	0.38	1.44
			05/13/08	0.52	0.85
			07/21/08	1.53	1.5
			09/24/08	1.09	0.74
			11/19/08	0.99	1.14
			02/02/09	0.24	0.81
			03/09/09	0.39	0.71
			05/28/09	0.49	0.55
			07/16/09	0.66	0.63

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	As	01/26/05	0.47	1.42
			03/22/05	0.28	0.62
			05/23/05	0.59	0.71
			07/13/05	1.14	0.99
			09/21/05	1.02	1.49
			11/10/05	1.03	0.71
			01/25/06	0.48	0.92
			03/09/06	0.26	0.3
			05/17/06	0.61	0.73
			07/12/06	0.67	1.13
			09/20/06	0.8	1.23
			11/15/06	0.62	0.96
			01/31/07	0.49	0.86
			03/22/07	0.48	2.04
			05/22/07	0.6	1.5
			07/24/07	1.16	0.73
			09/18/07	1.11	1.04
			11/26/07	0.98	0.7
			01/15/08	0.52	0.63
			03/20/08	0.58	1.43
			05/20/08	0.58	0.87
			07/14/08	1.07	1.98
			09/24/08	1.17	0.73
			11/19/08	1.01	1.57
			01/22/09	0.32	0.41
			03/12/09	0.51	0.67
			05/28/09	0.64	0.87
			07/16/09	0.76	0.68
West Point	625.9	As	01/27/05	0.53	1.54
			03/22/05	0.42	0.79
			05/23/05	0.59	1.05
			07/13/05	1.35	1.09
			09/21/05	1.32	1.62
			11/10/05	1.04	0.74
			01/25/06	0.51	1.41
			03/09/06	0.43	0.64
			05/17/06	0.71	0.8
			07/12/06	0.91	1.28
			09/20/06	1.07	1.64
			11/15/06	0.69	1.3
			01/19/07	0.58	1.23
			03/22/07	0.32	2.08
			05/22/07	0.63	1.08
			07/25/07	1.11	0.64
			09/18/07	1.09	1.18
			11/26/07	1.07	0.89
			01/15/08	0.57	1.18
			03/20/08	0.55	1.23
			05/20/08	0.57	2.94
			07/14/08	0.96	4.41
			09/24/08	1.25	0.86
			11/19/08	1.13	1.19
			01/22/09	0.43	0.87
			03/12/09	0.54	0.94
			05/28/09	0.69	1.37
			07/16/09	0.93	0.92

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	As	01/26/05	0.5	1.98
			03/22/05	0.31	0.75
			05/23/05	0.66	0.47
			07/13/05	0.94	0.73
			09/21/05	1.05	1.41
			11/10/05	1.13	0.86
			01/25/06	0.51	2.04
			03/09/06	0.28	0.25
			05/09/06	0.54	0.75
			07/27/06	0.77	0.79
			09/14/06	0.92	1.3
			11/01/06	0.79	1.91
			01/31/07	0.39	0.91
			03/22/07	0.35	2.47
			05/08/07	0.44	0.74
			07/24/07	0.9	0.57
			09/19/07	1.05	0.92
			11/27/07	0.91	0.59
			01/23/08	0.47	0.55
			03/18/08	0.39	1.26
			05/21/08	0.57	1.01
			07/23/08	0.86	0.86
			09/18/08	1.08	1.16
			11/18/08	0.97	0.91
			02/03/09	0.36	0.95
			03/10/09	0.46	1.03
			05/21/09	0.59	0.82
			07/22/09	0.88	0.95
Newburgh	776	As	01/26/05	0.63	2.04
			03/22/05	0.32	0.68
			05/23/05	0.62	2.25
			07/13/05	1.03	0.81
			09/21/05	1.1	1.27
			11/09/05	1.2	0.73
			01/25/06	0.59	1.89
			03/09/06	0.34	0.28
			05/10/06	0.67	0.75
			07/12/06	0.77	1.24
			09/20/06	0.96	1.4
			11/15/06	0.66	1.08
			01/31/07	0.48	1.45
			03/22/07	0.37	2.15
			05/22/07	0.49	0.94
			07/24/07	1.07	0.47
			09/19/07	0.87	0.96
			11/27/07	0.93	0.81
			01/23/08	0.54	1.75
			03/25/08	0.54	
			05/21/08	0.6	0.95
			07/15/08	0.81	0.64
			09/29/08	1.04	0.67
			11/18/08	0.99	1.15
			02/03/09	0.37	0.97
			03/10/09	0.45	0.77
			05/20/09	0.48	1.04
			07/22/09	0.91	0.94

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	As	01/26/05	0.51	1.5
			03/21/05	0.27	1.03
			05/24/05	0.39	0.63
			07/12/05	0.99	0.95
			09/20/05	0.96	1.27
			11/09/05	1.16	1.2
			01/24/06	0.53	1.62
			03/08/06	0.28	0.29
			05/16/06	0.66	0.61
			07/11/06	0.73	1.07
			09/19/06	0.81	1.35
			11/15/06	0.7	1.4
			01/30/07	0.44	1.62
			03/22/07	0.69	1.6
			05/21/07	0.52	0.97
			07/25/07	0.92	0.39
			09/20/07	1.16	1.05
			11/28/07	0.9	0.91
			01/24/08	0.53	0.94
			03/18/08	0.43	1.21
			05/21/08	0.68	0.94
			07/22/08	0.86	0.53
			09/17/08	1.12	1.16
			11/17/08	0.77	0.94
			02/02/09	0.39	1.41
			03/10/09	0.35	0.99
			05/19/09	0.54	1.19
			07/21/09	0.72	0.68
Smithland	918.5	As	01/27/05	0.75	1.95
			03/21/05	0.48	0.83
			05/24/05	0.71	0.46
			07/12/05	1.06	0.87
			09/20/05	1.16	1.53
			11/09/05	1.18	0.91
			01/24/06	0.59	2.17
			03/08/06	0.35	0.25
			05/16/06	0.69	1.01
			07/11/06	0.88	1.18
			09/19/06	1.01	1.19
			11/14/06	0.83	1.22
			01/30/07	0.65	1.51
			03/21/07	0.73	1.76
			05/21/07	0.64	0.69
			07/25/07	1.11	0.62
			09/20/07	1.27	1.3
			11/28/07	1.16	0.84
			01/24/08	0.75	1.12
			03/17/08	0.56	0.98
			05/22/08	0.74	1.78
			07/22/08	1	0.87
			09/30/08	1.2	0.96
			11/17/08	0.99	0.92
			02/02/09	0.37	1.35
			03/10/09	0.59	0.97
			05/19/09	0.84	1.43
			07/21/09	0.85	0.69

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	As	01/27/05	0.8	1.28
			03/21/05	0.48	1.2
			05/24/05	0.68	0.9
			07/12/05	1.15	1.1
			09/20/05	1.14	1.65
			11/09/05	1.21	1.23
			01/24/06	0.68	1.51
			03/08/06	0.31	0.37
			05/16/06	0.92	1.16
			07/11/06	1	1.38
			09/19/06	1.02	2.56
			11/14/06	0.77	1.4
			01/30/07	0.62	1.66
			03/21/07	0.55	1.87
			05/21/07	0.69	0.94
			07/25/07	1.09	0.63
			09/20/07	1.63	1.45
			11/28/07	1.12	1.06
			01/24/08	0.84	1.55
			03/17/08	0.54	0.94
			05/22/08	0.68	2.15
			07/21/08	0.86	0.84
			09/16/08	1.2	1.19
			11/17/08	1.01	1.08
			02/02/09	0.37	1.32
			03/11/09	0.59	1.64
			05/19/09	0.86	1.53
			07/21/09	0.8	0.92
New Cumberland	54.4	Ba	01/20/05	31.49	40.3
			03/16/05	34.69	38.79
			05/12/05	31.3	32.22
			07/14/05	37.82	48.19
			09/07/05	46	45.49
			11/08/05	35.73	41.5
			01/04/06	30.42	42.53
			03/07/06	31.94	36.79
			05/04/06	33.95	37.54
			07/13/06	31.01	34.65
			09/14/06	34.46	38.06
			11/01/06	31.11	44.05
			01/12/07	33.54	38.79
			03/12/07	31.09	37.23
			05/07/07	34.07	38.75
			07/10/07	51.48	54.69
			09/17/07	49.06	50.81
			11/05/07	44.87	45.31
			01/08/08	35.11	39.42
			03/18/08	32.81	37.23
			05/28/08	36.98	40.64
			07/16/08	40.79	45.67
			09/24/08	50.22	51.28
			11/12/08	58.59	56.57
			02/09/09	42.46	51.8
			03/16/09	30.74	39.48
			05/18/09	37.95	43.6
			07/15/09	49.12	52.88

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Ba	01/20/05	29.72	42.39
			03/16/05	32.89	39.09
			05/12/05	30.65	32.8
			07/14/05	45.15	49.88
			09/07/05	46.34	46.09
			11/08/05	37.03	42.45
			01/04/06	32.17	52.03
			03/07/06	31.66	36.19
			05/04/06	28.03	37.51
			07/13/06	31.09	35.42
			09/14/06	32.82	37.8
			11/01/06	30.41	47.49
			01/12/07	34.81	40.98
			03/12/07	33.56	39.35
			05/07/07	29.73	37.33
			07/10/07	54.02	56.89
			09/17/07	45.99	46.72
			11/05/07	48.07	47.85
			01/08/08	35.24	39.5
			03/18/08	33.09	38.72
			05/28/08	35.29	38.82
			07/16/08	43.56	48.21
			09/24/08	50.41	51.32
			11/12/08	52.67	58.3
			02/09/09	44.78	52.2
			03/16/09	29.56	39.58
			05/18/09	35.93	41.57
			07/15/09	48.22	52.48
Hannibal	126.4	Ba	01/20/05	29.6	44.23
			03/16/05	31.38	38.78
			05/12/05	32.78	34.11
			07/14/05	43.32	48.43
			09/15/05	49.18	50.29
			11/15/05	35.63	40.95
			01/04/06	32.68	51
			03/13/06	30.08	44.61
			05/03/06	31.81	35.91
			07/18/06	33.34	37.09
			09/06/06	41.83	46.33
			11/07/06	30.9	35.11
			01/02/07	35.55	38.48
			03/13/07	34.93	39.28
			05/10/07	27.25	37.77
			07/12/07	55.28	57.9
			09/24/07	47.21	48.49
			11/28/07	36.53	47.48
			01/09/08	36.24	39.83
			03/26/08	31.98	36.04
			05/15/08	34.83	40.21
			07/17/08	39.51	48.84
			09/17/08	51.16	51.83
			11/19/08	54.99	58.81
			02/10/09	42.22	46.92
			03/10/09	34.98	58.61
			05/19/09	36.37	42.14
			07/22/09	51.44	55.9

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Ba	01/04/05	29.12	46.79
			03/15/05	31.58	37.9
			05/04/05	32.55	34.97
			07/12/05	42.94	46.77
			09/15/05	48.47	47.99
			11/15/05	37.34	42.91
			01/03/06	35.96	45.1
			03/13/06	37.11	45.83
			05/03/06	32.66	34.55
			07/18/06	32.1	35.54
			09/06/06	45.46	49.2
			11/07/06	31.06	35.99
			01/02/07	40.67	41.34
			03/13/07	35.63	41.43
			05/10/07	31.5	38.95
			07/12/07	57.85	61.24
			09/24/07	46.84	48.27
			11/28/07	39.67	47.14
			01/09/08	35.74	44.44
			03/26/08	32.61	37.55
			05/15/08	29.46	41.3
			07/17/08	50.5	53.92
			09/08/08	49.16	50.63
			11/19/08	54.44	58.96
			02/10/09	42.64	49.9
			03/10/09	38.64	52.66
			05/19/09	36.21	40.74
			07/22/09	49.07	56.12
Belleville	203.9	Ba	01/04/05	29.21	49.74
			03/15/05	34.12	37.69
			05/04/05	33.18	36.72
			07/12/05	44	47.68
			09/13/05	42.59	47.61
			11/03/05	36.75	43.72
			01/03/06	37.01	49.54
			03/09/06	33	38.5
			05/11/06	36.86	40.32
			07/12/06	33.94	38.55
			09/19/06	32.77	35.14
			11/24/06	30.76	38.53
			01/04/07	36.85	39.83
			03/15/07	33.94	42.2
			05/09/07	34.07	42.55
			07/17/07	48.69	58.91
			09/19/07	44.77	46.46
			11/08/07	48.52	48.04
			01/07/08	32.05	35.64
			03/13/08	29.54	44.58
			05/19/08	33.77	46.31
			07/23/08	47.61	50.23
			09/08/08	52.65	53.72
			11/13/08	51.75	55.33
			01/22/09	31.72	
			03/09/09	34.15	43.48
			05/13/09	33.34	43.46
			07/13/09	48.59	50.03

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Ba	01/04/05	28.2	40.29
			03/15/05	26.55	35.18
			05/04/05	26.21	30.34
			07/12/05	43.5	47.15
			09/13/05	47.59	54.77
			11/03/05	38.69	46.62
			01/03/06	30.15	35.52
			03/09/06	32.23	40.59
			05/11/06	34.64	37.75
			07/12/06	35.03	43.43
			09/19/06	36.98	42.57
			11/24/06	28.33	35.47
			01/04/07	31.49	33.82
			03/15/07	30.48	42.38
			05/09/07	37.87	52.15
			07/17/07	54.66	58.57
			09/19/07	44.01	47.36
			11/08/07	50.23	51.49
			01/07/08	34.12	37.95
			03/13/08	28.66	41.06
			05/19/08	30.55	38.66
			07/23/08	46.85	53.21
			09/17/08	46.14	55.72
			11/13/08	50.27	54.53
			01/22/09	31.45	33.9
			03/09/09	33.55	37.7
			05/13/09	29.98	38.04
			07/13/09	46.85	52.03
Greenup	341	Ba	01/26/05	27.33	67.64
			03/23/05	33.69	43.74
			05/24/05	36.6	35.9
			07/14/05	38.04	44.97
			09/20/05	50.31	58.13
			11/08/05	37.85	43.15
			01/19/06	27.88	44.87
			03/07/06	29.46	35.74
			05/10/06	29.28	36.9
			07/25/06	34.43	39.12
			09/12/06	41.02	46.25
			11/28/06	29.27	35.96
			01/30/07	32	35.87
			03/15/07	32.51	41.28
			05/09/07	28.09	
			07/26/07	52.65	58.15
			09/13/07	46.36	49
			11/29/07	40.08	50.09
			01/29/08	31.95	37.2
			03/20/08	29.94	46.45
			05/29/08	34.45	37.93
			07/21/08	41.54	47.07
			09/25/08	53.02	58.36
			11/15/08	50.79	55.28
			01/22/09	32.29	35.66
			03/09/09	33.08	37.45
			05/28/09	32.77	43.86
			07/15/09	42.87	50.8

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Ba	01/25/05	23.4	48.03
			03/23/05	32.17	34.95
			05/24/05	37.81	37.66
			07/14/05	46.05	58.79
			09/20/05	45.76	54.42
			11/08/05	41.69	51.23
			01/19/06	25.95	38.46
			03/07/06	32.76	36.49
			05/10/06	32.46	36.51
			07/12/06	35.72	40.63
			09/12/06	39.05	44.62
			11/28/06	31.35	37.34
			01/30/07	30.68	35.76
			03/15/07	29.53	41.26
			05/09/07	29.75	45.4
			07/25/07	52.73	58.74
			09/13/07	49.27	56.97
			11/29/07	42.86	50.93
			01/28/08	31.41	36.09
			03/26/08	31.26	49.87
			05/29/08	35.06	37.98
			07/21/08	43.11	50.47
			09/25/08	58.29	57.8
			11/15/08	54.44	60.86
			01/22/09	29.76	34.61
			03/09/09	36.1	38.48
			05/28/09	33.45	42.95
			07/29/09	43.7	51.46
Anderson Ferry	477.5	Ba	01/25/05	25.01	46.62
			03/24/05	30.65	38.31
			05/23/05	38.32	43.31
			07/13/05	47.99	52.13
			09/27/05	55.12	57.31
			11/16/05	32.44	47.24
			01/20/06	27.35	48.73
			03/06/06	32.53	37.18
			05/09/06	36.54	40.85
			07/12/06	35.81	41.13
			09/11/06	37.33	44.7
			11/09/06	31.16	42.06
			01/24/07	30.32	114.53
			03/27/07	33.62	56.36
			05/08/07	37.23	44.79
			07/24/07	52.71	57.21
			09/18/07	52.12	56.3
			11/28/07	42.66	46.26
			01/09/08	34.71	41.73
			03/24/08	28.55	62.99
			05/13/08	40.79	57.74
			07/17/08	46.84	52.02
			09/23/08	57.47	57.9
			11/19/08	50.53	51.79
			01/14/09	30.47	45.94
			03/09/09	32.91	39.43
			05/28/09	39.64	44.78
			07/29/09	48.12	51.85

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Ba	01/26/05	26.27	44.85
			03/24/05	32.39	41.71
			05/23/05	38.07	38.86
			07/13/05	45.88	49.59
			09/27/05	49.11	51.36
			11/16/05	35.5	48.55
			01/20/06	26.7	44.29
			03/06/06	34.6	39.1
			05/09/06	35.88	38.57
			07/13/06	37.87	43.63
			09/13/06	35.43	47.56
			11/09/06	31.04	39.59
			01/24/07	29.14	46.21
			03/27/07	32.62	57.02
			05/22/07	31.32	44.8
			07/25/07	45.76	57.92
			09/18/07	55.77	57.55
			11/28/07	43.02	48.71
			01/09/08	35.59	40.75
			03/24/08	31.45	68.2
			05/13/08	37.9	51
			07/21/08	37.78	39.79
			09/24/08	56.06	57.18
			11/19/08	61.21	66.42
			02/02/09	30.42	42.12
			03/09/09	33.25	40.92
			05/28/09	35.58	43.23
			07/16/09	45.03	48.56
Louisville	600.6	Ba	01/26/05	23.81	50.1
			03/22/05	30.36	33.13
			05/23/05	31.62	38.31
			07/13/05	40.72	45.33
			09/21/05	44.35	53.04
			11/10/05	50.19	52.41
			01/25/06	25.3	42.66
			03/09/06	34.13	36.58
			05/17/06	33.87	38.66
			07/12/06	36.44	40.43
			09/20/06	42.24	46.78
			11/15/06	32.31	38.51
			01/31/07	30.42	36.05
			03/22/07	29.29	82.9
			05/22/07	43.82	67.19
			07/24/07	58.41	59.37
			09/18/07	66.21	68.24
			11/26/07	46.74	48.43
			01/15/08	28.76	40.35
			03/20/08	17.76	66.75
			05/20/08	29.55	37.17
			07/14/08	52.46	80.02
			09/24/08	57.74	57.16
			11/19/08	58.12	65.88
			01/22/09	28.78	31.95
			03/12/09	33.14	38.02
			05/28/09	37.17	48.09
			07/16/09	44.4	50.07

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Ba	01/27/05	27.4	51.16
			03/22/05	32.62	36.31
			05/23/05	32.29	43.53
			07/13/05	43.1	47.61
			09/21/05	47.3	50.52
			11/10/05	50.79	54
			01/25/06	22.96	62.11
			03/09/06	35.63	50.02
			05/17/06	37.62	39.95
			07/12/06	38.62	41.75
			09/20/06	42.14	46.78
			11/15/06	33.09	42.64
			01/19/07	34.99	48.04
			03/22/07	25.39	79.48
			05/22/07	38	50.54
			07/25/07	58.18	58.92
			09/18/07	66.83	68.25
			11/26/07	50.51	50.15
			01/15/08	29.99	52.92
			03/20/08	21.19	61.2
			05/20/08	29.39	150.12
			07/14/08	47.78	146.2
			09/24/08	57.01	58.19
			11/19/08	56.89	63.48
			01/22/09	30.66	39.36
			03/12/09	33.86	42.76
			05/28/09	39.46	55.92
			07/16/09	49.98	53.83
Cannelton	720.7	Ba	01/26/05	29.75	60.31
			03/22/05	29.67	36.58
			05/23/05	29.16	35.46
			07/13/05	41.92	45.54
			09/21/05	46.62	47.84
			11/10/05	52.18	54.39
			01/25/06	31.44	77.56
			03/09/06	33.43	34.46
			05/09/06	31.51	34.32
			07/27/06	37.03	41.1
			09/14/06	38.98	46.23
			11/01/06	31.82	71.86
			01/31/07	31.53	39.31
			03/22/07	31.44	95.11
			05/08/07	31.79	41.49
			07/24/07	54.22	54.91
			09/19/07	62.57	64.59
			11/27/07	48.77	48.8
			01/23/08	31.66	38.37
			03/18/08	29.54	47.04
			05/21/08	28.8	47.51
			07/23/08	47.05	49.42
			09/18/08	56.35	57.07
			11/18/08	55.74	58.66
			02/03/09	29.53	45.54
			03/10/09	30.59	41.83
			05/21/09	32.57	43.38
			07/22/09	46.79	49.98

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Ba	01/26/05	29.69	59.31
			03/22/05	31.03	40.62
			05/23/05	35.66	71.39
			07/13/05	40.74	43.85
			09/21/05	54.83	53.03
			11/09/05	51.73	55.76
			01/25/06	31.46	76.2
			03/09/06	33.99	35.38
			05/10/06	35.59	37.23
			07/12/06	34.76	42.06
			09/20/06	39.5	42.49
			11/15/06	33.74	41.37
			01/31/07	33.1	49.22
			03/22/07	26.64	71.2
			05/22/07	36.82	47.34
			07/24/07	53.07	53.15
			09/19/07	62.4	62.08
			11/27/07	45	50.14
			01/23/08	33.85	66.1
			03/25/08	24.86	
			05/21/08	29.87	51.35
			07/15/08	47.75	50.56
			09/29/08	56.02	55.17
			11/18/08	57.73	61.73
			02/03/09	28.86	51.62
			03/10/09	29.7	36.44
			05/20/09	30.79	46.44
			07/22/09	42.5	45.9
J.T. Myers	846	Ba	01/26/05	25.1	50.65
			03/21/05	29.34	39.63
			05/24/05	33.39	39.17
			07/12/05	37.42	42.85
			09/20/05	42.33	45.65
			11/09/05	55.88	59.81
			01/24/06	31.42	73.36
			03/08/06	32.56	34.94
			05/16/06	35.14	37.62
			07/11/06	37.51	42.58
			09/19/06	39.5	43.26
			11/15/06	32.49	46.89
			01/30/07	33.19	55.83
			03/22/07	31.08	67.45
			05/21/07	36.24	44.82
			07/25/07	51.48	52.28
			09/20/07	60.64	60.33
			11/28/07	43.8	50.67
			01/24/08	32.13	45.91
			03/18/08	29.63	45.66
			05/21/08	30.59	56.96
			07/22/08	50.29	51
			09/17/08	52.51	54.03
			11/17/08	51.05	52.88
			02/02/09	26.75	68.01
			03/10/09	28.89	38.66
			05/19/09	29.23	53.16
			07/21/09	40.33	43.91

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Ba	01/27/05	25.78	53.01
			03/21/05	32.09	39.87
			05/24/05	35.17	37.61
			07/12/05	38.07	38.74
			09/20/05	38.04	43.08
			11/09/05	47.89	53.71
			01/24/06	31.98	71.34
			03/08/06	32.94	39.57
			05/16/06	39.74	44.25
			07/11/06	38.71	42.62
			09/19/06	38.88	42.64
			11/14/06	35.49	43.79
			01/30/07	37.7	54.58
			03/21/07	32.44	64.14
			05/21/07	38.74	43.84
			07/25/07	47.84	50.48
			09/20/07	50.28	54.75
			11/28/07	46.13	47.54
			01/24/08	38.32	55.85
			03/17/08	32.59	47.81
			05/22/08	34.29	63.44
			07/22/08	43.16	46.61
			09/30/08	52.22	53.44
			11/17/08	51.82	53
			02/02/09	28.74	56.03
			03/10/09	32.12	44.75
			05/19/09	33.11	54.64
			07/21/09	42.41	45.56
L&D 52	939.9	Ba	01/27/05	24.33	48.01
			03/21/05	33.4	45.38
			05/24/05	35.61	41.81
			07/12/05	39.5	41.49
			09/20/05	32.84	37.48
			11/09/05	37.83	45.75
			01/24/06	31.04	67.99
			03/08/06	36.14	40.21
			05/16/06	39.02	45.99
			07/11/06	38.75	49.23
			09/19/06	37.19	73.86
			11/14/06	36.21	50.31
			01/30/07	35.44	61.95
			03/21/07	33.88	66.71
			05/21/07	39.02	47.38
			07/25/07	47.7	49.81
			09/20/07	43.57	43.79
			11/28/07	45.69	52.56
			01/24/08	37.34	67.63
			03/17/08	29.18	46.45
			05/22/08	34.88	98.22
			07/21/08	44.35	47.17
			09/16/08	52.54	55.61
			11/17/08	42.99	47.23
			02/02/09	28.21	60.93
			03/11/09	33.05	58.9
			05/19/09	32.75	49.03
			07/21/09	43.74	47.29

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Ca	01/20/05	22.63	21.59
			03/16/05	R	R
			05/12/05	R	R
			07/14/05	16.29	36.63
			09/07/05	39.53	44.83
			11/08/05	33.29	31.01
			01/04/06	31.71	31.79
			03/07/06	28.21	31.3
			05/04/06	26.55	24.62
			07/13/06	28.24	33.13
			09/14/06	23.67	25.88
			11/01/06	18.87	20.83
			01/12/07	21.01	21.05
			03/12/07	23.48	26.42
			05/07/07	25.27	25.72
			07/10/07	38.61	39.9
			09/17/07	35.22	36.89
			11/05/07	34.85	36.19
			01/08/08	23.98	25.2
			03/18/08	22.26	24.88
			05/28/08	25.87	26.66
			07/16/08	31.96	33.19
			09/24/08	36.32	37.82
			11/12/08	36.36	39.59
			02/09/09	33.12	34.01
			03/16/09	16.95	17.35
			05/18/09	23.21	25.47
			07/15/09	27.59	27.53
Pike Island	84.2	Ca	01/20/05	22.91	21.77
			03/16/05	28.9	33.53
			05/12/05	29.37	28.64
			07/14/05	32.83	46.96
			09/07/05	43.44	44.76
			11/08/05	41.24	33.5
			01/04/06	32.01	31.08
			03/07/06	28.28	30.39
			05/04/06	23.61	25.54
			07/13/06	29.71	31.9
			09/14/06	23.12	25.68
			11/01/06	17.77	20.31
			01/12/07	20.89	21.34
			03/12/07	24.94	26.39
			05/07/07	23.84	26.5
			07/10/07	40.84	42.37
			09/17/07	34.26	35.36
			11/05/07	37.75	38.3
			01/08/08	23.33	24.02
			03/18/08	22.67	25.39
			05/28/08	24.89	25.4
			07/16/08	39.04	41.29
			09/24/08	39.59	41.07
			11/12/08	37.67	40.44
			02/09/09	34.61	35.08
			03/16/09	16.21	16.96
			05/18/09	23.21	24.87
			07/15/09	28.2	28.65

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Ca	01/20/05	23.61	22.5
			03/16/05	30.02	31.03
			05/12/05	32.46	32.36
			07/14/05	38.03	37.42
			09/15/05	42.83	49.4
			11/15/05	36.79	31.95
			01/04/06	32.75	35.26
			03/13/06	30.88	34.44
			05/03/06	23.51	27.58
			07/18/06	29.3	33.23
			09/06/06	31.85	32.81
			11/07/06	21.23	22.24
			01/02/07	27.08	29.75
			03/13/07	27.14	28.23
			05/10/07	23.73	28.41
			07/12/07	42.87	44.61
			09/24/07	32.63	33.4
			11/28/07	32.65	33.85
			01/09/08	24.47	24.35
			03/26/08	22.96	25.24
			05/15/08	28.13	28.85
			07/17/08	32.58	38.52
			09/17/08	38.35	39.39
			11/19/08	40.91	40.73
			02/10/09	34.99	36.39
			03/10/09	23.48	26.42
			05/19/09	26.24	27.83
			07/22/09	30.34	30.39
Willow Island	161.8	Ca	01/04/05	26.61	25.06
			03/15/05	29.51	32.26
			05/04/05	29.68	33.1
			07/12/05	39.15	43.04
			09/15/05	42.06	47.67
			11/15/05	40.27	34.9
			01/03/06	35.49	35.42
			03/13/06	31.53	31.12
			05/03/06	24.89	24.13
			07/18/06	30.43	32.27
			09/06/06	35.48	37.5
			11/07/06	20.37	20.9
			01/02/07	28.45	30.46
			03/13/07	25.88	28.12
			05/10/07	26.98	28.64
			07/12/07	42.77	44.64
			09/24/07	31.82	32.59
			11/28/07	31.45	32.47
			01/09/08	23.88	24.72
			03/26/08	22.7	24.47
			05/15/08	24.02	30.06
			07/17/08	41.45	41.5
			09/08/08	32.41	33.17
			11/19/08	41.55	41.44
			02/10/09	36.31	37.46
			03/10/09	25.67	26.42
			05/19/09	24.96	25.88
			07/22/09	30.19	30.88

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Ca	01/04/05	31.5	29.98
			03/15/05	34.85	35.32
			05/04/05	38.49	37.13
			07/12/05	37.53	52.78
			09/13/05	39.68	43.23
			11/03/05	46.54	45.26
			01/03/06	39.7	37.7
			03/09/06	35.87	37.1
			05/11/06	37.68	35.88
			07/12/06	34.51	42.51
			09/19/06	29.43	31.89
			11/24/06	25.11	25.83
			01/04/07	31.93	37.57
			03/15/07	32.12	33.91
			05/09/07	33.25	33.46
			07/17/07	37.23	44.86
			09/19/07	34.54	35.84
			11/08/07	41.61	43
			01/07/08	22.99	23.41
			03/13/08	26.49	29.58
			05/19/08	30.94	32.43
			07/23/08	44.59	44.81
			09/08/08	36.97	37.82
			11/13/08	44.62	45.29
			01/22/09	29.93	
			03/09/09	28.55	31.11
			05/13/09	27.82	30.06
			07/13/09	34.09	34.18
R.C. Byrd	279.2	Ca	01/04/05	26.53	25.68
			03/15/05	20.58	25.03
			05/04/05	16.72	16.31
			07/12/05	29.91	36.57
			09/13/05	37	41.06
			11/03/05	38.94	42.3
			01/03/06	24.71	26.03
			03/09/06	29.27	30.24
			05/11/06	25.06	23.24
			07/12/06	23.91	26.59
			09/19/06	27.11	27.98
			11/24/06	21.47	20.13
			01/04/07	22.1	24.08
			03/15/07	24.66	26.54
			05/09/07	29.03	29.24
			07/17/07	34.94	36.09
			09/19/07	30.3	30.98
			11/08/07	39.94	40.11
			01/07/08	27.16	28.34
			03/13/08	18.23	20.34
			05/19/08	18.8	19.21
			07/23/08	35.67	36.02
			09/17/08	29.95	35.61
			11/13/08	33.69	37.99
			01/22/09	23.87	24.28
			03/09/09	25.39	26.64
			05/13/09	15.03	14.95
			07/13/09	32.88	31.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Ca	01/26/05	26.47	25.68
			03/23/05	29.03	29.27
			05/24/05	31.3	32.24
			07/14/05	28.18	35.82
			09/20/05	38.15	37.52
			11/08/05	51.17	40.88
			01/19/06	25.88	27.46
			03/07/06	26.45	28.26
			05/10/06	23.48	26.3
			07/25/06	29.49	32.89
			09/12/06	33.76	37.78
			11/28/06	21.92	22.39
			01/30/07	23.07	24.36
			03/15/07	27.7	28.79
			05/09/07	23.84	
			07/26/07	33.88	37.06
			09/13/07	35.44	36.23
			11/29/07	34.55	37.34
			01/29/08	33.04	26.6
			03/20/08	23.97	26.42
			05/29/08	25.46	25.31
			07/21/08	31.29	32.97
			09/25/08	34.8	37.08
			11/15/08	35.36	36.84
			01/22/09	24.46	31.31
			03/09/09	25.49	27.36
			05/28/09	22.43	27.4
			07/15/09	31.16	32.75
Meldahl	436.2	Ca	01/25/05	26.36	26.35
			03/23/05	31.32	30.56
			05/24/05	31.51	35.85
			07/14/05	32.34	33.92
			09/20/05	32.57	42.9
			11/08/05	49.61	41.98
			01/19/06	28.74	32.03
			03/07/06	30.12	30.46
			05/10/06	26.89	26.61
			07/12/06	30.28	36.88
			09/12/06	30.96	31.93
			11/28/06	26.44	28.82
			01/30/07	25.5	26.63
			03/15/07	27.34	30.41
			05/09/07	26.81	32.02
			07/25/07	34.8	37.98
			09/13/07	36.78	42.04
			11/29/07	36.44	38.43
			01/28/08	28.51	29.44
			03/26/08	26.29	28.4
			05/29/08	28.1	27.99
			07/21/08	31.71	35.34
			09/25/08	38.25	38.3
			11/15/08	39.05	40.29
			01/22/09	24.39	25.54
			03/09/09	30.25	30
			05/28/09	24.08	28.91
			07/29/09	30.25	33.3

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Ca	01/25/05	26.74	26.72
			03/24/05	33.23	31.96
			05/23/05	40.09	38.81
			07/13/05	35.81	38.43
			09/27/05	39.77	45.22
			11/16/05	43.88	37.33
			01/20/06	R	R
			03/06/06	31.76	33.36
			05/09/06	28.86	26.96
			07/12/06	31.93	37.62
			09/11/06	30.79	35.32
			11/09/06	26.26	28.62
			01/24/07	25.53	30.11
			03/27/07	27.77	30.28
			05/08/07	32.21	31.43
			07/24/07	34.11	36.76
			09/18/07	39.47	42.5
			11/28/07	37.46	38.85
			01/09/08	29.67	29.65
			03/24/08	24.19	27.83
			05/13/08	34.84	35.98
			07/17/08	35.16	34.52
			09/23/08	40.27	40.42
			11/19/08	37.28	37.75
			01/14/09	23.24	23.43
			03/09/09	28.2	31.07
			05/28/09	29.96	30.33
			07/29/09	33.23	33.57
Markland	531.5	Ca	01/26/05	28.08	29.08
			03/24/05	34.97	36.22
			05/23/05	39.05	39.64
			07/13/05	36.5	37.6
			09/27/05	36.68	39.34
			11/16/05	44.49	41.81
			01/20/06	31.45	35.31
			03/06/06	35.23	35.91
			05/09/06	33.84	39.1
			07/13/06	33.14	41.43
			09/13/06	29.03	34.83
			11/09/06	26.75	31.11
			01/24/07	26.06	30.68
			03/27/07	26.28	30.83
			05/22/07	29.06	36.31
			07/25/07	29.86	37.81
			09/18/07	40.58	42.56
			11/28/07	38.05	41.47
			01/09/08	31.69	32
			03/24/08	25.97	28.32
			05/13/08	35.53	37.63
			07/21/08	39.76	38.82
			09/24/08	38.52	38.83
			11/19/08	45.18	44.64
			02/02/09	26.88	27.67
			03/09/09	29.97	32.16
			05/28/09	28.17	31.55
			07/16/09	35.37	36.52

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Ca	01/26/05	30.52	29.96
			03/22/05	35.66	34.73
			05/23/05	36.64	42.69
			07/13/05	36.67	40.75
			09/21/05	32.95	41.42
			11/10/05	55.07	44.35
			01/25/06	36.77	36.29
			03/09/06	41.28	38.37
			05/17/06	37.07	36.8
			07/12/06	32.73	37.62
			09/20/06	37.67	38.46
			11/15/06	34.98	33.37
			01/31/07	29.67	33.65
			03/22/07	28.42	31.94
			05/22/07	37.77	34.95
			07/24/07	39.16	39.27
			09/18/07	45.78	45.38
			11/26/07	43.97	44.55
			01/15/08	34.24	34.67
			03/20/08	25.99	36.64
			05/20/08	32.19	32.2
			07/14/08	39.2	41.45
			09/24/08	40.9	40.9
			11/19/08	42	41.6
			01/22/09	29.21	29.03
			03/12/09	34.53	34.84
			05/28/09	31.05	33.87
			07/16/09	36.51	35.85
West Point	625.9	Ca	01/27/05	30.95	30.28
			03/22/05	38.56	37.5
			05/23/05	39.87	42.46
			07/13/05	42.39	44.42
			09/21/05	45.41	50.02
			11/10/05	62.34	49.07
			01/25/06	32.88	40.91
			03/09/06	43.21	43.47
			05/17/06	39.49	41.58
			07/12/06	42.93	53.11
			09/20/06	42.36	43.21
			11/15/06	35.5	38.02
			01/19/07	33.92	32.17
			03/22/07	24.62	32.02
			05/22/07	45.36	46.41
			07/25/07	42.23	42.06
			09/18/07	55.86	56.06
			11/26/07	53.07	52.71
			01/15/08	34.43	35.78
			03/20/08	28.23	35.89
			05/20/08	32.89	58.3
			07/14/08	47	74.46
			09/24/08	49.98	50.84
			11/19/08	50.02	48.98
			01/22/09	36.42	36.67
			03/12/09	36.74	36.77
			05/28/09	38.17	39.81
			07/16/09	46.27	45.29

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Ca	01/26/05	31.42	30.61
			03/22/05	34.14	33.82
			05/23/05	R	R
			07/13/05	34.16	60.57
			09/21/05	35.11	38.45
			11/10/05	57.3	46.84
			01/25/06	35.9	36.45
			03/09/06	39.16	37.1
			05/09/06	32	35.85
			07/27/06	35.99	40.54
			09/14/06	34.75	38.42
			11/01/06	32.36	36.07
			01/31/07	32.5	31.63
			03/22/07	29.92	32.77
			05/08/07	32.35	34.23
			07/24/07	37.11	37.47
			09/19/07	42.46	43.09
			11/27/07	40.72	40.97
			01/23/08	33.27	33.51
			03/18/08	31.55	34.48
			05/21/08	32.13	33.54
			07/23/08	39.47	38.02
			09/18/08	45.55	45.63
			11/18/08	40.7	40.91
			02/03/09	33.33	33.78
			03/10/09	31.9	33.21
			05/21/09	31.39	32.23
			07/22/09	37.87	37.17
Newburgh	776	Ca	01/26/05	31.79	31
			03/22/05	34.22	34.35
			05/23/05	37.55	33.97
			07/13/05	33.19	36.39
			09/21/05	38.42	42.24
			11/09/05	56.02	44.62
			01/25/06	37.69	38.6
			03/09/06	40.67	39.04
			05/10/06	35.47	34.76
			07/12/06	34.43	43.01
			09/20/06	37.45	37.91
			11/15/06	34.61	40.75
			01/31/07	35.81	35.82
			03/22/07	26.39	34.31
			05/22/07	40.69	36.8
			07/24/07	35	34.64
			09/19/07	40.3	39.76
			11/27/07	38.54	42.24
			01/23/08	35.54	37.44
			03/25/08	27.33	
			05/21/08	34.73	35.64
			07/15/08	41.61	41.77
			09/29/08	46.32	46.15
			11/18/08	45.27	44.42
			02/03/09	33.38	34.55
			03/10/09	33.97	34.39
			05/20/09	29.08	31.41
			07/22/09	36.04	35.52

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Ca	01/26/05	29.99	29.6
			03/21/05	33.48	33.69
			05/24/05	37.35	35.81
			07/12/05	32.21	38.47
			09/20/05	36.52	41.17
			11/09/05	59.18	44.4
			01/24/06	39.84	40.71
			03/08/06	38.47	37.8
			05/16/06	37.44	35.89
			07/11/06	37.81	43.62
			09/19/06	38.48	38.71
			11/15/06	35.49	32.73
			01/30/07	35.27	33.99
			03/22/07	35.42	37.31
			05/21/07	40.87	37.85
			07/25/07	36.55	36.32
			09/20/07	39.54	39.06
			11/28/07	39.43	40.75
			01/24/08	35.01	35.74
			03/18/08	31.74	33.6
			05/21/08	35.04	36.88
			07/22/08	43.43	42.34
			09/17/08	43.01	43.22
			11/17/08	40.7	40.33
			02/02/09	28.81	32.93
			03/10/09	34.91	35.16
			05/19/09	28.42	28.85
			07/21/09	37.27	36.76
Smithland	918.5	Ca	01/27/05	29.18	28.99
			03/21/05	42.34	44.19
			05/24/05	40.34	38.83
			07/12/05	32.97	38.01
			09/20/05	37.69	39.75
			11/09/05	61.68	48.75
			01/24/06	41.75	44.03
			03/08/06	43.41	47.52
			05/16/06	43.28	41.04
			07/11/06	41.05	48.7
			09/19/06	38.8	39.63
			11/14/06	39.55	44.58
			01/30/07	41.38	40.78
			03/21/07	37.74	39.14
			05/21/07	47.57	48.4
			07/25/07	36.11	36.02
			09/20/07	40.1	39.92
			11/28/07	43.77	43.95
			01/24/08	43.53	44.64
			03/17/08	34.52	35.73
			05/22/08	37.43	40.53
			07/22/08	43.91	42.89
			09/30/08	45.12	44.95
			11/17/08	46.82	45.69
			02/02/09	33.01	34.21
			03/10/09	40.88	41.72
			05/19/09	32.51	32.99
			07/21/09	43.15	42.47

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Ca	01/27/05	27.82	28.4
			03/21/05	42.37	42.75
			05/24/05	40.35	37.48
			07/12/05	34.45	42.71
			09/20/05	31.8	33.17
			11/09/05	47.71	35.78
			01/24/06	40.21	44.91
			03/08/06	47.75	44.84
			05/16/06	42.71	43.35
			07/11/06	40.53	49.94
			09/19/06	38	40.84
			11/14/06	37.93	43.37
			01/30/07	37.44	36.39
			03/21/07	39.65	40.16
			05/21/07	49.85	50.41
			07/25/07	35.54	35.49
			09/20/07	33.08	32.75
			11/28/07	43.4	43.95
			01/24/08	24.63	45.72
			03/17/08	30.23	35.07
			05/22/08	37.73	44.04
			07/21/08	42.04	40.82
			09/16/08	42.99	43.25
			11/17/08	39.57	38.63
			02/02/09	32.68	34.05
			03/11/09	40.27	41.64
			05/19/09	33.12	33.71
			07/21/09	43.24	41.99
New Cumberland	54.4	Cd	01/20/05	<0.1	0.12
			03/16/05	<0.1	0.11
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/04/06	<0.1	0.1
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	0.13
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	<0.1	<0.1
			09/17/07	<0.1	<0.1
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	<0.1
			07/15/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Cd	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/04/06	<0.1	0.2
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	<0.1	<0.1
			09/17/07	<0.1	<0.1
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	0.21
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	<0.1
			07/15/09	<0.1	<0.1
Hannibal	126.4	Cd	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/04/06	<0.1	0.13
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	<0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/26/08	<0.1	0.13
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	0.17
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Cd	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/03/06	<0.1	0.12
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	<0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	0.12
			03/26/08	<0.1	0.1
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	0.15
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
Belleville	203.9	Cd	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	0.12
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	<0.1
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	0.1
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Cd	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	<0.1
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	0.11
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1
Greenup	341	Cd	01/26/05	<0.1	0.25
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/25/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	
			07/26/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/29/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/15/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Cd	01/25/05	<0.1	<0.1
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	0.12
			05/09/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/28/08	<0.1	<0.1
			03/26/08	<0.1	0.11
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1
Anderson Ferry	477.5	Cd	01/25/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/27/05	<0.1	<0.1
			11/16/05	<0.1	0.16
			01/20/06	<0.1	0.14
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/11/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	0.44
			03/27/07	<0.1	0.12
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	<0.1
			05/13/08	<0.1	<0.1
			07/17/08	<0.1	0.1
			09/23/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/14/09	<0.1	0.13
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Cd	01/26/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	0.2
			07/13/05	<0.1	<0.1
			09/27/05	<0.1	<0.1
			11/16/05	<0.1	<0.1
			01/20/06	<0.1	<0.1
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/13/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	<0.1
			03/27/07	<0.1	0.14
			05/22/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	0.13
			05/13/08	<0.1	0.12
			07/21/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1
Louisville	600.6	Cd	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	0.17
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/26/07	<0.1	<0.1
			01/15/08	<0.1	0.12
			03/20/08	<0.1	0.14
			05/20/08	<0.1	<0.1
			07/14/08	<0.1	0.18
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Cd	01/27/05	<0.1	0.13
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	0.15	0.14
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	0.18
			03/09/06	<0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	0.11	0.12
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/19/07	<0.1	<0.1
			03/22/07	<0.1	0.23
			05/22/07	0.12	0.17
			07/25/07	<0.1	0.12
			09/18/07	<0.1	0.1
			11/26/07	<0.1	0.15
			01/15/08	<0.1	0.17
			03/20/08	<0.1	<0.1
			05/20/08	<0.1	0.48
			07/14/08	<0.1	0.76
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	0.16
			07/16/09	<0.1	<0.1
Cannelton	720.7	Cd	01/26/05	<0.1	0.13
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	0.25
			03/09/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/27/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	0.17
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	0.19
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/18/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/21/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Cd	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	0.2
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/09/05	0.1	<0.1
			01/25/06	<0.1	0.22
			03/09/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	0.11
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	0.15
			03/25/08	<0.1	
			05/21/08	<0.1	<0.1
			07/15/08	<0.1	<0.1
			09/29/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	0.11
			03/10/09	<0.1	<0.1
			05/20/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
J.T. Myers	846	Cd	01/26/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	0.23
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/30/07	<0.1	0.11
			03/22/07	<0.1	0.15
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/22/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Cd	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	0.22
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	0.11
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	0.11
			07/22/08	<0.1	<0.1
			09/30/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1
L&D 52	939.9	Cd	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	0.22
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	0.12
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	0.22
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	0.11
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	0.13
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	0.14
			07/21/08	<0.1	<0.1
			09/16/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	0.13
			03/11/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Cr	01/20/05	<0.1	1.24
			03/16/05	0.61	0.77
			05/12/05	0.18	0.55
			07/14/05	0.47	0.56
			09/07/05	0.35	1.24
			11/08/05	0.1	1.01
			01/04/06	0.4	2
			03/07/06	0.34	0.58
			05/04/06	0.23	1
			07/13/06	<0.1	<0.1
			09/14/06	0.29	0.45
			11/01/06	0.62	2.53
			01/12/07	0.67	1.53
			03/12/07	0.78	1.47
			05/07/07	0.8	1.43
			07/10/07	1.12	1.54
			09/17/07	0.75	1.06
			11/05/07	0.91	1.94
			01/08/08	0.46	1.29
			03/18/08	1.02	1.81
			05/28/08	0.3	0.92
			07/16/08	1.05	1.57
			09/24/08	1.62	2.26
			11/12/08	0.52	1.29
			02/09/09	1.05	1.34
			03/16/09	0.27	1.31
			05/18/09	0.54	1.94
			07/15/09	1.18	1.07
Pike Island	84.2	Cr	01/20/05	0.14	2.09
			03/16/05	0.73	0.81
			05/12/05	<0.1	0.84
			07/14/05	0.26	0.61
			09/07/05	0.61	1.58
			11/08/05	<0.1	1.09
			01/04/06	0.28	2.61
			03/07/06	0.15	0.64
			05/04/06	<0.1	1.18
			07/13/06	<0.1	0.87
			09/14/06	0.15	0.94
			11/01/06	0.68	2.94
			01/12/07	0.72	2.06
			03/12/07	0.89	1.68
			05/07/07	0.77	1.19
			07/10/07	1.09	1.67
			09/17/07	1.24	0.65
			11/05/07	1.59	2.56
			01/08/08	0.43	1.3
			03/18/08	1.03	2.18
			05/28/08	0.74	1.71
			07/16/08	1.54	1.66
			09/24/08	1.36	2.57
			11/12/08	0.29	1.32
			02/09/09	0.94	1.61
			03/16/09	0.26	1.5
			05/18/09	0.52	1.23
			07/15/09	1.17	1.17

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Cr	01/20/05	<0.1	2.11
			03/16/05	0.77	0.83
			05/12/05	0.22	0.86
			07/14/05	0.54	0.61
			09/15/05	0.22	1.37
			11/15/05	<0.1	1.5
			01/04/06	0.3	2.48
			03/13/06	0.1	0.79
			05/03/06	0.5	1.23
			07/18/06	<0.1	0.76
			09/06/06	0.78	0.9
			11/07/06	0.23	1.47
			01/02/07	1.57	2.19
			03/13/07	0.74	1.49
			05/10/07	0.41	1.42
			07/12/07	0.76	1.14
			09/24/07	0.14	0.49
			11/28/07	0.46	2.7
			01/09/08	0.45	1.23
			03/26/08	0.55	1.22
			05/15/08	0.12	1.65
			07/17/08	0.76	1.56
			09/17/08	1.95	3.28
			11/19/08	0.51	1.12
			02/10/09	1.09	1.33
			03/10/09	0.24	2.99
			05/19/09	0.57	1.56
			07/22/09	1.23	0.89
Willow Island	161.8	Cr	01/04/05	0.13	1.88
			03/15/05	0.55	0.92
			05/04/05	<0.1	1.05
			07/12/05	<0.1	0.39
			09/15/05	0.11	1.18
			11/15/05	<0.1	1.17
			01/03/06	0.76	1.62
			03/13/06	0.11	0.85
			05/03/06	0.27	1.06
			07/18/06	0.27	1.25
			09/06/06	0.23	0.75
			11/07/06	0.2	1.49
			01/02/07	1.77	2.41
			03/13/07	0.16	1.54
			05/10/07	0.26	1.3
			07/12/07	0.18	1.57
			09/24/07	<0.1	0.58
			11/28/07	0.59	2.34
			01/09/08	0.47	1.93
			03/26/08	0.47	1.51
			05/15/08	0.4	1.77
			07/17/08	0.93	1.58
			09/08/08	1.97	2.88
			11/19/08	0.22	1.36
			02/10/09	1.12	1.28
			03/10/09	R	2.03
			05/19/09	0.41	1.23
			07/22/09	1.08	0.98

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Cr	01/04/05	0.58	2.14
			03/15/05	0.54	0.89
			05/04/05	0.12	1.09
			07/12/05	<0.1	0.68
			09/13/05	0.11	1.29
			11/03/05	0.27	1.38
			01/03/06	0.63	2.45
			03/09/06	0.34	0.82
			05/11/06	0.41	1.21
			07/12/06	0.26	0.88
			09/19/06	0.41	1.51
			11/24/06	<0.1	1.62
			01/04/07	1.44	1.94
			03/15/07	0.85	1.87
			05/09/07	1.1	2.39
			07/17/07	0.95	1.49
			09/19/07	0.25	0.73
			11/08/07	0.96	2
			01/07/08	0.42	1.89
			03/13/08	1.29	3.31
			05/19/08	0.43	2.5
			07/23/08	0.73	1.47
			09/08/08	2.41	2.46
			11/13/08	0.3	1.32
			01/22/09	0.61	
			03/09/09	0.95	1.71
			05/13/09	0.63	1.63
			07/13/09	1.82	1.41
R.C. Byrd	279.2	Cr	01/04/05	0.41	1.66
			03/15/05	0.25	0.85
			05/04/05	<0.1	0.79
			07/12/05	<0.1	0.61
			09/13/05	0.26	1.48
			11/03/05	0.31	1.28
			01/03/06	0.35	1.37
			03/09/06	0.35	0.88
			05/11/06	0.23	1.36
			07/12/06	0.2	1.4
			09/19/06	<0.1	1.71
			11/24/06	<0.1	1.33
			01/04/07	1.32	1.85
			03/15/07	0.61	1.9
			05/09/07	0.94	2.21
			07/17/07	0.76	1.51
			09/19/07	<0.1	0.87
			11/08/07	0.93	2.29
			01/07/08	0.36	1.74
			03/13/08	0.93	2.82
			05/19/08	0.35	1.32
			07/23/08	0.7	1.85
			09/17/08	1.74	2.27
			11/13/08	0.31	1.65
			01/22/09	0.48	1.46
			03/09/09	0.84	1.27
			05/13/09	0.13	1.81
			07/13/09	1.91	1.56

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Cr	01/26/05	<0.1	6.21
			03/23/05	0.4	1.72
			05/24/05	<0.1	0.85
			07/14/05	<0.1	0.4
			09/20/05	0.19	1.51
			11/08/05	<0.1	1.23
			01/19/06	<0.1	2.2
			03/07/06	<0.1	0.75
			05/10/06	0.17	1.24
			07/25/06	0.35	0.9
			09/12/06	<0.1	1.63
			11/28/06	<0.1	1.38
			01/30/07	1.96	2.86
			03/15/07	0.32	2.01
			05/09/07	0.59	
			07/26/07	<0.1	1.37
			09/13/07	2.76	2.17
			11/29/07	0.25	2
			01/29/08	0.36	1
			03/20/08	0.74	2.84
			05/29/08	0.23	1.14
			07/21/08	0.58	1.54
			09/25/08	1.35	2.47
			11/15/08	0.54	1.58
			01/22/09	0.69	1.68
			03/09/09	0.87	1.28
			05/28/09	0.15	1.22
			07/15/09	1.47	1.2
Meldahl	436.2	Cr	01/25/05	<0.1	3.24
			03/23/05	0.76	0.74
			05/24/05	<0.1	0.71
			07/14/05	0.24	1.21
			09/20/05	0.11	1.46
			11/08/05	0.17	1.68
			01/19/06	0.24	1.8
			03/07/06	0.16	0.82
			05/10/06	<0.1	1.34
			07/12/06	0.16	0.83
			09/12/06	<0.1	1.5
			11/28/06	<0.1	1.47
			01/30/07	1.73	1.82
			03/15/07	0.27	1.85
			05/09/07	0.71	2.04
			07/25/07	0.19	1.42
			09/13/07	2.17	1.11
			11/29/07	0.47	1.68
			01/28/08	0.4	0.89
			03/26/08	0.55	3.19
			05/29/08	0.18	0.99
			07/21/08	0.71	1.75
			09/25/08	1.23	2.67
			11/15/08	0.7	1.13
			01/22/09	0.16	1.4
			03/09/09	1.12	1.48
			05/28/09	0.19	1.28
			07/29/09	0.66	0.98

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Cr	01/25/05	<0.1	2.93
			03/24/05	0.63	1.37
			05/23/05	<0.1	1.76
			07/13/05	0.56	0.76
			09/27/05	0.13	1.56
			11/16/05	0.12	2.92
			01/20/06	0.19	3.28
			03/06/06	0.22	0.86
			05/09/06	0.22	1.48
			07/12/06	0.2	0.97
			09/11/06	<0.1	1.53
			11/09/06	0.16	1.96
			01/24/07	0.29	9.85
			03/27/07	0.23	2.57
			05/08/07	0.94	1.95
			07/24/07	0.78	1.47
			09/18/07	1.07	1.5
			11/28/07	0.75	0.97
			01/09/08	0.15	1.22
			03/24/08	0.65	4.18
			05/13/08	0.74	3.29
			07/17/08	1.01	2.04
			09/23/08	1.72	3.16
			11/19/08	0.56	1.14
			01/14/09	0.62	2.46
			03/09/09	0.38	0.94
			05/28/09	0.39	1.35
			07/29/09	0.88	0.84
Markland	531.5	Cr	01/26/05	0.11	2.24
			03/24/05	0.47	1.63
			05/23/05	<0.1	1.01
			07/13/05	0.55	1.05
			09/27/05	0.27	1.64
			11/16/05	0.13	2.02
			01/20/06	0.26	2.07
			03/06/06	0.1	0.81
			05/09/06	0.26	1.3
			07/13/06	0.14	1.18
			09/13/06	<0.1	1.6
			11/09/06	0.21	1.62
			01/24/07	0.42	2.33
			03/27/07	0.26	3
			05/22/07	0.39	1.48
			07/25/07	0.17	1.42
			09/18/07	0.71	1.08
			11/28/07	0.66	0.89
			01/09/08	0.54	1.69
			03/24/08	0.58	4.94
			05/13/08	0.5	2.66
			07/21/08	0.88	2.13
			09/24/08	1.5	1.99
			11/19/08	0.97	1.76
			02/02/09	0.59	2.15
			03/09/09	0.87	1.7
			05/28/09	0.36	1.32
			07/16/09	1.63	1.21

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Cr	01/26/05	0.62	2.86
			03/22/05	0.43	0.91
			05/23/05	<0.1	1.37
			07/13/05	0.55	0.72
			09/21/05	<0.1	1.76
			11/10/05	<0.1	1.48
			01/25/06	<0.1	1.98
			03/09/06	<0.1	0.69
			05/17/06	0.15	1.46
			07/12/06	0.22	0.94
			09/20/06	0.25	1.75
			11/15/06	0.15	1.76
			01/31/07	2.9	1.85
			03/22/07	0.19	6.13
			05/22/07	0.13	2.9
			07/24/07	1.34	1.4
			09/18/07	0.61	0.99
			11/26/07	1.09	2.85
			01/15/08	0.45	1.61
			03/20/08	0.79	8.08
			05/20/08	0.37	1.93
			07/14/08	1.76	4.56
			09/24/08	1.59	3.29
			11/19/08	0.69	2.25
			01/22/09	0.61	1.05
			03/12/09	0.64	1.57
			05/28/09	0.58	1.84
			07/16/09	1.14	1.41
West Point	625.9	Cr	01/27/05	0.51	3.36
			03/22/05	0.55	1.33
			05/23/05	<0.1	2.01
			07/13/05	0.63	0.77
			09/21/05	0.17	1.65
			11/10/05	<0.1	1.61
			01/25/06	<0.1	4.42
			03/09/06	0.18	1.26
			05/17/06	0.12	1.47
			07/12/06	0.16	1.03
			09/20/06	0.55	1.94
			11/15/06	0.25	2.17
			01/19/07	0.39	2.43
			03/22/07	0.16	6.04
			05/22/07	0.31	1.66
			07/25/07	1.05	1.65
			09/18/07	0.96	1.02
			11/26/07	1.16	3.08
			01/15/08	0.43	3.39
			03/20/08	0.46	6.59
			05/20/08	0.4	16.03
			07/14/08	1.51	18
			09/24/08	1.78	2.59
			11/19/08	0.37	1.75
			01/22/09	0.62	2.02
			03/12/09	0.58	1.92
			05/28/09	0.35	3.26
			07/16/09	1.85	1.73

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Cr	01/26/05	0.2	4.62
			03/22/05	0.51	1.1
			05/23/05	<0.1	1.11
			07/13/05	0.47	0.84
			09/21/05	<0.1	1.55
			11/10/05	<0.1	1.21
			01/25/06	<0.1	5.69
			03/09/06	0.1	0.52
			05/09/06	0.12	1.27
			07/27/06	<0.1	1.03
			09/14/06	<0.1	1.71
			11/01/06	0.83	5.41
			01/31/07	1.32	1.81
			03/22/07	0.12	7.49
			05/08/07	1.19	2.42
			07/24/07	0.29	1.47
			09/19/07	0.48	0.69
			11/27/07	0.91	0.76
			01/23/08	0.36	1.65
			03/18/08	0.85	3.48
			05/21/08	0.39	3.26
			07/23/08	0.54	0.41
			09/18/08	2.89	2.48
			11/18/08	0.4	1.29
			02/03/09	1.92	2.39
			03/10/09	0.77	2.3
			05/21/09	0.47	1.75
			07/22/09	0.45	1.46
Newburgh	776	Cr	01/26/05	0.24	4.51
			03/22/05	0.43	1.54
			05/23/05	<0.1	5.72
			07/13/05	0.41	0.61
			09/21/05	<0.1	1.45
			11/09/05	0.24	2.26
			01/25/06	<0.1	6.02
			03/09/06	<0.1	0.74
			05/10/06	0.12	1.46
			07/12/06	0.14	1.48
			09/20/06	0.16	1.81
			11/15/06	0.17	1.95
			01/31/07	1.52	2.86
			03/22/07	0.22	4.81
			05/22/07	0.38	1.65
			07/24/07	0.29	1.62
			09/19/07	0.15	0.58
			11/27/07	0.89	2.14
			01/23/08	0.48	4.35
			03/25/08	0.44	
			05/21/08	0.37	3.39
			07/15/08	1.82	1.93
			09/29/08	1.2	1.99
			11/18/08	0.5	1.49
			02/03/09	1.38	2.92
			03/10/09	0.57	1.72
			05/20/09	0.36	2.61
			07/22/09	0.55	1.46

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Cr	01/26/05	<0.1	2.98
			03/21/05	0.4	1.75
			05/24/05	<0.1	1.45
			07/12/05	<0.1	0.71
			09/20/05	<0.1	1.57
			11/09/05	0.11	1.71
			01/24/06	0.13	5.7
			03/08/06	<0.1	0.67
			05/16/06	0.17	1.34
			07/11/06	0.3	1.12
			09/19/06	0.15	1.9
			11/15/06	0.22	2.63
			01/30/07	1.47	3.55
			03/22/07	0.18	4.32
			05/21/07	0.64	1.74
			07/25/07	0.13	1.58
			09/20/07	0.25	0.64
			11/28/07	0.5	1.98
			01/24/08	0.44	2.32
			03/18/08	0.81	3.32
			05/21/08	0.39	3.64
			07/22/08	0.57	1.44
			09/17/08	2.75	3.08
			11/17/08	0.88	1.37
			02/02/09	1.46	4.48
			03/10/09	0.24	2.23
			05/19/09	0.35	3.12
			07/21/09	0.43	1.52
Smithland	918.5	Cr	01/27/05	0.35	4.4
			03/21/05	0.49	1.41
			05/24/05	<0.1	1.22
			07/12/05	<0.1	0.51
			09/20/05	<0.1	1.31
			11/09/05	0.12	1.41
			01/24/06	0.19	5.19
			03/08/06	0.14	0.65
			05/16/06	0.23	1.55
			07/11/06	0.28	0.92
			09/19/06	<0.1	1.63
			11/14/06	0.17	2
			01/30/07	2.78	3.32
			03/21/07	0.33	4.16
			05/21/07	0.61	1.47
			07/25/07	0.23	1.59
			09/20/07	0.16	0.49
			11/28/07	0.28	1.3
			01/24/08	0.43	3.18
			03/17/08	0.37	3.54
			05/22/08	0.31	4.42
			07/22/08	0.26	1.76
			09/30/08	1.03	3.29
			11/17/08	0.59	1.19
			02/02/09	0.77	3.5
			03/10/09	0.68	2.57
			05/19/09	0.36	2.79
			07/21/09	0.4	0.99

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Cr	01/27/05	0.43	2.88
			03/21/05	0.41	2.19
			05/24/05	<0.1	1.52
			07/12/05	<0.1	0.69
			09/20/05	<0.1	1.56
			11/09/05	<0.1	1.72
			01/24/06	0.22	4.66
			03/08/06	0.11	0.78
			05/16/06	<0.1	1.7
			07/11/06	0.32	1.59
			09/19/06	<0.1	5.86
			11/14/06	0.13	2.43
			01/30/07	0.94	4.26
			03/21/07	0.29	4.44
			05/21/07	0.43	1.49
			07/25/07	0.11	1.67
			09/20/07	0.16	0.6
			11/28/07	0.84	1.87
			01/24/08	0.33	4.13
			03/17/08	0.95	3.49
			05/22/08	0.37	8.62
			07/21/08	0.63	1.79
			09/16/08	1.74	2.91
			11/17/08	1.65	1.62
			02/02/09	1.09	3.76
			03/11/09	0.64	4.38
			05/19/09	0.4	3
			07/21/09	0.29	1.58
New Cumberland	54.4	Cu	01/20/05	1.13	2.48
			03/16/05	2.67	4.03
			05/12/05	1.75	2.59
			07/14/05	4.11	6.37
			09/07/05	4.56	6.17
			11/08/05	3.73	4.4
			01/04/06	1.4	4.64
			03/07/06	1.45	1.56
			05/04/06	2.27	2.97
			07/13/06	2.65	2.83
			09/14/06	2.44	3.47
			11/01/06	1.67	4.7
			01/12/07	1.46	2.79
			03/12/07	2.54	2.4
			05/07/07	2.65	3.62
			07/10/07	5.92	8.37
			09/17/07	7.28	8.28
			11/05/07	6.93	5.65
			01/08/08	1.79	2.51
			03/18/08	1.42	2.31
			05/28/08	2.23	3.14
			07/16/08	3.43	5.22
			09/24/08	6.61	8.72
			11/12/08	3.91	4.82
			02/09/09	1.44	3.46
			03/16/09	1.49	2.59
			05/18/09	2.55	3.47
			07/15/09	3.34	4.15

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Cu	01/20/05	0.85	2.35
			03/16/05	3.32	6.48
			05/12/05	1.07	1.75
			07/14/05	2.29	2.97
			09/07/05	2.21	3.18
			11/08/05	1.91	2.21
			01/04/06	1.12	5.24
			03/07/06	0.6	0.78
			05/04/06	1.15	1.61
			07/13/06	1.7	2.25
			09/14/06	1.69	2.93
			11/01/06	2.11	3.9
			01/12/07	0.82	2.47
			03/12/07	1.04	1.72
			05/07/07	0.96	1.45
			07/10/07	2.66	3.03
			09/17/07	3.73	3.3
			11/05/07	3.34	3.46
			01/08/08	1.42	1.88
			03/18/08	0.92	1.93
			05/28/08	1.3	1.68
			07/16/08	2.34	3.12
			09/24/08	2.99	3.41
			11/12/08	R	3.32
			02/09/09	1.08	2.99
			03/16/09	R	2.14
			05/18/09	1.56	1.85
			07/15/09	2.35	2.65
Hannibal	126.4	Cu	01/20/05	0.73	2.91
			03/16/05	1.12	2.06
			05/12/05	1.29	1.97
			07/14/05	2.23	2.72
			09/15/05	2.47	3.26
			11/15/05	2.94	3.7
			01/04/06	0.92	4.66
			03/13/06	0.64	1.33
			05/03/06	1.21	1.58
			07/18/06	2.39	2.54
			09/06/06	1.89	3.29
			11/07/06	1.24	2.14
			01/02/07	1.05	1.4
			03/13/07	1.15	1.73
			05/10/07	1.26	1.6
			07/12/07	4.31	3.52
			09/24/07	3.95	3.52
			11/28/07	2.54	4.85
			01/09/08	1.22	2.08
			03/26/08	0.99	2.22
			05/15/08	1.87	2.4
			07/17/08	2.39	2.56
			09/17/08	3	3.9
			11/19/08	2.95	3.4
			02/10/09	R	1.94
			03/10/09	1.51	4.77
			05/19/09	1.33	1.67
			07/22/09	2.5	2.64

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Cu	01/04/05	0.88	2.52
			03/15/05	1.82	3.67
			05/04/05	1.08	1.68
			07/12/05	1.9	2.24
			09/15/05	2.34	2.56
			11/15/05	2.03	2.36
			01/03/06	1.31	3.34
			03/13/06	0.77	1.46
			05/03/06	1.19	1.54
			07/18/06	2.19	2.66
			09/06/06	2.05	3.2
			11/07/06	1.47	2.1
			01/02/07	1.05	1.54
			03/13/07	1.03	1.91
			05/10/07	1.1	1.38
			07/12/07	5.09	3.06
			09/24/07	3.76	3.07
			11/28/07	2.04	4.82
			01/09/08	1.46	3.67
			03/26/08	1.26	2.18
			05/15/08	1.06	2.58
			07/17/08	2.19	2.19
			09/08/08	2.52	2.93
			11/19/08	2.47	3.15
			02/10/09	1.15	2.31
			03/10/09	1.09	3.47
			05/19/09	1.37	1.5
			07/22/09	2.35	2.56
Belleville	203.9	Cu	01/04/05	1.03	3.24
			03/15/05	1.06	1.77
			05/04/05	1.15	2.07
			07/12/05	1.59	1.93
			09/13/05	2.07	2.44
			11/03/05	2.21	2.85
			01/03/06	1.22	3.45
			03/09/06	0.65	0.89
			05/11/06	1.17	1.54
			07/12/06	2.07	2.19
			09/19/06	1.75	2.74
			11/24/06	1.45	2.33
			01/04/07	1.23	1.54
			03/15/07	1.1	2
			05/09/07	1.6	1.94
			07/17/07	2.64	2.61
			09/19/07	4.28	2.7
			11/08/07	3.74	3.47
			01/07/08	1.28	2.03
			03/13/08	0.77	3.31
			05/19/08	1.24	3.41
			07/23/08	1.68	2.13
			09/08/08	2.04	2.39
			11/13/08	2.63	2.68
			01/22/09	1.59	
			03/09/09	1.28	2.31
			05/13/09	1.37	2.46
			07/13/09	1.65	2.01

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Cu	01/04/05	0.82	1.71
			03/15/05	0.29	1.37
			05/04/05	0.67	1.47
			07/12/05	1.38	2.11
			09/13/05	1.95	2.77
			11/03/05	2.09	2.79
			01/03/06	1.1	2
			03/09/06	0.48	1.04
			05/11/06	1	1.83
			07/12/06	1.5	2.73
			09/19/06	1.83	3.11
			11/24/06	1.12	1.83
			01/04/07	0.94	1.14
			03/15/07	0.96	2.26
			05/09/07	0.88	2.32
			07/17/07	1.86	2.7
			09/19/07	1.96	2.82
			11/08/07	2.34	3.51
			01/07/08	1.26	2
			03/13/08	0.81	2.98
			05/19/08	0.82	1.89
			07/23/08	1.97	2.57
			09/17/08	1.8	2.66
			11/13/08	2.18	2.63
			01/22/09	0.9	1.53
			03/09/09	1.07	1.51
			05/13/09	1.12	1.54
			07/13/09	1.5	2.47
Greenup	341	Cu	01/26/05	0.81	7.65
			03/23/05	0.95	2.79
			05/24/05	1.21	1.78
			07/14/05	1.7	1.76
			09/20/05	1.8	2.33
			11/08/05	1.96	2.38
			01/19/06	0.81	3.66
			03/07/06	0.4	0.74
			05/10/06	0.81	1.25
			07/25/06	1.73	2.31
			09/12/06	1.91	2.83
			11/28/06	1.14	1.55
			01/30/07	0.89	1.62
			03/15/07	1.05	2.07
			05/09/07	2.7	
			07/26/07	2.36	2.93
			09/13/07	3.05	2.89
			11/29/07	2.27	4.18
			01/29/08	1.91	2.13
			03/20/08	1.04	3.43
			05/29/08	0.87	1.46
			07/21/08	1.56	1.98
			09/25/08	1.83	2.49
			11/15/08	2.35	3.42
			01/22/09	1.06	1.79
			03/09/09	0.9	1.4
			05/28/09	1.09	1.94
			07/15/09	1.61	2.23

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Cu	01/25/05	0.97	3.97
			03/23/05	0.99	1.52
			05/24/05	1.17	1.77
			07/14/05	1.6	3.31
			09/20/05	1.76	2.15
			11/08/05	2.37	3.64
			01/19/06	0.82	2.61
			03/07/06	0.44	0.72
			05/10/06	0.97	1.29
			07/12/06	1.58	2.03
			09/12/06	2.3	3.53
			11/28/06	1.23	1.93
			01/30/07	1.15	1.6
			03/15/07	1.12	2.38
			05/09/07	1.13	2.31
			07/25/07	2.01	2.27
			09/13/07	2.24	2.63
			11/29/07	2.17	3.76
			01/28/08	1.8	1.93
			03/26/08	1.08	4.31
			05/29/08	R	1.51
			07/21/08	1.55	1.97
			09/25/08	1.83	2.21
			11/15/08	2.21	2.77
			01/22/09	0.87	1.53
			03/09/09	1	1.44
			05/28/09	1.11	1.61
			07/29/09	1.8	2.3
Anderson Ferry	477.5	Cu	01/25/05	1.59	3.82
			03/24/05	1.14	2.57
			05/23/05	1.34	3.37
			07/13/05	1.47	1.99
			09/27/05	1.87	2.46
			11/16/05	1.69	4.49
			01/20/06	1.11	5.84
			03/06/06	0.49	0.85
			05/09/06	0.86	1.9
			07/12/06	1.88	2.41
			09/11/06	1.81	2.88
			11/09/06	1.36	2.98
			01/24/07	0.97	15.76
			03/27/07	1.45	4.26
			05/08/07	1.36	2.32
			07/24/07	1.76	2.38
			09/18/07	2.93	2.85
			11/28/07	1.99	3.41
			01/09/08	1.45	3.84
			03/24/08	1.21	5.62
			05/13/08	1.49	4.76
			07/17/08	1.97	2.98
			09/23/08	1.94	2.43
			11/19/08	2.24	2.61
			01/14/09	R	3.33
			03/09/09	0.79	1.84
			05/28/09	1.31	2.1
			07/29/09	1.91	2.63

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Cu	01/26/05	1.15	3.24
			03/24/05	0.88	2.49
			05/23/05	1.29	2.4
			07/13/05	1.54	1.84
			09/27/05	1.93	2.41
			11/16/05	1.63	3.06
			01/20/06	1.16	3.37
			03/06/06	0.53	0.94
			05/09/06	1.06	1.31
			07/13/06	1.98	2.35
			09/13/06	1.82	3.6
			11/09/06	1.36	2.52
			01/24/07	1.01	3.53
			03/27/07	1.33	4.62
			05/22/07	2.86	1.68
			07/25/07	1.67	2.26
			09/18/07	3.19	2.76
			11/28/07	2.26	3.54
			01/09/08	1.89	2.39
			03/24/08	1.48	6.71
			05/13/08	1.49	3.67
			07/21/08	1.56	2.06
			09/24/08	1.91	2.21
			11/19/08	2.36	2.85
			02/02/09	R	2.92
			03/09/09	0.94	1.95
			05/28/09	1.22	1.79
			07/16/09	1.38	1.74
Louisville	600.6	Cu	01/26/05	1.03	3.81
			03/22/05	0.95	1.52
			05/23/05	1.13	2.74
			07/13/05	1.81	2.21
			09/21/05	1.68	2.65
			11/10/05	2.31	2.72
			01/25/06	0.83	3.27
			03/09/06	0.48	0.85
			05/17/06	1.14	1.74
			07/12/06	1.82	2.1
			09/20/06	2.08	3.19
			11/15/06	1.36	2.21
			01/31/07	1.06	1.92
			03/22/07	1.26	9.28
			05/22/07	1.16	4.34
			07/24/07	2.23	2.3
			09/18/07	2.87	2.73
			11/26/07	3.44	2.78
			01/15/08	2.6	4.91
			03/20/08	2.06	7.72
			05/20/08	1.91	2.43
			07/14/08	1.85	6.97
			09/24/08	2.08	2.32
			11/19/08	2.24	3.76
			01/22/09	R	1.64
			03/12/09	1.06	1.88
			05/28/09	1.34	2.6
			07/16/09	1.4	2.25

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Cu	01/27/05	1.16	4.51
			03/22/05	1.19	2.26
			05/23/05	1.33	3.23
			07/13/05	4.6	5.52
			09/21/05	3.1	3.84
			11/10/05	2.2	3.07
			01/25/06	0.89	7.11
			03/09/06	0.81	2.16
			05/17/06	1.34	2.21
			07/12/06	1.89	2.62
			09/20/06	2.49	3.68
			11/15/06	1.55	3.23
			01/19/07	1.16	3.57
			03/22/07	1.06	9.03
			05/22/07	1.91	3.19
			07/25/07	5.1	5.58
			09/18/07	4.37	4.64
			11/26/07	4.36	3.65
			01/15/08	1.54	4.96
			03/20/08	2.37	6.8
			05/20/08	1.35	18.58
			07/14/08	2.14	20.52
			09/24/08	4.18	4.88
			11/19/08	2.45	3.35
			01/22/09	1.29	3.29
			03/12/09	1.21	2.74
			05/28/09	1.77	5.02
			07/16/09	1.99	3.06
Cannelton	720.7	Cu	01/26/05	1.17	5.62
			03/22/05	0.96	1.86
			05/23/05	1.15	2.2
			07/13/05	1.43	1.97
			09/21/05	1.41	1.66
			11/10/05	2.09	2.31
			01/25/06	0.92	9.25
			03/09/06	0.69	0.68
			05/09/06	1.22	1.48
			07/27/06	1.75	2.18
			09/14/06	1.5	2.51
			11/01/06	1.87	8.76
			01/31/07	1.37	2.32
			03/22/07	1.21	10.88
			05/08/07	1.08	1.77
			07/24/07	1.59	1.93
			09/19/07	2.64	2.26
			11/27/07	2.28	3.63
			01/23/08	2.07	2.95
			03/18/08	2.12	3.93
			05/21/08	1.42	4.19
			07/23/08	1.85	2.07
			09/18/08	1.81	0.89
			11/18/08	1.86	2.33
			02/03/09	1	3.73
			03/10/09	1.16	2.79
			05/21/09	1.59	3.01
			07/22/09	1.51	2.32

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Cu	01/26/05	1.3	5.2
			03/22/05	0.99	2.2
			05/23/05	1.3	7.43
			07/13/05	1.4	1.71
			09/21/05	1.82	2.15
			11/09/05	2.22	2.81
			01/25/06	1.14	9.32
			03/09/06	0.66	0.89
			05/10/06	1.45	1.77
			07/12/06	1.52	2.42
			09/20/06	2.36	2.83
			11/15/06	2.11	2.87
			01/31/07	1.17	4.09
			03/22/07	0.99	6.96
			05/22/07	1.31	2.07
			07/24/07	1.79	2.02
			09/19/07	2.1	2.34
			11/27/07	2.33	3.06
			01/23/08	1.6	6.49
			03/25/08	1.19	
			05/21/08	1.53	4.55
			07/15/08	1.93	2.26
			09/29/08	2.22	2.48
			11/18/08	2.15	3
			02/03/09	1.03	4.63
			03/10/09	1.18	2.17
			05/20/09	1.56	3.51
			07/22/09	1.63	2.32
J.T. Myers	846	Cu	01/26/05	1.09	4.01
			03/21/05	1.02	2.6
			05/24/05	1.2	2.79
			07/12/05	1.43	1.77
			09/20/05	1.4	1.82
			11/09/05	1.96	2.43
			01/24/06	1.14	9.81
			03/08/06	0.55	0.84
			05/16/06	1.33	1.75
			07/11/06	1.72	2.32
			09/19/06	2.02	2.79
			11/15/06	1.56	5.26
			01/30/07	1.63	5.4
			03/22/07	1.31	6.31
			05/21/07	1.28	1.91
			07/25/07	2.02	2.13
			09/20/07	1.97	2.32
			11/28/07	2.29	3.79
			01/24/08	1.61	3.36
			03/18/08	1.95	3.7
			05/21/08	1.8	5.32
			07/22/08	1.72	1.99
			09/17/08	1.83	2.38
			11/17/08	1.54	2.09
			02/02/09	0.97	7.04
			03/10/09	1.2	2.61
			05/19/09	1.39	4.74
			07/21/09	1.51	1.76

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Cu	01/27/05	1.41	4.63
			03/21/05	1.15	2.2
			05/24/05	1.37	2.48
			07/12/05	1.33	1.54
			09/20/05	1.44	1.71
			11/09/05	1.55	2.02
			01/24/06	1.1	8.24
			03/08/06	0.66	0.9
			05/16/06	1.45	2.06
			07/11/06	1.88	2.11
			09/19/06	1.81	2.45
			11/14/06	1.66	2.78
			01/30/07	1.31	4.05
			03/21/07	1.48	5.43
			05/21/07	1.25	1.47
			07/25/07	1.71	1.82
			09/20/07	1.72	1.92
			11/28/07	2.6	2.97
			01/24/08	2.51	3.92
			03/17/08	2.08	3.49
			05/22/08	1.66	5.88
			07/22/08	1.74	2.28
			09/30/08	1.86	2.1
			11/17/08	1.47	1.7
			02/02/09	0.95	5.31
			03/10/09	1.27	2.91
			05/19/09	1.79	4.46
			07/21/09	1.37	1.54
L&D 52	939.9	Cu	01/27/05	1.55	3.75
			03/21/05	1.02	3.12
			05/24/05	1.31	3.2
			07/12/05	1.45	1.85
			09/20/05	1.35	1.67
			11/09/05	1.47	2.19
			01/24/06	1.1	6.97
			03/08/06	0.5	1.1
			05/16/06	1.6	2.45
			07/11/06	1.87	2.93
			09/19/06	1.93	8.19
			11/14/06	1.64	3.83
			01/30/07	1.35	5.4
			03/21/07	1.56	5.72
			05/21/07	1.45	1.68
			07/25/07	1.6	1.75
			09/20/07	1.73	1.57
			11/28/07	2.29	3.46
			01/24/08	2.6	5.65
			03/17/08	1.57	3.45
			05/22/08	1.65	10.52
			07/21/08	1.57	2.12
			09/16/08	1.53	2.05
			11/17/08	1.3	1.76
			02/02/09	1.21	6.23
			03/11/09	1.33	4.76
			05/19/09	1.62	3.99
			07/21/09	1.33	1.83

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Fe	01/20/05	<50	1163
			03/16/05	<50	717
			05/12/05	<50	254
			07/14/05	<50	244
			09/07/05	<50	152
			11/08/05	<50	140
			01/04/06	<50	**2271**
			03/07/06	<50	280
			05/04/06	<50	232
			07/13/06	61.1	60
			09/14/06	<50	452
			11/01/06	50.6	**1716**
			01/12/07	<50	1059
			03/12/07	<50	692
			05/07/07	<50	394
			07/10/07	<50	200
			09/17/07	<50	124
			11/05/07	<50	125
			01/08/08	<50	588
			03/18/08	<50	810
			05/28/08	<50	351
			07/16/08	<50	383
			09/24/08	<50	126
			11/12/08	<50	213
			02/09/09	<50	1395
			03/16/09	<50	1253
			05/18/09	<50	347
			07/15/09	<50	215
Pike Island	84.2	Fe	01/20/05	53	1329
			03/16/05	<50	889
			05/12/05	<50	306
			07/14/05	<50	102
			09/07/05	<50	183
			11/08/05	<50	160
			01/04/06	<50	**3232**
			03/07/06	<50	300
			05/04/06	<50	153
			07/13/06	<50	317
			09/14/06	<50	536
			11/01/06	<50	**2339**
			01/12/07	<50	**1793**
			03/12/07	<50	797
			05/07/07	<50	336
			07/10/07	<50	97
			09/17/07	<50	83
			11/05/07	<50	124
			01/08/08	<50	650
			03/18/08	<50	936
			05/28/08	<50	456
			07/16/08	<50	260
			09/24/08	<50	83
			11/12/08	<50	147
			02/09/09	<50	1451
			03/16/09	<50	1432
			05/18/09	<50	299
			07/15/09	<50	182

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Fe	01/20/05	60	**2102**
			03/16/05	<50	918
			05/12/05	<50	259
			07/14/05	<50	123
			09/15/05	<50	152
			11/15/05	<50	210
			01/04/06	<50	**2925**
			03/13/06	<50	1020
			05/03/06	<50	143
			07/18/06	<50	183
			09/06/06	<50	702
			11/07/06	61.9	680
			01/02/07	<50	443
			03/13/07	<50	721
			05/10/07	<50	261
			07/12/07	<50	81
			09/24/07	<50	165
			11/28/07	<50	1485
			01/09/08	<50	570
			03/26/08	<50	1077
			05/15/08	<50	848
			07/17/08	<50	155
			09/17/08	<50	238
			11/19/08	<50	225
			02/10/09	<50	710
			03/10/09	<50	**3335**
			05/19/09	<50	381
			07/22/09	<50	168
Willow Island	161.8	Fe	01/04/05	67	**1943**
			03/15/05	<50	850
			05/04/05	<50	322
			07/12/05	<50	128
			09/15/05	<50	86
			11/15/05	<50	150
			01/03/06	<50	1382
			03/13/06	<50	1290
			05/03/06	<50	216
			07/18/06	<50	158
			09/06/06	<50	631
			11/07/06	50.5	824
			01/02/07	<50	445
			03/13/07	<50	955
			05/10/07	<50	200
			07/12/07	<50	147
			09/24/07	<50	96
			11/28/07	<50	1320
			01/09/08	<50	1289
			03/26/08	<50	1245
			05/15/08	<50	986
			07/17/08	<50	147
			09/08/08	<50	140
			11/19/08	<50	286
			02/10/09	<50	1117
			03/10/09	<50	**2068**
			05/19/09	<50	330
			07/22/09	<50	232

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Fe	01/04/05	57	**2604**
			03/15/05	<50	1058
			05/04/05	<50	673
			07/12/05	<50	140
			09/13/05	57	83
			11/03/05	<50	160
			01/03/06	<50	**1819**
			03/09/06	<50	500
			05/11/06	<50	135
			07/12/06	<50	308
			09/19/06	58.2	679
			11/24/06	57.5	1057
			01/04/07	<50	438
			03/15/07	<50	1064
			05/09/07	<50	499
			07/17/07	<50	55
			09/19/07	<50	111
			11/08/07	<50	156
			01/07/08	<50	574
			03/13/08	<50	**2482**
			05/19/08	<50	**1963**
			07/23/08	<50	202
			09/08/08	<50	86
			11/13/08	<50	225
			01/22/09	<50	
			03/09/09	<50	1210
			05/13/09	<50	989
			07/13/09	<50	128
R.C. Byrd	279.2	Fe	01/04/05	66	972
			03/15/05	<50	702
			05/04/05	<50	708
			07/12/05	<50	584
			09/13/05	71	363
			11/03/05	<50	350
			01/03/06	<50	714
			03/09/06	61	740
			05/11/06	<50	507
			07/12/06	<50	1042
			09/19/06	61.1	1064
			11/24/06	<50	703
			01/04/07	52.1	368
			03/15/07	<50	1408
			05/09/07	<50	1206
			07/17/07	<50	358
			09/19/07	<50	326
			11/08/07	<50	681
			01/07/08	<50	508
			03/13/08	<50	**1823**
			05/19/08	<50	959
			07/23/08	<50	777
			09/17/08	<50	322
			11/13/08	<50	532
			01/22/09	<50	534
			03/09/09	<50	537
			05/13/09	<50	764
			07/13/09	<50	501

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Fe	01/26/05	<50	**7446**
			03/23/05	<50	2310
			05/24/05	<50	401
			07/14/05	<50	111
			09/20/05	53	265
			11/08/05	<50	180
			01/19/06	<50	2103
			03/07/06	<50	360
			05/10/06	<50	190
			07/25/06	<50	425
			09/12/06	<50	524
			11/28/06	<50	542
			01/30/07	<50	737
			03/15/07	<50	1112
			05/09/07	<50	
			07/26/07	<50	157
			09/13/07	<50	198
			11/29/07	<50	1096
			01/29/08	<50	548
			03/20/08	<50	2731
			05/29/08	<50	438
			07/21/08	<50	215
			09/25/08	<50	318
			11/15/08	<50	651
			01/22/09	<50	580
			03/09/09	<50	552
			05/28/09	<50	601
			07/15/09	<50	534
Meldahl	436.2	Fe	01/25/05	<50	**3527**
			03/23/05	58	540
			05/24/05	<50	408
			07/14/05	<50	1145
			09/20/05	71	169
			11/08/05	<50	710
			01/19/06	<50	1507
			03/07/06	<50	390
			05/10/06	<50	206
			07/12/06	<50	321
			09/12/06	52.3	724
			11/28/06	<50	609
			01/30/07	<50	611
			03/15/07	<50	1182
			05/09/07	<50	952
			07/25/07	<50	99
			09/13/07	<50	173
			11/29/07	<50	869
			01/28/08	<50	434
			03/26/08	<50	3249
			05/29/08	<50	336
			07/21/08	<50	184
			09/25/08	<50	198
			11/15/08	<50	374
			01/22/09	<50	546
			03/09/09	<50	444
			05/28/09	<50	359
			07/29/09	<50	243

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Fe	01/25/05	58	3071
			03/24/05	<50	1370
			05/23/05	<50	1355
			07/13/05	<50	182
			09/27/05	<50	289
			11/16/05	<50	1800
			01/20/06	<50	3165
			03/06/06	<50	250
			05/09/06	<50	554
			07/12/06	<50	385
			09/11/06	<50	493
			11/09/06	59.3	1217
			01/24/07	<50	**11817**
			03/27/07	<50	2588
			05/08/07	<50	984
			07/24/07	<50	181
			09/18/07	<50	187
			11/28/07	<50	538
			01/09/08	<50	1066
			03/24/08	<50	**4830**
			05/13/08	<50	2745
			07/17/08	<50	813
			09/23/08	<50	212
			11/19/08	<50	136
			01/14/09	<50	2095
			03/09/09	<50	681
			05/28/09	<50	726
			07/29/09	<50	408
Markland	531.5	Fe	01/26/05	50	**2383**
			03/24/05	<50	**2360**
			05/23/05	<50	491
			07/13/05	<50	143
			09/27/05	<50	242
			11/16/05	<50	1300
			01/20/06	<50	1927
			03/06/06	<50	410
			05/09/06	<50	135
			07/13/06	<50	311
			09/13/06	<50	932
			11/09/06	67.9	782
			01/24/07	<50	2265
			03/27/07	<50	**2917**
			05/22/07	<50	255
			07/25/07	<50	78
			09/18/07	<50	156
			11/28/07	<50	440
			01/09/08	<50	806
			03/24/08	<50	**5536**
			05/13/08	<50	1766
			07/21/08	<50	372
			09/24/08	<50	186
			11/19/08	<50	559
			02/02/09	<50	1910
			03/09/09	<50	950
			05/28/09	<50	447
			07/16/09	<50	219

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Fe	01/26/05	59	**3870**
			03/22/05	<50	763
			05/23/05	<50	1470
			07/13/05	<50	249
			09/21/05	<50	637
			11/10/05	<50	370
			01/25/06	<50	2050
			03/09/06	<50	370
			05/17/06	<50	528
			07/12/06	<50	415
			09/20/06	<50	901
			11/15/06	73.3	983
			01/31/07	<50	975
			03/22/07	<50	**7294**
			05/22/07	<50	**3309**
			07/24/07	<50	176
			09/18/07	<50	216
			11/26/07	<50	196
			01/15/08	<50	1670
			03/20/08	<50	**8827**
			05/20/08	<50	1122
			07/14/08	<50	**4841**
			09/24/08	<50	140
			11/19/08	<50	1577
			01/22/09	<50	680
			03/12/09	113.17	1006
			05/28/09	<50	1342
			07/16/09	<50	921
West Point	625.9	Fe	01/27/05	<50	**4092**
			03/22/05	<50	1190
			05/23/05	<50	**2555**
			07/13/05	<50	288
			09/21/05	<50	229
			11/10/05	<50	480
			01/25/06	<50	**5357**
			03/09/06	<50	**2470**
			05/17/06	<50	565
			07/12/06	<50	544
			09/20/06	<50	844
			11/15/06	67.4	1600
			01/19/07	<50	2155
			03/22/07	<50	**7028**
			05/22/07	<50	750
			07/25/07	<50	147
			09/18/07	<50	178
			11/26/07	<50	453
			01/15/08	<50	**3162**
			03/20/08	<50	**7173**
			05/20/08	<50	**19591**
			07/14/08	<50	**18721**
			09/24/08	<50	148
			11/19/08	<50	743
			01/22/09	<50	1525
			03/12/09	<50	1586
			05/28/09	<50	**2464**
			07/16/09	<50	536

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Fe	01/26/05	54	**5342**
			03/22/05	<50	1020
			05/23/05	<50	1296
			07/13/05	<50	224
			09/21/05	<50	191
			11/10/05	<50	150
			01/25/06	<50	**6600**
			03/09/06	<50	200
			05/09/06	<50	263
			07/27/06	<50	390
			09/14/06	<50	720
			11/01/06	51.5	**5855**
			01/31/07	<50	753
			03/22/07	<50	**9319**
			05/08/07	<50	602
			07/24/07	<50	96
			09/19/07	<50	177
			11/27/07	<50	315
			01/23/08	<50	974
			03/18/08	<50	**3062**
			05/21/08	<50	**2872**
			07/23/08	<50	272
			09/18/08	<50	305
			11/18/08	<50	238
			02/03/09	<50	**2706**
			03/10/09	<50	1972
			05/21/09	<50	1428
			07/22/09	<50	397
Newburgh	776	Fe	01/26/05	56	**5252**
			03/22/05	<50	1800
			05/23/05	<50	**6778**
			07/13/05	<50	159
			09/21/05	<50	150
			11/09/05	<50	250
			01/25/06	<50	**6125**
			03/09/06	<50	310
			05/10/06	<50	548
			07/12/06	<50	915
			09/20/06	<50	606
			11/15/06	68.9	1137
			01/31/07	<50	**2887**
			03/22/07	<50	**6082**
			05/22/07	<50	775
			07/24/07	<50	67
			09/19/07	<50	95
			11/27/07	<50	399
			01/23/08	<50	**4425**
			03/25/08	<50	
			05/21/08	<50	**3169**
			07/15/08	<50	183
			09/29/08	<50	96
			11/18/08	<50	704
			02/03/09	<50	**3592**
			03/10/09	<50	1196
			05/20/09	<50	2007
			07/22/09	<50	503

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Fe	01/26/05	63	**3692**
			03/21/05	<50	2050
			05/24/05	<50	1723
			07/12/05	<50	224
			09/20/05	<50	382
			11/09/05	<50	320
			01/24/06	<50	**6966**
			03/08/06	<50	330
			05/16/06	<50	542
			07/11/06	<50	724
			09/19/06	<50	728
			11/15/06	<50	2288
			01/30/07	<50	**3988**
			03/22/07	<50	**4803**
			05/21/07	<50	591
			07/25/07	<50	153
			09/20/07	<50	224
			11/28/07	<50	954
			01/24/08	<50	1854
			03/18/08	<50	**2874**
			05/21/08	<50	**4045**
			07/22/08	<50	122
			09/17/08	<50	375
			11/17/08	<50	338
			02/02/09	<50	**5734**
			03/10/09	<50	1855
			05/19/09	<50	**3473**
			07/21/09	<50	279
Smithland	918.5	Fe	01/27/05	56	**4491**
			03/21/05	<50	1330
			05/24/05	<50	1060
			07/12/05	<50	164
			09/20/05	56	272
			11/09/05	<50	160
			01/24/06	<50	**5701**
			03/08/06	<50	340
			05/16/06	<50	848
			07/11/06	<50	497
			09/19/06	<50	796
			11/14/06	57.4	1222
			01/30/07	<50	2975
			03/21/07	<50	**4792**
			05/21/07	<50	175
			07/25/07	<50	321
			09/20/07	<50	70
			11/28/07	<50	320
			01/24/08	<50	2411
			03/17/08	<50	2431
			05/22/08	<50	**4803**
			07/22/08	<50	547
			09/30/08	<50	260
			11/17/08	<50	174
			02/02/09	<50	**3898**
			03/10/09	<50	2041
			05/19/09	<50	3017
			07/21/09	<50	228

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Fe	01/27/05	56	3190
			03/21/05	<50	2580
			05/24/05	<50	1883
			07/12/05	<50	402
			09/20/05	<50	336
			11/09/05	<50	810
			01/24/06	<50	**5011**
			03/08/06	<50	710
			05/16/06	<50	1093
			07/11/06	<50	1385
			09/19/06	<50	**8445**
			11/14/06	85.8	2122
			01/30/07	<50	**4522**
			03/21/07	<50	**4886**
			05/21/07	<50	362
			07/25/07	<50	360
			09/20/07	<50	151
			11/28/07	<50	1176
			01/24/08	<50	**3806**
			03/17/08	<50	2351
			05/22/08	<50	**9875**
			07/21/08	<50	436
			09/16/08	<50	709
			11/17/08	<50	555
			02/02/09	<50	**4644**
			03/11/09	<50	**4106**
			05/19/09	<50	2338
			07/21/09	<50	534
New Cumberland	54.4	Hg	01/20/05	<1.5	2.75
			03/16/05	<1.5	1.56
			05/12/05	<1.5	2.56
			07/14/05	<1.5	<1.5
			09/07/05	<1.5	2.08
			11/08/05	<1.5	<1.5
			01/04/06	<1.5	8.52
			03/07/06	<1.5	1.78
			05/04/06	<1.5	<1.5
			07/13/06	<1.5	<1.5
			09/14/06	<1.5	2.28
			11/01/06	<1.5	7.65
			01/12/07	<1.5	2.74
			03/12/07	<1.5	1.7
			05/07/07	<1.5	<1.5
			07/10/07	1.91	2.45
			09/17/07	5.3	5.71
			11/05/07	<1.5	1.84
			01/08/08	1.54	2.09
			03/18/08	<1.5	3.21
			05/28/08	<1.5	<1.5
			07/16/08	<1.5	<1.5
			09/24/08	<1.5	<1.5
			11/12/08	<1.5	2.22
			02/09/09	<1.5	6.19
			03/16/09	<1.5	3.83
			05/18/09	<1.5	1.86
			07/15/09	<1.5	<1.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Hg	01/20/05	<1.5	3.25
			03/16/05	<1.5	1.91
			05/12/05	<1.5	<1.5
			07/14/05	<1.5	<1.5
			09/07/05	<1.5	<1.5
			11/08/05	<1.5	<1.5
			01/04/06	<1.5	**15.11**
			03/07/06	<1.5	<1.5
			05/04/06	<1.5	<1.5
			07/13/06	<1.5	2.26
			09/14/06	<1.5	4.12
			11/01/06	<1.5	9.78
			01/12/07	<1.5	5.23
			03/12/07	<1.5	2.41
			05/07/07	<1.5	1.67
			07/10/07	3.34	5.26
			09/17/07	4.83	4.94
			11/05/07	<1.5	<1.5
			01/08/08	<1.5	2.18
			03/18/08	<1.5	3.27
			05/28/08	<1.5	<1.5
			07/16/08	<1.5	<1.5
			09/24/08	<1.5	<1.5
			11/12/08	<1.5	<1.5
			02/09/09	<1.5	7.64
			03/16/09	<1.5	4.98
			05/18/09	<1.5	3.45
			07/15/09	2.56	2.75
Hannibal	126.4	Hg	01/20/05	<1.5	4.36
			03/16/05	<1.5	1.75
			05/12/05	<1.5	2.02
			07/14/05	<1.5	3.1
			09/15/05	<1.5	2.02
			11/15/05	<1.5	2.18
			01/04/06	<1.5	9.36
			03/13/06	<1.5	3.82
			05/03/06	<1.5	<1.5
			07/18/06	<1.5	1.97
			09/06/06	5.27	7.68
			11/07/06	<1.5	2.8
			01/02/07	<1.5	1.53
			03/13/07	<1.5	2.35
			05/10/07	<1.5	<1.5
			07/12/07	<1.5	2.25
			09/24/07	2.97	**50.82**
			11/28/07	<1.5	6.26
			01/09/08	<1.5	1.98
			03/26/08	3.94	3.56
			05/15/08	<1.5	3.45
			07/17/08	<1.5	<1.5
			09/17/08	<1.5	<1.5
			11/19/08	<1.5	<1.5
			02/10/09	2.52	4.4
			03/10/09	<1.5	2.9
			05/19/09	<1.5	3.33
			07/22/09	<1.5	<1.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Hg	01/04/05	<1.5	4.39
			03/15/05	<1.5	2.28
			05/04/05	<1.5	<1.5
			07/12/05	<1.5	<1.5
			09/15/05	<1.5	<1.5
			11/15/05	<1.5	1.66
			01/03/06	<1.5	5.8
			03/13/06	<1.5	4.26
			05/03/06	<1.5	<1.5
			07/18/06	<1.5	<1.5
			09/06/06	<1.5	4.73
			11/07/06	<1.5	2.03
			01/02/07	<1.5	2
			03/13/07	<1.5	2.95
			05/10/07	<1.5	<1.5
			07/12/07	2.31	8.62
			09/24/07	1.89	**27.09**
			11/28/07	1.93	9.28
			01/09/08	<1.5	5.99
			03/26/08	<1.5	4.21
			05/15/08	<1.5	**13.1**
			07/17/08	1.98	<1.5
			09/08/08	<1.5	<1.5
			11/19/08	<1.5	<1.5
			02/10/09	<1.5	5.78
			03/10/09	<1.5	5.53
			05/19/09	<1.5	2.12
			07/22/09	<1.5	5.77
Belleville	203.9	Hg	01/04/05	<1.5	4.12
			03/15/05	<1.5	2.12
			05/04/05	<1.5	1.79
			07/12/05	<1.5	<1.5
			09/13/05	<1.5	<1.5
			11/03/05	<1.5	<1.5
			01/03/06	<1.5	5.91
			03/09/06	<1.5	2.41
			05/11/06	1.73	<1.5
			07/12/06	2.63	2.19
			09/19/06	<1.5	3.14
			11/24/06	1.91	3.7
			01/04/07	<1.5	1.97
			03/15/07	<1.5	3.29
			05/09/07	<1.5	2.09
			07/17/07	3.4	5.62
			09/19/07	<1.5	2.24
			11/08/07	<1.5	3.19
			01/07/08	<1.5	2.79
			03/13/08	<1.5	7.7
			05/19/08	<1.5	6.2
			07/23/08	2.01	3.08
			09/08/08	<1.5	<1.5
			11/13/08	<1.5	<1.5
			01/22/09	<1.5	
			03/09/09	<1.5	10.82
			05/13/09	<1.5	5.43
			07/13/09	<1.5	2.61

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Hg	01/04/05	<1.5	2.39
			03/15/05	<1.5	1.55
			05/04/05	<1.5	2.37
			07/12/05	<1.5	1.85
			09/13/05	<1.5	<1.5
			11/03/05	<1.5	<1.5
			01/03/06	<1.5	2.55
			03/09/06	<1.5	3.24
			05/11/06	<1.5	2.49
			07/12/06	<1.5	3.17
			09/19/06	<1.5	4.07
			11/24/06	2.12	2.72
			01/04/07	2.17	1.57
			03/15/07	3.18	4.45
			05/09/07	<1.5	3.94
			07/17/07	5.4	**12.95**
			09/19/07	<1.5	2.82
			11/08/07	<1.5	2.54
			01/07/08	<1.5	2.3
			03/13/08	<1.5	7.91
			05/19/08	<1.5	3.05
			07/23/08	2.04	5.14
			09/17/08	<1.5	<1.5
			11/13/08	<1.5	<1.5
			01/22/09	<1.5	2.12
			03/09/09	<1.5	1.61
			05/13/09	<1.5	3.77
			07/13/09	<1.5	<1.5
Greenup	341	Hg	01/26/05	<1.5	**18**
			03/23/05	<1.5	2.24
			05/24/05	<1.5	1.87
			07/14/05	<1.5	<1.5
			09/20/05	<1.5	<1.5
			11/08/05	<1.5	<1.5
			01/19/06	<1.5	5.72
			03/07/06	<1.5	1.68
			05/10/06	<1.5	<1.5
			07/25/06	2.64	4.18
			09/12/06	<1.5	1.51
			11/28/06	<1.5	1.86
			01/30/07	<1.5	1.61
			03/15/07	<1.5	4.85
			05/09/07	<1.5	
			07/26/07	3.5	6.96
			09/13/07	<1.5	<1.5
			11/29/07	<1.5	5.36
			01/29/08	<1.5	1.94
			03/20/08	<1.5	7.58
			05/29/08	6.44	11.79
			07/21/08	<1.5	<1.5
			09/25/08	<1.5	2.04
			11/15/08	<1.5	1.87
			01/22/09	<1.5	2.48
			03/09/09	<1.5	1.76
			05/28/09	<1.5	2.92
			07/15/09	<1.5	<1.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Hg	01/25/05	<1.5	5.82
			03/23/05	<1.5	<1.5
			05/24/05	<1.5	1.63
			07/14/05	<1.5	2.52
			09/20/05	<1.5	<1.5
			11/08/05	<1.5	<1.5
			01/19/06	<1.5	3.92
			03/07/06	<1.5	2.08
			05/10/06	<1.5	<1.5
			07/12/06	<1.5	1.59
			09/12/06	<1.5	2.28
			11/28/06	<1.5	2.24
			01/30/07	<1.5	3.75
			03/15/07	<1.5	5.92
			05/09/07	<1.5	3.46
			07/25/07	<1.5	1.6
			09/13/07	<1.5	<1.5
			11/29/07	2.66	3.5
			01/28/08	<1.5	1.83
			03/26/08	<1.5	7.19
			05/29/08	4.87	9.18
			07/21/08	<1.5	<1.5
			09/25/08	<1.5	<1.5
			11/15/08	<1.5	<1.5
			01/22/09	<1.5	2.67
			03/09/09	<1.5	<1.5
			05/28/09	2.01	1.87
			07/29/09	<1.5	<1.5
Anderson Ferry	477.5	Hg	01/25/05	<1.5	6.4
			03/24/05	<1.5	2.9
			05/23/05	<1.5	3.22
			07/13/05	<1.5	<1.5
			09/27/05	<1.5	<1.5
			11/16/05	<1.5	5.99
			01/20/06	<1.5	**12.68**
			03/06/06	<1.5	<1.5
			05/09/06	<1.5	2.45
			07/12/06	<1.5	1.6
			09/11/06	<1.5	<1.5
			11/09/06	<1.5	**12.99**
			01/24/07	<1.5	**33.89**
			03/27/07	<1.5	10.07
			05/08/07	<1.5	3.07
			07/24/07	2.3	2.78
			09/18/07	6.9	3.43
			11/28/07	<1.5	2.5
			01/09/08	<1.5	6.21
			03/24/08	<1.5	**13.89**
			05/13/08	<1.5	8.36
			07/17/08	<1.5	2.5
			09/23/08	<1.5	<1.5
			11/19/08	<1.5	**13.04**
			01/14/09	2.15	8.83
			03/09/09	<1.5	1.98
			05/28/09	<1.5	3.25
			07/29/09	<1.5	2.76

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Hg	01/26/05	<1.5	7.58
			03/24/05	<1.5	4.62
			05/23/05	<1.5	1.58
			07/13/05	<1.5	<1.5
			09/27/05	<1.5	<1.5
			11/16/05	<1.5	3.29
			01/20/06	<1.5	5.77
			03/06/06	<1.5	1.96
			05/09/06	<1.5	<1.5
			07/13/06	<1.5	<1.5
			09/13/06	<1.5	2.96
			11/09/06	2.45	3.21
			01/24/07	<1.5	6.89
			03/27/07	1.85	8.55
			05/22/07	<1.5	5.11
			07/25/07	<1.5	<1.5
			09/18/07	<1.5	4.69
			11/28/07	<1.5	1.89
			01/09/08	2.51	3.76
			03/24/08	<1.5	**15.37**
			05/13/08	<1.5	8.85
			07/21/08	<1.5	2.24
			09/24/08	<1.5	<1.5
			11/19/08	R	2.58
			02/02/09	2.12	6.64
			03/09/09	<1.5	1.95
			05/28/09	<1.5	1.75
			07/16/09	<1.5	<1.5
Louisville	600.6	Hg	01/26/05	<1.5	8.32
			03/22/05	<1.5	1.75
			05/23/05	<1.5	5.56
			07/13/05	<1.5	<1.5
			09/21/05	<1.5	2.92
			11/10/05	<1.5	<1.5
			01/25/06	<1.5	6.27
			03/09/06	<1.5	<1.5
			05/17/06	<1.5	<1.5
			07/12/06	<1.5	<1.5
			09/20/06	<1.5	2.61
			11/15/06	<1.5	3.7
			01/31/07	<1.5	3.48
			03/22/07	<1.5	**28.5**
			05/22/07	<1.5	9.83
			07/24/07	<1.5	<1.5
			09/18/07	<1.5	<1.5
			11/26/07	<1.5	6.12
			01/15/08	<1.5	5.79
			03/20/08	2.42	**21.46**
			05/20/08	<1.5	5.12
			07/14/08	<1.5	7.46
			09/24/08	<1.5	<1.5
			11/19/08	<1.5	6.63
			01/22/09	<1.5	3.7
			03/12/09	1.52	4.72
			05/28/09	<1.5	3.78
			07/16/09	<1.5	4.78

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Hg	01/27/05	<1.5	**12.5**
			03/22/05	<1.5	7.64
			05/23/05	<1.5	11.63
			07/13/05	2.62	**17.87**
			09/21/05	2.55	**12.38**
			11/10/05	2.21	**15.51**
			01/25/06	<1.5	**31.12**
			03/09/06	2.77	**30.15**
			05/17/06	<1.5	**23.32**
			07/12/06	2.63	**28.22**
			09/20/06	2.38	**22.14**
			11/15/06	1.55	3.65
			01/19/07	<1.5	8.19
			03/22/07	<1.5	**25.62**
			05/22/07	4.67	**59.24**
			07/25/07	9.23	**26.88**
			09/18/07	5.49	**59.23**
			11/26/07	2.73	**30.15**
			01/15/08	2.44	**19.43**
			03/20/08	<1.5	**21.26**
			05/20/08	<1.5	**71.14**
			07/14/08	<1.5	**122.44**
			09/24/08	6.62	**34.66**
			11/19/08	4.1	**30.93**
			01/22/09	5.07	**19.62**
			03/12/09	<1.5	**14**
			05/28/09	1.96	**30.01**
			07/16/09	3.54	**32.68**
Cannelton	720.7	Hg	01/26/05	<1.5	**12.69**
			03/22/05	<1.5	5.54
			05/23/05	<1.5	3.94
			07/13/05	<1.5	<1.5
			09/21/05	<1.5	1.66
			11/10/05	<1.5	<1.5
			01/25/06	<1.5	**26.44**
			03/09/06	<1.5	<1.5
			05/09/06	<1.5	<1.5
			07/27/06	<1.5	10.01
			09/14/06	<1.5	2.33
			11/01/06	<1.5	**15.92**
			01/31/07	<1.5	5.53
			03/22/07	<1.5	**26.39**
			05/08/07	<1.5	2.21
			07/24/07	<1.5	<1.5
			09/19/07	<1.5	1.67
			11/27/07	<1.5	1.61
			01/23/08	<1.5	4.24
			03/18/08	<1.5	10.68
			05/21/08	R	**29.46**
			07/23/08	R	<1.5
			09/18/08	1.87	2.95
			11/18/08	<1.5	<1.5
			02/03/09	<1.5	7.78
			03/10/09	<1.5	5.58
			05/21/09	<1.5	9.65
			07/22/09	<1.5	2.04

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Hg	01/26/05	<1.5	11.85
			03/22/05	<1.5	10.29
			05/23/05	<1.5	**25.73**
			07/13/05	<1.5	<1.5
			09/21/05	<1.5	1.82
			11/09/05	<1.5	1.74
			01/25/06	<1.5	**25.58**
			03/09/06	<1.5	<1.5
			05/10/06	<1.5	1.67
			07/12/06	<1.5	3.15
			09/20/06	<1.5	2.18
			11/15/06	<1.5	5.76
			01/31/07	1.74	9.18
			03/22/07	2.42	**15.71**
			05/22/07	<1.5	3.28
			07/24/07	<1.5	1.58
			09/19/07	<1.5	<1.5
			11/27/07	<1.5	4.36
			01/23/08	1.8	**17.71**
			03/25/08	R	
			05/21/08	R	**24.68**
			07/15/08	12.87	**17.13**
			09/29/08	R	7.39
			11/18/08	1.84	3.8
			02/03/09	<1.5	**13.69**
			03/10/09	<1.5	3.72
			05/20/09	<1.5	5.69
			07/22/09	<1.5	2.5
J.T. Myers	846	Hg	01/26/05	<1.5	9.05
			03/21/05	<1.5	4.67
			05/24/05	<1.5	5.78
			07/12/05	<1.5	<1.5
			09/20/05	<1.5	1.94
			11/09/05	<1.5	<1.5
			01/24/06	<1.5	**31.19**
			03/08/06	<1.5	1.84
			05/16/06	<1.5	1.8
			07/11/06	<1.5	3.56
			09/19/06	<1.5	2.8
			11/15/06	4.75	9.5
			01/30/07	<1.5	**15.76**
			03/22/07	<1.5	**15.23**
			05/21/07	<1.5	2.4
			07/25/07	1.53	1.98
			09/20/07	<1.5	<1.5
			11/28/07	<1.5	4.49
			01/24/08	<1.5	7.72
			03/18/08	<1.5	9.11
			05/21/08	R	**29.03**
			07/22/08	R	2.4
			09/17/08	<1.5	<1.5
			11/17/08	<1.5	<1.5
			02/02/09	<1.5	**43.76**
			03/10/09	<1.5	4.52
			05/19/09	<1.5	9.33
			07/21/09	<1.5	<1.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Hg	01/27/05	<1.5	8.03
			03/21/05	<1.5	3.11
			05/24/05	<1.5	2.83
			07/12/05	<1.5	<1.5
			09/20/05	<1.5	<1.5
			11/09/05	<1.5	<1.5
			01/24/06	<1.5	**18.97**
			03/08/06	<1.5	1.77
			05/16/06	<1.5	2.91
			07/11/06	<1.5	<1.5
			09/19/06	<1.5	2.21
			11/14/06	<1.5	4.07
			01/30/07	2.62	9.07
			03/21/07	2.37	**24.44**
			05/21/07	<1.5	<1.5
			07/25/07	3.25	**33.87**
			09/20/07	<1.5	<1.5
			11/28/07	1.71	2.26
			01/24/08	<1.5	8.61
			03/17/08	<1.5	7.27
			05/22/08	R	**29.69**
			07/22/08	R	4.06
			09/30/08	R	9.84
			11/17/08	<1.5	<1.5
			02/02/09	<1.5	**15.67**
			03/10/09	<1.5	5.07
			05/19/09	<1.5	11.48
			07/21/09	<1.5	<1.5
L&D 52	939.9	Hg	01/27/05	<1.5	7.28
			03/21/05	<1.5	5.2
			05/24/05	<1.5	5.45
			07/12/05	<1.5	<1.5
			09/20/05	<1.5	1.62
			11/09/05	<1.5	2.65
			01/24/06	<1.5	**19.14**
			03/08/06	<1.5	1.99
			05/16/06	<1.5	3.08
			07/11/06	<1.5	4.48
			09/19/06	<1.5	**18.43**
			11/14/06	<1.5	7.96
			01/30/07	<1.5	**12.96**
			03/21/07	<1.5	3.13
			05/21/07	<1.5	1.66
			07/25/07	<1.5	1.59
			09/20/07	<1.5	<1.5
			11/28/07	2.27	3.94
			01/24/08	1.75	**15.3**
			03/17/08	<1.5	8.36
			05/22/08	R	**36**
			07/21/08	R	**14**
			09/16/08	<1.5	<1.5
			11/17/08	R	**15.73**
			02/02/09	1.87	**25.38**
			03/11/09	<1.5	**13.1**
			05/19/09	<1.5	10.59
			07/21/09	<1.5	<1.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Mg	01/20/05	6.74	6.98
			03/16/05	R	R
			05/12/05	R	R
			07/14/05	4.18	11.65
			09/07/05	11.87	11.89
			11/08/05	9.91	7.75
			01/04/06	7.6	8.07
			03/07/06	7.79	8.42
			05/04/06	5.57	7.72
			07/13/06	8.18	8.29
			09/14/06	6.77	6.45
			11/01/06	4.87	5.39
			01/12/07	5.18	5.29
			03/12/07	6.39	6.69
			05/07/07	6.19	6.31
			07/10/07	11.07	11.27
			09/17/07	9.41	9.85
			11/05/07	9.3	9.82
			01/08/08	6.27	6.73
			03/18/08	6.45	7.07
			05/28/08	7.36	7.38
			07/16/08	8.13	8.47
			09/24/08	9.79	10.64
			11/12/08	9.94	10.28
			02/09/09	8.72	8.95
			03/16/09	4.4	4.59
			05/18/09	6.19	6.82
			07/15/09	7.4	7.63
Pike Island	84.2	Mg	01/20/05	6.69	6.44
			03/16/05	7.6	7.74
			05/12/05	8.51	8.59
			07/14/05	9.36	10.97
			09/07/05	12.49	12.65
			11/08/05	10.46	8.62
			01/04/06	8.25	8.4
			03/07/06	8.26	8.64
			05/04/06	5.03	7.95
			07/13/06	8.45	8.34
			09/14/06	6.1	6.33
			11/01/06	4.58	5.22
			01/12/07	5.16	5.2
			03/12/07	6.38	6.66
			05/07/07	5.8	6.38
			07/10/07	11.5	11.99
			09/17/07	9.55	9.75
			11/05/07	10.45	10.51
			01/08/08	6.07	6.4
			03/18/08	6.49	7.11
			05/28/08	6.87	6.91
			07/16/08	10.49	11.06
			09/24/08	11.11	11.71
			11/12/08	10.35	11.06
			02/09/09	8.94	9.24
			03/16/09	4.21	4.52
			05/18/09	6.2	6.63
			07/15/09	7.55	7.85

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Mg	01/20/05	7.48	7.17
			03/16/05	8.32	9.56
			05/12/05	9.66	9.27
			07/14/05	11.38	11.85
			09/15/05	13.37	13.57
			11/15/05	10.47	7.94
			01/04/06	8.44	9.06
			03/13/06	8.28	9.2
			05/03/06	5.55	8.14
			07/18/06	7.43	8.42
			09/06/06	8.79	8.66
			11/07/06	5.21	5.85
			01/02/07	7.42	7.48
			03/13/07	7.18	7.19
			05/10/07	6.05	7.09
			07/12/07	12.36	12.92
			09/24/07	9.32	10.05
			11/28/07	8.79	9.07
			01/09/08	6.43	6.6
			03/26/08	6.52	7.15
			05/15/08	7.78	7.73
			07/17/08	8.52	10.29
			09/17/08	11.24	11.85
			11/19/08	11.51	10.97
			02/10/09	9.05	9.39
			03/10/09	6.43	7.21
			05/19/09	6.97	7.29
			07/22/09	8.35	8.17
Willow Island	161.8	Mg	01/04/05	7.74	7.67
			03/15/05	7.92	8.22
			05/04/05	8.87	9.13
			07/12/05	11.86	12.48
			09/15/05	14.46	14.6
			11/15/05	11.78	9.14
			01/03/06	9.1	9.19
			03/13/06	9.15	8.66
			05/03/06	5.3	6.76
			07/18/06	7.95	8.33
			09/06/06	9.61	9.57
			11/07/06	5.16	5.66
			01/02/07	8.1	8.7
			03/13/07	7.04	7.19
			05/10/07	6.88	7.22
			07/12/07	14.17	14.29
			09/24/07	10.68	11.09
			11/28/07	8.31	8.6
			01/09/08	6.29	6.63
			03/26/08	6.36	6.79
			05/15/08	6.49	8.04
			07/17/08	11.29	11.35
			09/08/08	9.77	10.02
			11/19/08	11.96	11.79
			02/10/09	9.37	9.53
			03/10/09	7.01	7.29
			05/19/09	6.64	6.67
			07/22/09	8.37	8.67

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Mg	01/04/05	9.9	10.24
			03/15/05	12.33	11.25
			05/04/05	11.52	10.77
			07/12/05	11.75	14.61
			09/13/05	13.65	13.6
			11/03/05	15.83	14.76
			01/03/06	10.76	10.75
			03/09/06	10.72	11.08
			05/11/06	8.69	12.46
			07/12/06	9.73	9.95
			09/19/06	8.19	8.41
			11/24/06	6.55	7.12
			01/04/07	8.76	9.88
			03/15/07	9.28	9.62
			05/09/07	9.3	9.28
			07/17/07	13.22	15.39
			09/19/07	10.06	10.32
			11/08/07	12.59	12.57
			01/07/08	6.59	6.88
			03/13/08	7.65	8.46
			05/19/08	9	9.65
			07/23/08	12.88	13.03
			09/08/08	12.36	12.65
			11/13/08	14.42	14.18
			01/22/09	8.13	
			03/09/09	7.79	8.67
			05/13/09	7.47	8.03
			07/13/09	9.82	9.92
R.C. Byrd	279.2	Mg	01/04/05	8.63	8.56
			03/15/05	6.49	7.34
			05/04/05	6.06	5.85
			07/12/05	10.83	11.13
			09/13/05	12.8	13.06
			11/03/05	14.62	12.46
			01/03/06	7.43	7.76
			03/09/06	8.77	9.48
			05/11/06	6.18	8.49
			07/12/06	7.4	6.42
			09/19/06	7.45	7.57
			11/24/06	5.58	6.19
			01/04/07	6.39	6.98
			03/15/07	6.95	7.22
			05/09/07	7.67	8.7
			07/17/07	12.94	12.99
			09/19/07	9.29	9.58
			11/08/07	13.36	13.29
			01/07/08	7.39	7.89
			03/13/08	5.61	6.27
			05/19/08	6.08	6.29
			07/23/08	10.94	11.14
			09/17/08	10.89	13.2
			11/13/08	11.47	12.72
			01/22/09	6.76	7.03
			03/09/09	7.45	7.88
			05/13/09	4.56	4.65
			07/13/09	10.17	9.46

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Mg	01/26/05	9.3	10.1
			03/23/05	11.62	11.41
			05/24/05	10.81	10.64
			07/14/05	10.93	11.3
			09/20/05	14.15	13.57
			11/08/05	14.14	12.75
			01/19/06	8.41	9.4
			03/07/06	8.7	9.34
			05/10/06	7.39	9.69
			07/25/06	9.12	9.44
			09/12/06	9.86	10.25
			11/28/06	6.73	7.28
			01/30/07	8.08	9.2
			03/15/07	8.88	8.99
			05/09/07	7.19	
			07/26/07	12.72	13.52
			09/13/07	10.61	10.86
			11/29/07	10.25	10.89
			01/29/08	8.99	8.43
			03/20/08	7.66	8.5
			05/29/08	8.22	8.26
			07/21/08	9.92	10.23
			09/25/08	13.17	14.11
			11/15/08	12.55	12.88
			01/22/09	8.26	8.54
			03/09/09	8.56	9.34
			05/28/09	7.59	9.12
			07/15/09	10.94	11.22
Meldahl	436.2	Mg	01/25/05	9.35	9.48
			03/23/05	11.67	10.52
			05/24/05	10.4	11.33
			07/14/05	11.7	13.12
			09/20/05	13.41	14.28
			11/08/05	15.51	12.45
			01/19/06	8.87	10.1
			03/07/06	10.39	10.47
			05/10/06	8.62	10.3
			07/12/06	8.94	10.73
			09/12/06	9.3	9.52
			11/28/06	7.46	9.02
			01/30/07	7.81	9.5
			03/15/07	8.34	9.02
			05/09/07	7.5	9.77
			07/25/07	13.42	14.69
			09/13/07	10.96	12.52
			11/29/07	11.23	11.94
			01/28/08	8.16	8.74
			03/26/08	8.02	8.93
			05/29/08	8.76	8.66
			07/21/08	10.08	11.32
			09/25/08	14.35	14.21
			11/15/08	14.45	14.55
			01/22/09	7.54	8.05
			03/09/09	9.58	9.68
			05/28/09	8.15	9.62
			07/29/09	11.25	12.44

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Mg	01/25/05	9.52	9.56
			03/24/05	12.48	11.66
			05/23/05	12.91	12.56
			07/13/05	12.68	14.2
			09/27/05	14.45	14.52
			11/16/05	14.2	11.36
			01/20/06	11.1	10.88
			03/06/06	10.78	11.6
			05/09/06	9.11	10.42
			07/12/06	9.65	10.78
			09/11/06	9.42	10.52
			11/09/06	7.25	9.21
			01/24/07	7.3	9.39
			03/27/07	8.29	8.45
			05/08/07	9.79	9.96
			07/24/07	13.91	14.74
			09/18/07	12.64	13.08
			11/28/07	11.2	11.75
			01/09/08	8.94	8.95
			03/24/08	7.03	8.39
			05/13/08	11.12	11.52
			07/17/08	10.76	10.7
			09/23/08	14.93	14.72
			11/19/08	13.67	13.8
			01/14/09	7.15	7.37
			03/09/09	8.91	9.85
			05/28/09	9.54	9.65
			07/29/09	11.58	11.83
Markland	531.5	Mg	01/26/05	9.32	9.76
			03/24/05	12.48	11.09
			05/23/05	12.63	12.93
			07/13/05	13.25	11.89
			09/27/05	14.02	13.49
			11/16/05	16.74	12.89
			01/20/06	8.95	11.06
			03/06/06	12.2	11.99
			05/09/06	10.45	12.03
			07/13/06	10.27	11.46
			09/13/06	9.13	10.52
			11/09/06	R	R
			01/24/07	7.36	15.86
			03/27/07	8.28	8.93
			05/22/07	9.53	11.88
			07/25/07	12.09	15.2
			09/18/07	13.72	14.24
			11/28/07	12	13.02
			01/09/08	9.42	10.03
			03/24/08	7.44	8.64
			05/13/08	11.29	12.22
			07/21/08	10.81	10.72
			09/24/08	14.52	14.56
			11/19/08	17.07	16.72
			02/02/09	8.41	8.82
			03/09/09	9.15	9.98
			05/28/09	9.48	10.45
			07/16/09	11.67	12.29

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Mg	01/26/05	10.13	10.13
			03/22/05	11.44	11.34
			05/23/05	11.67	12.67
			07/13/05	13.1	13.35
			09/21/05	14.06	14.24
			11/10/05	18.71	15.39
			01/25/06	10.35	11.38
			03/09/06	15.31	12.24
			05/17/06	11.31	12.28
			07/12/06	10.48	11.12
			09/20/06	10.93	10.76
			11/15/06	9.56	10.8
			01/31/07	9.25	10.74
			03/22/07	8.35	9.52
			05/22/07	11.9	11.57
			07/24/07	15.65	15.61
			09/18/07	14.87	14.95
			11/26/07	14.71	14.81
			01/15/08	8.86	9.46
			03/20/08	6.01	9.64
			05/20/08	9.54	9.72
			07/14/08	11.51	12.83
			09/24/08	15.35	15.19
			11/19/08	15.89	15.5
			01/22/09	8.48	8.51
			03/12/09	10.22	10.71
			05/28/09	10.14	11.22
			07/16/09	10.77	10.84
West Point	625.9	Mg	01/27/05	10.04	10.56
			03/22/05	12.65	12.35
			05/23/05	11.8	13.3
			07/13/05	13.4	15.73
			09/21/05	16.92	16.14
			11/10/05	21.8	17.23
			01/25/06	9.48	12.64
			03/09/06	13.07	13.51
			05/17/06	12.38	13.52
			07/12/06	14.02	15.62
			09/20/06	11.68	11.58
			11/15/06	9.81	11.07
			01/19/07	8.64	8.96
			03/22/07	6.88	9.26
			05/22/07	13.2	13.32
			07/25/07	16.94	16.03
			09/18/07	16.62	16.83
			11/26/07	16.52	16.2
			01/15/08	9.23	10.07
			03/20/08	6.93	9.47
			05/20/08	9.74	19.52
			07/14/08	13.69	21.24
			09/24/08	16.36	17.15
			11/19/08	17.03	16.63
			01/22/09	9.7	10
			03/12/09	10.78	10.98
			05/28/09	11.44	12.24
			07/16/09	12.72	12.76

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Mg	01/26/05	9.53	9.88
			03/22/05	12.54	11.55
			05/23/05	11.84	10.86
			07/13/05	12.65	13.76
			09/21/05	13.64	12.24
			11/10/05	18.98	15.98
			01/25/06	10.68	12.1
			03/09/06	11.45	11.07
			05/09/06	10.56	10.48
			07/27/06	10.33	10.74
			09/14/06	10.59	11.13
			11/01/06	7.3	10.12
			01/31/07	8.75	9.73
			03/22/07	8.61	9.61
			05/08/07	9.37	10
			07/24/07	15.33	15.22
			09/19/07	15.77	15.99
			11/27/07	13.83	13.83
			01/23/08	9.03	9.42
			03/18/08	8.72	9.66
			05/21/08	9.42	9.58
			07/23/08	11.95	11.32
			09/18/08	15.6	15.87
			11/18/08	14.93	14.84
			02/03/09	9.4	9.8
			03/10/09	9.12	9.76
			05/21/09	8.45	8.72
			07/22/09	11.1	11.03
Newburgh	776	Mg	01/26/05	10.38	10.16
			03/22/05	11.55	11.61
			05/23/05	11.51	11.46
			07/13/05	11.34	12.59
			09/21/05	15.25	13.92
			11/09/05	21.93	15.12
			01/25/06	10.96	12.36
			03/09/06	12.48	12.15
			05/10/06	11.85	11.87
			07/12/06	12.34	14.61
			09/20/06	10.85	10.69
			11/15/06	10.45	10.84
			01/31/07	9.95	10.7
			03/22/07	7.14	9.77
			05/22/07	11.2	11.33
			07/24/07	14.69	14.5
			09/19/07	15.19	15.32
			11/27/07	12.81	14.25
			01/23/08	9.96	10.98
			03/25/08	7.55	
			05/21/08	9.62	10.35
			07/15/08	12.94	12.9
			09/29/08	16.34	16.57
			11/18/08	16.74	16.15
			02/03/09	10.39	10.72
			03/10/09	9.54	9.88
			05/20/09	7.69	8.36
			07/22/09	11.17	11.03

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Mg	01/26/05	9.13	9.18
			03/21/05	11.36	10.44
			05/24/05	11.83	11.52
			07/12/05	12.19	12.42
			09/20/05	12.86	12.2
			11/09/05	19.81	15.71
			01/24/06	10.9	12.65
			03/08/06	11.41	10.93
			05/16/06	10.01	11.69
			07/11/06	13.02	13.5
			09/19/06	11.31	11.11
			11/15/06	9.59	9.99
			01/30/07	9.03	9.63
			03/22/07	9.76	10.81
			05/21/07	11.13	11.09
			07/25/07	15.69	14.71
			09/20/07	16.77	16.56
			11/28/07	13.21	13.54
			01/24/08	9.45	10.14
			03/18/08	8.41	9.05
			05/21/08	9.11	10.29
			07/22/08	13.25	13.18
			09/17/08	15.35	15.51
			11/17/08	14.01	13.04
			02/02/09	7.99	9.83
			03/10/09	9.25	9.53
			05/19/09	7.1	7.57
			07/21/09	11.67	11.6
Smithland	918.5	Mg	01/27/05	9.14	9.62
			03/21/05	13.27	14.92
			05/24/05	12.93	12.65
			07/12/05	13.25	12.85
			09/20/05	14.06	13.98
			11/09/05	18.87	16.43
			01/24/06	12.07	13.68
			03/08/06	13.32	14.5
			05/16/06	13.4	15.22
			07/11/06	15.79	15.6
			09/19/06	11.45	11.18
			11/14/06	10.51	11.63
			01/30/07	11.18	11.92
			03/21/07	10.88	11.45
			05/21/07	14.18	13.6
			07/25/07	16.85	16.58
			09/20/07	12.58	17.21
			11/28/07	14.59	14.42
			01/24/08	12.44	13.38
			03/17/08	9.67	9.99
			05/22/08	10.76	12.23
			07/22/08	13.66	13.15
			09/30/08	16.65	16.66
			11/17/08	17.47	16.53
			02/02/09	9.38	9.91
			03/10/09	11.28	11.71
			05/19/09	9.37	9.86
			07/21/09	14.39	14.4

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Mg	01/27/05	8.6	9.08
			03/21/05	14.68	13.95
			05/24/05	13.29	12.12
			07/12/05	13.98	14.76
			09/20/05	11.85	10.97
			11/09/05	14.95	11.85
			01/24/06	11.94	13.93
			03/08/06	14.29	13.64
			05/16/06	12.84	14.24
			07/11/06	14.64	16.73
			09/19/06	11.39	12.45
			11/14/06	9.98	11.88
			01/30/07	10.09	11
			03/21/07	10.82	11.4
			05/21/07	14.23	13.74
			07/25/07	16.78	16.23
			09/20/07	12.61	12.53
			11/28/07	13.98	14.27
			01/24/08	7.61	13.33
			03/17/08	8.48	9.78
			05/22/08	11.02	14.1
			07/21/08	13.06	12.68
			09/16/08	16.92	16.9
			11/17/08	14.22	13.56
			02/02/09	9.14	9.89
			03/11/09	11.11	11.88
			05/19/09	9.49	9.91
			07/21/09	14.29	14.11
New Cumberland	54.4	Mn	01/20/05	128.57	180.97
			03/16/05	160.92	174.67
			05/12/05	7.35	98.52
			07/14/05	0.4	71.46
			09/07/05	0.34	38.97
			11/08/05	19.16	40.74
			01/04/06	89.26	213.29
			03/07/06	107.3	134
			05/04/06	26.29	74.77
			07/13/06	13.98	14.47
			09/14/06	2.11	66.82
			11/01/06	52.42	282.07
			01/12/07	56.87	140.86
			03/12/07	107.72	147.68
			05/07/07	63.58	114.43
			07/10/07	0.78	52.28
			09/17/07	11.57	39.11
			11/05/07	27.95	52.6
			01/08/08	110.64	148.28
			03/18/08	128.6	157.89
			05/28/08	67.15	99.07
			07/16/08	0.75	55.11
			09/24/08	1.63	31.79
			11/12/08	36.93	47.92
			02/09/09	135.6	222.01
			03/16/09	52.12	117.52
			05/18/09	64.39	99.65
			07/15/09	1.73	39.99

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Mn	01/20/05	118.5	204.28
			03/16/05	141.05	168.64
			05/12/05	6.22	82.25
			07/14/05	0.62	60.07
			09/07/05	0.34	46.47
			11/08/05	32.4	40.34
			01/04/06	102.86	355.35
			03/07/06	103.17	126
			05/04/06	24.84	51.38
			07/13/06	30.91	50.53
			09/14/06	4.16	94.46
			11/01/06	43.41	347.18
			01/12/07	40.96	203.09
			03/12/07	113.96	166.72
			05/07/07	35.21	92.16
			07/10/07	0.45	40.38
			09/17/07	16.46	39.37
			11/05/07	9.77	33.15
			01/08/08	107.79	156.98
			03/18/08	128.02	171.91
			05/28/08	52.53	92.75
			07/16/08	1.35	40.1
			09/24/08	1.36	26.95
			11/12/08	28.74	51.39
			02/09/09	153.01	228.35
			03/16/09	50.48	137.78
			05/18/09	48.91	81.28
			07/15/09	0.95	36.73
Hannibal	126.4	Mn	01/20/05	110.67	213.1
			03/16/05	141.81	175.6
			05/12/05	2.85	74.6
			07/14/05	0.56	50.8
			09/15/05	0.59	33.13
			11/15/05	12.05	45.47
			01/04/06	128.49	345.46
			03/13/06	84.33	157.26
			05/03/06	39.45	49.35
			07/18/06	0.61	24.76
			09/06/06	2.69	131.34
			11/07/06	37.99	100.37
			01/02/07	82.58	106.58
			03/13/07	116.78	158.08
			05/10/07	2.2	64.28
			07/12/07	0.51	26.75
			09/24/07	74.69	107.62
			11/28/07	15.2	207.16
			01/09/08	105.72	141.18
			03/26/08	83.52	129.85
			05/15/08	3.23	85.52
			07/17/08	0.55	27.1
			09/17/08	25.04	59.53
			11/19/08	14.4	40.51
			02/10/09	130.17	173.62
			03/10/09	99.97	370.92
			05/19/09	33.09	68.32
			07/22/09	5.12	28.83

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Mn	01/04/05	80.32	185.32
			03/15/05	119.54	148.37
			05/04/05	19.65	79.07
			07/12/05	0.5	35.78
			09/15/05	0.65	25.36
			11/15/05	10.95	38.05
			01/03/06	99.8	228.67
			03/13/06	85.12	157.07
			05/03/06	31.22	44.88
			07/18/06	0.66	17.65
			09/06/06	15.96	99.95
			11/07/06	30.39	109.84
			01/02/07	86.24	110.09
			03/13/07	109.09	166.09
			05/10/07	3.96	53.52
			07/12/07	0.98	39.45
			09/24/07	67.05	90.47
			11/28/07	15.29	173.38
			01/09/08	93.26	231.82
			03/26/08	73.22	137.07
			05/15/08	1.46	86.6
			07/17/08	0.41	25.04
			09/08/08	1.02	30.22
			11/19/08	9.24	40.97
			02/10/09	113.02	179.23
			03/10/09	108.77	282.72
			05/19/09	24.73	59.44
			07/22/09	16.6	44.31
Belleville	203.9	Mn	01/04/05	48.05	195.52
			03/15/05	90.77	122.69
			05/04/05	3.93	101.88
			07/12/05	0.65	41.38
			09/13/05	1.19	17.34
			11/03/05	2.27	36.39
			01/03/06	53.82	202.04
			03/09/06	53.68	137.13
			05/11/06	6.7	40.78
			07/12/06	11.34	32.9
			09/19/06	10.66	86.11
			11/24/06	9.16	113.34
			01/04/07	54.94	81.8
			03/15/07	72.89	146.49
			05/09/07	6.99	63.88
			07/17/07	1.77	26.58
			09/19/07	35.12	61.97
			11/08/07	40.48	62.89
			01/07/08	55.83	95.35
			03/13/08	44.85	183.96
			05/19/08	3.75	182.43
			07/23/08	0.7	34.76
			09/08/08	3.53	25.84
			11/13/08	30.15	47.57
			01/22/09	72.03	
			03/09/09	104.83	173.82
			05/13/09	4.42	85.98
			07/13/09	4.17	33.56

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Mn	01/04/05	57.95	120.06
			03/15/05	68.73	104.41
			05/04/05	58.53	90.98
			07/12/05	41.35	123.46
			09/13/05	9.68	63.79
			11/03/05	19.83	52.82
			01/03/06	33.74	78.77
			03/09/06	55.77	158.9
			05/11/06	88.49	111.08
			07/12/06	73.49	118.19
			09/19/06	33.06	111.39
			11/24/06	20.59	60.75
			01/04/07	30.93	52.67
			03/15/07	83.79	169.53
			05/09/07	261.77	352.88
			07/17/07	33.74	80.56
			09/19/07	57.32	101.71
			11/08/07	60.14	109.14
			01/07/08	65.67	99.87
			03/13/08	70.78	154.2
			05/19/08	44.03	108.43
			07/23/08	37.32	80
			09/17/08	34.96	70.71
			11/13/08	48.13	78.01
			01/22/09	75.11	100.59
			03/09/09	72.44	98.8
			05/13/09	58.66	97.97
			07/13/09	47.42	87.59
Greenup	341	Mn	01/26/05	49	515.48
			03/23/05	68.75	224.8
			05/24/05	5.99	44.06
			07/14/05	3.57	27.49
			09/20/05	2.83	41.1
			11/08/05	2.64	29.36
			01/19/06	33.17	217.01
			03/07/06	12.79	94.58
			05/10/06	29.55	48.67
			07/25/06	5.59	34.83
			09/12/06	4.14	72.35
			11/28/06	14.4	47.94
			01/30/07	42.23	76.39
			03/15/07	34.55	126.92
			05/09/07	8.33	
			07/26/07	19.1	47.38
			09/13/07	27.45	57.24
			11/29/07	18.81	170.18
			01/29/08	56.1	98.6
			03/20/08	23.53	162.25
			05/29/08	13.58	55.49
			07/21/08	0.66	27.56
			09/25/08	1.82	55.45
			11/15/08	7.58	86.12
			01/22/09	47.4	96.96
			03/09/09	42.48	71.35
			05/28/09	10.64	51.03
			07/15/09	1.72	34.95

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Mn	01/25/05	12.63	169.04
			03/23/05	25.24	45.33
			05/24/05	3.75	44.45
			07/14/05	0.95	293.06
			09/20/05	1.81	34.03
			11/08/05	0.97	135.02
			01/19/06	4.72	88.2
			03/07/06	0.42	76.24
			05/10/06	7.12	24.58
			07/12/06	8.92	29.89
			09/12/06	19.85	104.63
			11/28/06	3.42	40.03
			01/30/07	7.71	42.51
			03/15/07	7.38	95.35
			05/09/07	2.39	96.17
			07/25/07	1.37	22.96
			09/13/07	17.08	47.11
			11/29/07	2.58	117.31
			01/28/08	19.73	39.71
			03/26/08	4.88	184.1
			05/29/08	6.18	26.94
			07/21/08	0.32	17.72
			09/25/08	3.73	30.87
			11/15/08	3.99	45.44
			01/22/09	13.59	40.46
			03/09/09	20.17	39.86
			05/28/09	4.39	40.51
			07/29/09	1.36	34.01
Anderson Ferry	477.5	Mn	01/25/05	16.51	145.39
			03/24/05	33.8	74.23
			05/23/05	15.6	115.01
			07/13/05	4.56	49.42
			09/27/05	8.98	51.44
			11/16/05	8.36	119.14
			01/20/06	6.74	239.96
			03/06/06	5.62	54.16
			05/09/06	60.86	87.07
			07/12/06	29.55	44.37
			09/11/06	2.89	45.86
			11/09/06	30.34	120.69
			01/24/07	127.72	1132.09
			03/27/07	6.95	238.19
			05/08/07	5.77	88.7
			07/24/07	13.42	35.32
			09/18/07	4.57	39.83
			11/28/07	18.82	68.51
			01/09/08	36.77	117.57
			03/24/08	2.54	272.26
			05/13/08	8.47	217.76
			07/17/08	23.57	62.11
			09/23/08	3.42	35.2
			11/19/08	6.82	16.27
			01/14/09	3.11	185.46
			03/09/09	33.99	60.29
			05/28/09	29.7	74.26
			07/29/09	10.82	48.42

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Mn	01/26/05	7.12	141.05
			03/24/05	10.66	113.43
			05/23/05	3.81	50.49
			07/13/05	0.39	39.3
			09/27/05	2.52	37.58
			11/16/05	2.28	69.4
			01/20/06	32.62	166.37
			03/06/06	2.55	69.68
			05/09/06	4.99	13.39
			07/13/06	20.55	37.75
			09/13/06	12.83	103.38
			11/09/06	5.7	57.86
			01/24/07	1.66	194.22
			03/27/07	7.27	238.03
			05/22/07	1.31	35.81
			07/25/07	2.51	22.42
			09/18/07	2.86	38.67
			11/28/07	3.04	48.45
			01/09/08	10.4	79.27
			03/24/08	19.73	342.53
			05/13/08	2.38	164.22
			07/21/08	8.93	64.89
			09/24/08	1.24	28.08
			11/19/08	13.33	72.86
			02/02/09	6.12	102.99
			03/09/09	10.39	57.86
			05/28/09	14.64	56.14
			07/16/09	2.5	29.06
Louisville	600.6	Mn	01/26/05	8.29	183.85
			03/22/05	22.24	50.67
			05/23/05	28.1	121.96
			07/13/05	9.05	36.11
			09/21/05	11.04	57.94
			11/10/05	6.12	32.6
			01/25/06	10.56	125.04
			03/09/06	0.68	45.21
			05/17/06	26.82	40.97
			07/12/06	18.28	40.64
			09/20/06	17.75	74.47
			11/15/06	9.38	75.98
			01/31/07	10.24	70.22
			03/22/07	4.54	639.68
			05/22/07	203.61	433.51
			07/24/07	23.12	40.72
			09/18/07	22.96	50.9
			11/26/07	6.11	26.29
			01/15/08	13.75	93.02
			03/20/08	1.86	360.33
			05/20/08	25.02	89.79
			07/14/08	130.84	373.96
			09/24/08	2.43	20.33
			11/19/08	18.34	91.93
			01/22/09	9.19	43.74
			03/12/09	16.89	57.35
			05/28/09	35.07	100.97
			07/16/09	21.04	74.19

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Mn	01/27/05	18.35	217.08
			03/22/05	39.38	80.6
			05/23/05	7.21	157.25
			07/13/05	43.21	85.7
			09/21/05	14.62	45.1
			11/10/05	42.41	75.55
			01/25/06	4.59	392.28
			03/09/06	59.32	204.23
			05/17/06	37.37	56.56
			07/12/06	91.04	100.72
			09/20/06	24.78	86.22
			11/15/06	22.35	138.64
			01/19/07	7.5	172.79
			03/22/07	3.66	610.51
			05/22/07	10.64	114.45
			07/25/07	33.87	54.56
			09/18/07	12.41	49.56
			11/26/07	32.86	65.56
			01/15/08	1.16	245.67
			03/20/08	1.79	330.53
			05/20/08	10.7	1236.94
			07/14/08	24.18	1052.27
			09/24/08	5.93	34.39
			11/19/08	39.89	78.98
			01/22/09	49.9	140.81
			03/12/09	15.4	101.13
			05/28/09	39.11	176.33
			07/16/09	22.04	66.54
Cannelton	720.7	Mn	01/26/05	2.85	273.85
			03/22/05	6.9	52.07
			05/23/05	1.71	64.57
			07/13/05	2.75	41.5
			09/21/05	6.52	25.75
			11/10/05	4.44	20.57
			01/25/06	18.87	646.59
			03/09/06	0.29	24.75
			05/09/06	13.66	24.21
			07/27/06	3.06	28.81
			09/14/06	7.03	66.16
			11/01/06	3.81	582
			01/31/07	1.96	110.35
			03/22/07	2.01	718.76
			05/08/07	1.53	35.08
			07/24/07	5.71	18.52
			09/19/07	6.85	33.37
			11/27/07	4.95	32.57
			01/23/08	1.23	62.83
			03/18/08	1.47	175.4
			05/21/08	0.77	188.55
			07/23/08	0.76	39.46
			09/18/08	13.22	38.05
			11/18/08	7.12	21.65
			02/03/09	3.09	198.09
			03/10/09	1.33	99.74
			05/21/09	2.23	66.78
			07/22/09	0.85	38.23

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Mn	01/26/05	15.73	270.33
			03/22/05	11.22	75.18
			05/23/05	1.92	458.5
			07/13/05	0.57	29.45
			09/21/05	0.34	22.59
			11/09/05	3.75	32.98
			01/25/06	1.95	572.61
			03/09/06	1.72	34.04
			05/10/06	21.55	35.04
			07/12/06	12.12	57.84
			09/20/06	4.36	39.26
			11/15/06	13.61	113.7
			01/31/07	14.56	234.72
			03/22/07	1.54	385.18
			05/22/07	0.28	87.11
			07/24/07	8.4	20.76
			09/19/07	9.51	30.86
			11/27/07	5.67	37.95
			01/23/08	5.71	403.25
			03/25/08	4.64	
			05/21/08	1.41	256.55
			07/15/08	0.46	18.59
			09/29/08	0.15	11.51
			11/18/08	8.08	50.34
			02/03/09	7.41	299.22
			03/10/09	8.87	59.73
			05/20/09	2.62	94.32
			07/22/09	1.13	42.6
J.T. Myers	846	Mn	01/26/05	4.85	174.41
			03/21/05	9.54	92.97
			05/24/05	0.59	135.51
			07/12/05	0.85	43.1
			09/20/05	2.07	39.7
			11/09/05	3.51	37.64
			01/24/06	5.55	569.96
			03/08/06	1.06	33.33
			05/16/06	6.44	36.19
			07/11/06	0.88	50.13
			09/19/06	1.44	45.78
			11/15/06	1.6	213.12
			01/30/07	6.45	325.45
			03/22/07	0.9	356.29
			05/21/07	0.44	71.62
			07/25/07	1.03	26.57
			09/20/07	2.17	32.97
			11/28/07	1.83	98.09
			01/24/08	2.64	157.07
			03/18/08	1.82	171.11
			05/21/08	0.7	290.22
			07/22/08	0.54	18.21
			09/17/08	0.43	34.99
			11/17/08	5.72	28.62
			02/02/09	2.65	541.31
			03/10/09	4.51	74.18
			05/19/09	0.85	162.26
			07/21/09	0.44	30.24

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Mn	01/27/05	5.21	118.46
			03/21/05	4.59	70.3
			05/24/05	1.66	58.57
			07/12/05	0.87	35.12
			09/20/05	2.3	38.37
			11/09/05	0.26	27.32
			01/24/06	10.05	406.88
			03/08/06	1.41	27.09
			05/16/06	6.85	42.09
			07/11/06	2.5	32.1
			09/19/06	2.09	39.88
			11/14/06	2.77	76.94
			01/30/07	4.88	165.9
			03/21/07	1.72	256.38
			05/21/07	0.33	25.31
			07/25/07	7.27	70.55
			09/20/07	1.98	20.9
			11/28/07	2.9	40.23
			01/24/08	4.32	106.43
			03/17/08	2.37	131.61
			05/22/08	3.45	275.62
			07/22/08	0.2	26.44
			09/30/08	0.43	25.3
			11/17/08	6.04	17.74
			02/02/09	2.68	350.63
			03/10/09	1.79	78.25
			05/19/09	0.67	180.54
			07/21/09	0.19	35.08
L&D 52	939.9	Mn	01/27/05	6.64	97.86
			03/21/05	28.57	143.1
			05/24/05	4.54	97.6
			07/12/05	4.18	55.34
			09/20/05	1.57	35.64
			11/09/05	0.47	102.14
			01/24/06	5.98	357.94
			03/08/06	2.15	48.26
			05/16/06	8.78	52.75
			07/11/06	1.35	85.73
			09/19/06	1.08	493.7
			11/14/06	73.94	218.79
			01/30/07	11.58	229.14
			03/21/07	4.13	254.6
			05/21/07	0.49	57.51
			07/25/07	0.74	48.99
			09/20/07	0.43	39.28
			11/28/07	5.67	100.96
			01/24/08	6.59	231.61
			03/17/08	2.88	119.13
			05/22/08	3.62	712.82
			07/21/08	20.71	48.5
			09/16/08	9.83	70.78
			11/17/08	4.54	52.08
			02/02/09	4.12	395.41
			03/11/09	19.31	192.41
			05/19/09	0.71	164.9
			07/21/09	0.89	58.42

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Ni	01/20/05	4.57	6.54
			03/16/05	5.81	6.13
			05/12/05	2.85	3.75
			07/14/05	1.69	1.97
			09/07/05	2.38	2.52
			11/08/05	2.45	2.56
			01/04/06	2.64	6.33
			03/07/06	2.26	2.22
			05/04/06	2.28	2.57
			07/13/06	1.59	1.57
			09/14/06	1.38	2.25
			11/01/06	2.46	6.15
			01/12/07	2.3	4.1
			03/12/07	3.85	4.41
			05/07/07	2.49	3.23
			07/10/07	2.27	2.3
			09/17/07	1.89	2.24
			11/05/07	2.21	2.23
			01/08/08	3.56	4.51
			03/18/08	4.07	5.1
			05/28/08	2.52	3.29
			07/16/08	1.21	2.21
			09/24/08	1.98	2.24
			11/12/08	2.69	2.83
			02/09/09	3.24	5.21
			03/16/09	2.26	3.55
			05/18/09	2.18	2.73
			07/15/09	1.45	1.85
Pike Island	84.2	Ni	01/20/05	4.56	6.75
			03/16/05	5.43	6.49
			05/12/05	2.71	3.45
			07/14/05	1.83	1.99
			09/07/05	2.32	2.85
			11/08/05	3.15	2.9
			01/04/06	2.99	9.73
			03/07/06	2.18	2.29
			05/04/06	1.87	2.58
			07/13/06	1.41	1.89
			09/14/06	1.44	2.86
			11/01/06	2.18	7.21
			01/12/07	2.14	5.16
			03/12/07	3.67	4.83
			05/07/07	2.06	2.93
			07/10/07	1.86	2.02
			09/17/07	1.68	1.81
			11/05/07	2.16	2.46
			01/08/08	3.36	4.38
			03/18/08	4.03	5.78
			05/28/08	2.19	3.12
			07/16/08	1.47	2.1
			09/24/08	2.06	2.21
			11/12/08	2.34	2.76
			02/09/09	3.99	6.63
			03/16/09	2.6	4.09
			05/18/09	2.03	2.51
			07/15/09	1.55	1.87

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Ni	01/20/05	3.8	7.16
			03/16/05	4.69	6.07
			05/12/05	2.57	3.42
			07/14/05	1.89	1.95
			09/15/05	2.6	3.16
			11/15/05	3.02	2.75
			01/04/06	2.45	8.28
			03/13/06	1.97	2.78
			05/03/06	1.86	2.06
			07/18/06	1.45	1.69
			09/06/06	1.4	2.94
			11/07/06	2.15	3.27
			01/02/07	3.13	3.8
			03/13/07	3.86	4.37
			05/10/07	1.58	2.6
			07/12/07	2.22	2.36
			09/24/07	1.84	2.16
			11/28/07	2.31	5.31
			01/09/08	3.27	4.07
			03/26/08	3.08	4.75
			05/15/08	1.76	3.4
			07/17/08	1.18	1.75
			09/17/08	2	2.62
			11/19/08	2.9	3.1
			02/10/09	3.89	4.98
			03/10/09	3.2	9.41
			05/19/09	1.68	2.14
			07/22/09	1.76	1.51
Willow Island	161.8	Ni	01/04/05	2.97	5.3
			03/15/05	4.29	5.49
			05/04/05	2.86	3.71
			07/12/05	2.13	1.68
			09/15/05	2.18	2.16
			11/15/05	3.24	2.78
			01/03/06	3.82	6.59
			03/13/06	1.84	2.62
			05/03/06	1.6	1.76
			07/18/06	1.31	1.68
			09/06/06	1.67	2.93
			11/07/06	2.12	3.47
			01/02/07	2.97	3.73
			03/13/07	2.83	4.6
			05/10/07	1.96	2.27
			07/12/07	2.27	2.54
			09/24/07	1.87	2.18
			11/28/07	2.51	5.24
			01/09/08	3.02	5.6
			03/26/08	2.82	4.77
			05/15/08	1.32	3.4
			07/17/08	1.35	1.7
			09/08/08	1.93	2.06
			11/19/08	2.56	3.04
			02/10/09	3.83	5.15
			03/10/09	3.54	6.99
			05/19/09	1.65	2.15
			07/22/09	1.72	2.21

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Ni	01/04/05	2.58	5.01
			03/15/05	2.99	4.14
			05/04/05	2.19	3.48
			07/12/05	1.71	1.81
			09/13/05	2.64	2.62
			11/03/05	2.43	2.71
			01/03/06	2.2	5.15
			03/09/06	1.63	1.96
			05/11/06	1.58	1.76
			07/12/06	1.73	1.82
			09/19/06	1.36	2.6
			11/24/06	1.99	3.97
			01/04/07	2.46	3.19
			03/15/07	2.92	4.21
			05/09/07	1.82	2.83
			07/17/07	2.07	2.32
			09/19/07	1.66	1.95
			11/08/07	2.3	2.52
			01/07/08	1.84	2.85
			03/13/08	2.08	5.8
			05/19/08	1.5	5.3
			07/23/08	1.13	1.6
			09/08/08	1.92	2.18
			11/13/08	2.53	2.78
			01/22/09	2.23	
			03/09/09	2.82	4.36
			05/13/09	1.23	3.23
			07/13/09	1.29	1.43
R.C. Byrd	279.2	Ni	01/04/05	2.09	3.43
			03/15/05	1.4	2.7
			05/04/05	1.07	2.23
			07/12/05	1.31	2.17
			09/13/05	2.06	2.44
			11/03/05	2.19	2.45
			01/03/06	1.55	2.85
			03/09/06	1.1	2.07
			05/11/06	1.33	2.06
			07/12/06	1.71	2.55
			09/19/06	1.41	2.7
			11/24/06	1.37	2.26
			01/04/07	1.15	1.66
			03/15/07	1.85	3.79
			05/09/07	1.3	3.49
			07/17/07	2	2.32
			09/19/07	1.43	2.25
			11/08/07	1.95	3.1
			01/07/08	2.23	3.11
			03/13/08	1.42	4.04
			05/19/08	1.02	2.5
			07/23/08	1.13	2.35
			09/17/08	1.72	2.41
			11/13/08	2.03	3.08
			01/22/09	1.84	2.52
			03/09/09	1.96	2.75
			05/13/09	1.13	2.19
			07/13/09	1.25	2.08

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Ni	01/26/05	2.49	10.26
			03/23/05	2.24	5.28
			05/24/05	1.49	1.92
			07/14/05	1.48	1.42
			09/20/05	2.37	2.83
			11/08/05	1.91	2.29
			01/19/06	1.43	5.08
			03/07/06	0.97	1.56
			05/10/06	1.11	1.37
			07/25/06	1.18	1.76
			09/12/06	1.53	2.32
			11/28/06	1.45	2.23
			01/30/07	7.62	9.46
			03/15/07	1.89	3.62
			05/09/07	1.05	
			07/26/07	1.89	2.33
			09/13/07	1.9	2.31
			11/29/07	1.89	4.17
			01/29/08	1.99	2.86
			03/20/08	1.82	5.26
			05/29/08	1.02	1.81
			07/21/08	0.87	1.47
			09/25/08	2.19	2.8
			11/15/08	2.59	3.65
			01/22/09	1.94	3.4
			03/09/09	1.92	2.64
			05/28/09	1.34	2.07
			07/15/09	1.39	2.2
Meldahl	436.2	Ni	01/25/05	1.8	6.18
			03/23/05	1.61	2.33
			05/24/05	1.17	1.9
			07/14/05	1.59	4.19
			09/20/05	2.05	3.16
			11/08/05	2.15	3.42
			01/19/06	1.32	3.77
			03/07/06	0.86	1.29
			05/10/06	1.11	1.22
			07/12/06	1.14	1.55
			09/12/06	1.65	3.48
			11/28/06	1.47	2.34
			01/30/07	1.31	2.46
			03/15/07	1.58	3.53
			05/09/07	1.01	2.82
			07/25/07	2.18	2.3
			09/13/07	1.76	2.31
			11/29/07	1.8	3.6
			01/28/08	1.95	2.25
			03/26/08	1.53	6.34
			05/29/08	1.01	1.62
			07/21/08	0.93	1.43
			09/25/08	1.95	2.21
			11/15/08	2.26	3.09
			01/22/09	1.42	2.21
			03/09/09	1.91	2.43
			05/28/09	1.04	1.66
			07/29/09	1.55	1.89

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Ni	01/25/05	1.48	5.84
			03/24/05	1.44	3.03
			05/23/05	1.36	3.62
			07/13/05	1.84	2.15
			09/27/05	2.3	3.59
			11/16/05	2.45	4.65
			01/20/06	1.6	7.64
			03/06/06	0.92	1.38
			05/09/06	1.05	1.98
			07/12/06	1.49	1.87
			09/11/06	1.53	2.37
			11/09/06	1.39	3.41
			01/24/07	1.25	22.31
			03/27/07	1.69	6.01
			05/08/07	1.19	2.73
			07/24/07	1.87	2.38
			09/18/07	2	2.53
			11/28/07	1.82	2.77
			01/09/08	1.66	3.75
			03/24/08	1.41	8.45
			05/13/08	1.65	5.88
			07/17/08	1.26	2.55
			09/23/08	2.03	2.16
			11/19/08	2.57	2.77
			01/14/09	1.45	4.71
			03/09/09	1.55	2.51
			05/28/09	1.27	2.23
			07/29/09	1.38	1.94
Markland	531.5	Ni	01/26/05	1.82	4.74
			03/24/05	1.33	3.87
			05/23/05	1.27	2.43
			07/13/05	1.51	1.68
			09/27/05	2.02	3.44
			11/16/05	2.55	3.52
			01/20/06	1.47	4.42
			03/06/06	0.81	1.32
			05/09/06	1.08	1.09
			07/13/06	1.46	1.8
			09/13/06	1.43	3.14
			11/09/06	1.3	2.59
			01/24/07	1.15	5.02
			03/27/07	1.47	6.59
			05/22/07	0.83	1.5
			07/25/07	1.96	2.15
			09/18/07	2.39	2.68
			11/28/07	1.87	2.82
			01/09/08	1.6	2.93
			03/24/08	1.77	9.55
			05/13/08	1.33	4.48
			07/21/08	1.09	1.73
			09/24/08	1.87	2.02
			11/19/08	2.85	3.35
			02/02/09	1.46	4.1
			03/09/09	1.36	2.94
			05/28/09	1.1	1.8
			07/16/09	1.04	1.44

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Ni	01/26/05	1.47	5.61
			03/22/05	1.52	2.45
			05/23/05	1.07	3.12
			07/13/05	1.53	1.93
			09/21/05	1.69	3.63
			11/10/05	3.31	2.6
			01/25/06	1.49	4.39
			03/09/06	0.76	1.09
			05/17/06	1.14	1.69
			07/12/06	1.23	1.84
			09/20/06	1.62	2.94
			11/15/06	1.28	2.66
			01/31/07	1.21	2.58
			03/22/07	1.51	13.12
			05/22/07	1.05	5.79
			07/24/07	1.83	2.34
			09/18/07	2.71	3.03
			11/26/07	2.12	2.46
			01/15/08	1.47	4.09
			03/20/08	0.91	10.89
			05/20/08	1.26	2.97
			07/14/08	1.46	8.7
			09/24/08	1.77	2.08
			11/19/08	2.52	4.6
			01/22/09	1.32	2.19
			03/12/09	1.54	2.57
			05/28/09	1.12	2.86
			07/16/09	1.14	2.08
West Point	625.9	Ni	01/27/05	1.68	6.6
			03/22/05	1.78	3.4
			05/23/05	1.22	4.39
			07/13/05	2.52	2.89
			09/21/05	2.8	3.06
			11/10/05	4.05	3.79
			01/25/06	1.25	10.24
			03/09/06	1.24	3.06
			05/17/06	1.71	2.55
			07/12/06	2.68	3.04
			09/20/06	2.05	3.32
			11/15/06	1.68	3.85
			01/19/07	1.42	5.21
			03/22/07	1.38	12.83
			05/22/07	2.24	3.29
			07/25/07	2.8	3.23
			09/18/07	3.57	3.86
			11/26/07	3.16	3.96
			01/15/08	1.51	6.94
			03/20/08	1.15	9.96
			05/20/08	1.48	35.29
			07/14/08	1.64	33.69
			09/24/08	2.79	2.89
			11/19/08	3.6	4.32
			01/22/09	1.83	4.25
			03/12/09	1.69	3.93
			05/28/09	1.63	5.5
			07/16/09	1.91	2.7

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Ni	01/26/05	1.37	8.08
			03/22/05	1.27	2.67
			05/23/05	0.96	2.22
			07/13/05	1.58	1.74
			09/21/05	1.75	0.74
			11/10/05	3.33	2.58
			01/25/06	1.44	13.65
			03/09/06	0.8	0.82
			05/09/06	1.09	1.47
			07/27/06	1.13	1.69
			09/14/06	1.35	2.5
			11/01/06	1.54	10.68
			01/31/07	1.22	3.26
			03/22/07	1.42	15.82
			05/08/07	0.98	2.04
			07/24/07	1.83	2.08
			09/19/07	2.56	2.77
			11/27/07	1.94	2.35
			01/23/08	1.37	2.87
			03/18/08	1.27	5.36
			05/21/08	1.16	5.54
			07/23/08	1.24	1.54
			09/18/08	1.97	2.22
			11/18/08	2.52	2.65
			02/03/09	1.29	5.3
			03/10/09	1.31	3.77
			05/21/09	1.06	3.31
			07/22/09	1.28	2.19
Newburgh	776	Ni	01/26/05	1.6	7.83
			03/22/05	1.12	3.12
			05/23/05	1.15	10.51
			07/13/05	1.51	1.58
			09/21/05	1.94	2.13
			11/09/05	3.68	3.19
			01/25/06	1.61	12.75
			03/09/06	0.88	1.1
			05/10/06	1.27	1.83
			07/12/06	1.17	2.28
			09/20/06	1.71	2.47
			11/15/06	1.78	3.33
			01/31/07	1.34	5.88
			03/22/07	1.16	9.87
			05/22/07	1.06	2.22
			07/24/07	2.22	2.01
			09/19/07	2.32	2.49
			11/27/07	1.87	2.77
			01/23/08	1.55	8.92
			03/25/08	1.25	
			05/21/08	1.16	5.92
			07/15/08	1.18	1.5
			09/29/08	1.77	1.95
			11/18/08	3.07	3.65
			02/03/09	1.3	6.21
			03/10/09	1.32	2.72
			05/20/09	1.13	4.06
			07/22/09	1.32	2.19

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Ni	01/26/05	1.22	5.56
			03/21/05	1.15	3.68
			05/24/05	1.02	3.11
			07/12/05	1.24	1.57
			09/20/05	1.7	2.43
			11/09/05	3.76	2.88
			01/24/06	1.48	13.05
			03/08/06	0.66	1.03
			05/16/06	1.18	1.77
			07/11/06	1.18	2.25
			09/19/06	1.42	2.7
			11/15/06	1.34	5.24
			01/30/07	1.24	7.56
			03/22/07	1.34	9.04
			05/21/07	1.06	2.02
			07/25/07	1.69	2.09
			09/20/07	2.62	2.88
			11/28/07	2.15	3.57
			01/24/08	1.43	4.29
			03/18/08	1.19	5.37
			05/21/08	1.29	7.08
			07/22/08	1.03	1.4
			09/17/08	1.56	2.03
			11/17/08	1.84	2.4
			02/02/09	1.05	10.11
			03/10/09	1.1	3.25
			05/19/09	1.14	5.65
			07/21/09	1.04	1.47
Smithland	918.5	Ni	01/27/05	1.27	5.65
			03/21/05	1.12	2.85
			05/24/05	1.07	2.43
			07/12/05	1.27	1.37
			09/20/05	1.55	1.85
			11/09/05	1.94	2.26
			01/24/06	1.54	11.36
			03/08/06	0.71	0.99
			05/16/06	1.34	2.15
			07/11/06	1.25	1.69
			09/19/06	1.54	2.43
			11/14/06	1.43	2.98
			01/30/07	1.23	5.15
			03/21/07	1.39	7.1
			05/21/07	1.05	1.24
			07/25/07	1.63	2.17
			09/20/07	2.09	2.1
			11/28/07	2.17	2.53
			01/24/08	1.5	4.3
			03/17/08	1.25	4.39
			05/22/08	1.23	7.41
			07/22/08	1.04	1.73
			09/30/08	1.67	1.87
			11/17/08	1.87	2.23
			02/02/09	1.07	6.89
			03/10/09	1.21	3.36
			05/19/09	1.33	5.23
			07/21/09	1.83	2.02

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Ni	01/27/05	1.34	4.52
			03/21/05	1.11	4.27
			05/24/05	1.01	3.32
			07/12/05	1.28	1.84
			09/20/05	1.26	1.64
			11/09/05	2.47	2.66
			01/24/06	1.4	9.29
			03/08/06	0.61	1.65
			05/16/06	1.42	2.57
			07/11/06	1.9	2.85
			09/19/06	1.57	11.16
			11/14/06	1.48	4.56
			01/30/07	1.24	7.31
			03/21/07	1.32	6.89
			05/21/07	1.1	1.61
			07/25/07	1.65	2.09
			09/20/07	1.42	1.57
			11/28/07	2.1	3.62
			01/24/08	1.47	6.51
			03/17/08	1.1	4.14
			05/22/08	1.25	15.72
			07/21/08	0.98	1.71
			09/16/08	1.44	2.22
			11/17/08	1.48	2.12
			02/02/09	1.11	8.38
			03/11/09	1.26	6.05
			05/19/09	1.35	4.73
			07/21/09	0.91	1.75
New Cumberland	54.4	Pb	01/20/05	<0.1	1.07
			03/16/05	<0.1	0.44
			05/12/05	<0.1	0.38
			07/14/05	<0.1	0.41
			09/07/05	<0.1	0.29
			11/08/05	<0.1	0.34
			01/04/06	<0.1	3.18
			03/07/06	<0.1	0.21
			05/04/06	<0.1	0.28
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	0.85
			11/01/06	<0.1	2.53
			01/12/07	<0.1	1.11
			03/12/07	<0.1	0.62
			05/07/07	<0.1	0.55
			07/10/07	<0.1	0.53
			09/17/07	<0.1	0.39
			11/05/07	<0.1	0.36
			01/08/08	<0.1	0.61
			03/18/08	<0.1	0.76
			05/28/08	<0.1	0.43
			07/16/08	<0.1	0.71
			09/24/08	<0.1	0.18
			11/12/08	<0.1	0.43
			02/09/09	<0.1	1.52
			03/16/09	<0.1	1.25
			05/18/09	<0.1	0.54
			07/15/09	<0.1	0.4

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Pb	01/20/05	<0.1	1.34
			03/16/05	<0.1	0.6
			05/12/05	<0.1	0.54
			07/14/05	<0.1	0.15
			09/07/05	<0.1	0.42
			11/08/05	<0.1	0.4
			01/04/06	<0.1	4.65
			03/07/06	<0.1	0.17
			05/04/06	<0.1	0.22
			07/13/06	<0.1	0.44
			09/14/06	<0.1	1.25
			11/01/06	<0.1	3.51
			01/12/07	<0.1	1.82
			03/12/07	<0.1	0.85
			05/07/07	<0.1	0.49
			07/10/07	<0.1	0.26
			09/17/07	<0.1	0.25
			11/05/07	<0.1	0.35
			01/08/08	<0.1	0.73
			03/18/08	<0.1	1.19
			05/28/08	<0.1	0.56
			07/16/08	<0.1	0.47
			09/24/08	<0.1	0.11
			11/12/08	<0.1	0.12
			02/09/09	<0.1	1.66
			03/16/09	<0.1	1.48
			05/18/09	<0.1	0.45
			07/15/09	<0.1	0.39
Hannibal	126.4	Pb	01/20/05	<0.1	1.78
			03/16/05	<0.1	0.74
			05/12/05	<0.1	0.42
			07/14/05	<0.1	0.18
			09/15/05	<0.1	0.23
			11/15/05	<0.1	0.42
			01/04/06	<0.1	3.53
			03/13/06	<0.1	0.59
			05/03/06	<0.1	0.2
			07/18/06	<0.1	0.27
			09/06/06	<0.1	1.41
			11/07/06	<0.1	0.94
			01/02/07	<0.1	0.47
			03/13/07	<0.1	0.93
			05/10/07	<0.1	0.46
			07/12/07	<0.1	0.21
			09/24/07	<0.1	0.4
			11/28/07	<0.1	2.77
			01/09/08	<0.1	0.76
			03/26/08	<0.1	1.25
			05/15/08	<0.1	1.15
			07/17/08	<0.1	0.32
			09/17/08	<0.1	0.3
			11/19/08	<0.1	0.35
			02/10/09	<0.1	0.95
			03/10/09	<0.1	4.15
			05/19/09	<0.1	0.54
			07/22/09	<0.1	0.17

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Pb	01/04/05	<0.1	1.31
			03/15/05	<0.1	0.58
			05/04/05	<0.1	0.54
			07/12/05	<0.1	0.18
			09/15/05	<0.1	0.1
			11/15/05	<0.1	0.17
			01/03/06	0.11	1.94
			03/13/06	<0.1	0.66
			05/03/06	<0.1	0.3
			07/18/06	<0.1	0.2
			09/06/06	<0.1	1.15
			11/07/06	<0.1	1.13
			01/02/07	<0.1	0.5
			03/13/07	<0.1	0.89
			05/10/07	<0.1	0.38
			07/12/07	<0.1	0.32
			09/24/07	<0.1	0.24
			11/28/07	<0.1	2.54
			01/09/08	<0.1	1.87
			03/26/08	<0.1	1.42
			05/15/08	<0.1	1.39
			07/17/08	<0.1	0.29
			09/08/08	<0.1	<0.1
			11/19/08	<0.1	0.4
			02/10/09	<0.1	1.26
			03/10/09	<0.1	2.47
			05/19/09	<0.1	0.49
			07/22/09	<0.1	0.3
Belleville	203.9	Pb	01/04/05	<0.1	1.85
			03/15/05	<0.1	0.75
			05/04/05	<0.1	0.96
			07/12/05	<0.1	0.17
			09/13/05	<0.1	<0.1
			11/03/05	0.1	0.35
			01/03/06	<0.1	2.08
			03/09/06	<0.1	0.29
			05/11/06	<0.1	0.2
			07/12/06	<0.1	0.34
			09/19/06	<0.1	0.89
			11/24/06	<0.1	1.28
			01/04/07	0.13	0.52
			03/15/07	<0.1	1.13
			05/09/07	0.1	0.67
			07/17/07	<0.1	0.18
			09/19/07	<0.1	0.19
			11/08/07	<0.1	0.37
			01/07/08	<0.1	0.85
			03/13/08	<0.1	2.36
			05/19/08	<0.1	2.3
			07/23/08	<0.1	0.32
			09/08/08	<0.1	0.15
			11/13/08	<0.1	0.23
			01/22/09	<0.1	
			03/09/09	<0.1	1.23
			05/13/09	<0.1	1.49
			07/13/09	<0.1	0.22

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Pb	01/04/05	<0.1	0.85
			03/15/05	<0.1	0.62
			05/04/05	<0.1	0.92
			07/12/05	<0.1	0.7
			09/13/05	0.16	0.4
			11/03/05	<0.1	0.63
			01/03/06	<0.1	0.91
			03/09/06	<0.1	0.54
			05/11/06	<0.1	0.57
			07/12/06	<0.1	1.08
			09/19/06	<0.1	1.09
			11/24/06	<0.1	0.87
			01/04/07	<0.1	0.4
			03/15/07	<0.1	1.57
			05/09/07	<0.1	1.54
			07/17/07	<0.1	0.58
			09/19/07	<0.1	0.51
			11/08/07	<0.1	0.99
			01/07/08	<0.1	0.62
			03/13/08	<0.1	2.18
			05/19/08	<0.1	1.14
			07/23/08	<0.1	0.93
			09/17/08	<0.1	0.33
			11/13/08	<0.1	0.52
			01/22/09	<0.1	0.65
			03/09/09	<0.1	0.58
			05/13/09	<0.1	1.17
			07/13/09	<0.1	0.66
Greenup	341	Pb	01/26/05	<0.1	7.47
			03/23/05	<0.1	1.97
			05/24/05	<0.1	0.5
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	0.31
			11/08/05	<0.1	0.2
			01/19/06	<0.1	2.6
			03/07/06	<0.1	0.25
			05/10/06	<0.1	0.21
			07/25/06	<0.1	0.37
			09/12/06	<0.1	0.6
			11/28/06	<0.1	0.61
			01/30/07	<0.1	0.79
			03/15/07	<0.1	1.43
			05/09/07	<0.1	
			07/26/07	<0.1	0.28
			09/13/07	<0.1	0.38
			11/29/07	<0.1	1.81
			01/29/08	<0.1	0.71
			03/20/08	<0.1	2.64
			05/29/08	<0.1	0.59
			07/21/08	<0.1	0.37
			09/25/08	<0.1	0.37
			11/15/08	<0.1	1.28
			01/22/09	<0.1	0.64
			03/09/09	<0.1	0.48
			05/28/09	0.1	1.45
			07/15/09	<0.1	0.48

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Pb	01/25/05	<0.1	2.93
			03/23/05	<0.1	0.42
			05/24/05	<0.1	0.58
			07/14/05	<0.1	1.65
			09/20/05	<0.1	0.22
			11/08/05	<0.1	1.16
			01/19/06	<0.1	1.64
			03/07/06	<0.1	0.3
			05/10/06	<0.1	0.22
			07/12/06	<0.1	0.31
			09/12/06	<0.1	0.95
			11/28/06	<0.1	0.72
			01/30/07	<0.1	0.73
			03/15/07	<0.1	1.51
			05/09/07	<0.1	1.29
			07/25/07	<0.1	0.75
			09/13/07	<0.1	0.3
			11/29/07	<0.1	1.39
			01/28/08	<0.1	0.49
			03/26/08	<0.1	3.86
			05/29/08	<0.1	0.51
			07/21/08	<0.1	0.28
			09/25/08	<0.1	0.16
			11/15/08	<0.1	0.61
			01/22/09	<0.1	0.63
			03/09/09	<0.1	0.43
			05/28/09	<0.1	0.48
			07/29/09	<0.1	1.09
Anderson Ferry	477.5	Pb	01/25/05	<0.1	2.83
			03/24/05	<0.1	1.42
			05/23/05	<0.1	2.16
			07/13/05	<0.1	0.3
			09/27/05	0.11	0.43
			11/16/05	<0.1	1.93
			01/20/06	<0.1	6.61
			03/06/06	<0.1	0.22
			05/09/06	<0.1	0.74
			07/12/06	<0.1	0.49
			09/11/06	<0.1	0.69
			11/09/06	<0.1	1.7
			01/24/07	<0.1	18.96
			03/27/07	<0.1	4.04
			05/08/07	<0.1	1.21
			07/24/07	<0.1	0.33
			09/18/07	<0.1	0.39
			11/28/07	<0.1	0.86
			01/09/08	<0.1	1.7
			03/24/08	<0.1	4.67
			05/13/08	0.13	3.63
			07/17/08	<0.1	1.13
			09/23/08	<0.1	0.41
			11/19/08	<0.1	0.14
			01/14/09	<0.1	2.52
			03/09/09	<0.1	0.82
			05/28/09	0.11	0.97
			07/29/09	<0.1	0.8

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Pb	01/26/05	<0.1	2.56
			03/24/05	<0.1	1.69
			05/23/05	<0.1	0.9
			07/13/05	<0.1	0.18
			09/27/05	<0.1	0.31
			11/16/05	<0.1	0.89
			01/20/06	<0.1	2.36
			03/06/06	<0.1	0.3
			05/09/06	<0.1	<0.1
			07/13/06	<0.1	0.34
			09/13/06	<0.1	1.23
			11/09/06	<0.1	1.07
			01/24/07	<0.1	3.1
			03/27/07	0.13	3.9
			05/22/07	<0.1	0.38
			07/25/07	<0.1	0.2
			09/18/07	<0.1	0.26
			11/28/07	<0.1	0.69
			01/09/08	<0.1	1.08
			03/24/08	<0.1	5.74
			05/13/08	<0.1	2.47
			07/21/08	<0.1	0.49
			09/24/08	<0.1	0.16
			11/19/08	<0.1	0.52
			02/02/09	<0.1	2.12
			03/09/09	<0.1	0.92
			05/28/09	<0.1	0.61
			07/16/09	<0.1	0.18
Louisville	600.6	Pb	01/26/05	<0.1	3.1
			03/22/05	<0.1	0.66
			05/23/05	<0.1	1.64
			07/13/05	<0.1	0.3
			09/21/05	<0.1	0.76
			11/10/05	<0.1	0.42
			01/25/06	<0.1	2.45
			03/09/06	<0.1	0.25
			05/17/06	<0.1	0.43
			07/12/06	<0.1	0.41
			09/20/06	<0.1	0.99
			11/15/06	<0.1	1.12
			01/31/07	<0.1	1.04
			03/22/07	0.14	9.28
			05/22/07	<0.1	3.22
			07/24/07	<0.1	0.33
			09/18/07	<0.1	0.36
			11/26/07	<0.1	0.32
			01/15/08	<0.1	1.95
			03/20/08	<0.1	7.41
			05/20/08	<0.1	1.33
			07/14/08	<0.1	5.37
			09/24/08	<0.1	0.14
			11/19/08	<0.1	1.45
			01/22/09	<0.1	0.83
			03/12/09	0.18	0.88
			05/28/09	0.12	1.42
			07/16/09	<0.1	0.77

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Pb	01/27/05	<0.1	3.84
			03/22/05	<0.1	1.14
			05/23/05	<0.1	2.39
			07/13/05	<0.1	0.36
			09/21/05	<0.1	0.35
			11/10/05	<0.1	0.69
			01/25/06	<0.1	6.47
			03/09/06	0.13	1.61
			05/17/06	<0.1	0.68
			07/12/06	<0.1	0.64
			09/20/06	<0.1	1.08
			11/15/06	<0.1	1.91
			01/19/07	<0.1	2.82
			03/22/07	<0.1	8.94
			05/22/07	0.12	0.96
			07/25/07	<0.1	0.29
			09/18/07	<0.1	0.33
			11/26/07	<0.1	0.76
			01/15/08	<0.1	3.95
			03/20/08	<0.1	6.62
			05/20/08	<0.1	23.23
			07/14/08	<0.1	22.23
			09/24/08	<0.1	0.17
			11/19/08	<0.1	0.86
			01/22/09	<0.1	1.92
			03/12/09	<0.1	1.51
			05/28/09	<0.1	3.03
			07/16/09	<0.1	0.71
Cannelton	720.7	Pb	01/26/05	<0.1	4.87
			03/22/05	<0.1	0.89
			05/23/05	<0.1	1.27
			07/13/05	<0.1	0.25
			09/21/05	<0.1	0.22
			11/10/05	<0.1	0.12
			01/25/06	<0.1	8.96
			03/09/06	<0.1	0.19
			05/09/06	<0.1	0.25
			07/27/06	<0.1	0.36
			09/14/06	<0.1	0.85
			11/01/06	<0.1	7.62
			01/31/07	<0.1	1.49
			03/22/07	<0.1	9.93
			05/08/07	<0.1	0.69
			07/24/07	<0.1	0.18
			09/19/07	<0.1	0.27
			11/27/07	<0.1	0.42
			01/23/08	<0.1	1.15
			03/18/08	<0.1	3
			05/21/08	<0.1	3.25
			07/23/08	<0.1	0.42
			09/18/08	<0.1	0.29
			11/18/08	<0.1	0.26
			02/03/09	<0.1	2.84
			03/10/09	<0.1	1.75
			05/21/09	<0.1	1.73
			07/22/09	<0.1	0.54

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Pb	01/26/05	0.17	4.45
			03/22/05	<0.1	1.24
			05/23/05	<0.1	7.04
			07/13/05	<0.1	0.16
			09/21/05	<0.1	0.14
			11/09/05	0.1	0.3
			01/25/06	<0.1	8.38
			03/09/06	<0.1	0.23
			05/10/06	<0.1	0.51
			07/12/06	<0.1	0.85
			09/20/06	<0.1	0.7
			11/15/06	<0.1	1.52
			01/31/07	<0.1	3.17
			03/22/07	<0.1	5.98
			05/22/07	<0.1	0.93
			07/24/07	<0.1	0.12
			09/19/07	<0.1	0.19
			11/27/07	<0.1	0.49
			01/23/08	<0.1	5.24
			03/25/08	<0.1	
			05/21/08	<0.1	3.78
			07/15/08	<0.1	0.27
			09/29/08	<0.1	<0.1
			11/18/08	<0.1	0.68
			02/03/09	<0.1	3.98
			03/10/09	<0.1	1
			05/20/09	<0.1	2.05
			07/22/09	<0.1	0.54
J.T. Myers	846	Pb	01/26/05	<0.1	3.26
			03/21/05	<0.1	1.53
			05/24/05	<0.1	1.88
			07/12/05	<0.1	0.25
			09/20/05	<0.1	0.34
			11/09/05	<0.1	0.43
			01/24/06	<0.1	8.39
			03/08/06	<0.1	0.23
			05/16/06	<0.1	0.34
			07/11/06	<0.1	0.84
			09/19/06	<0.1	0.85
			11/15/06	<0.1	2.96
			01/30/07	<0.1	4.81
			03/22/07	<0.1	6.15
			05/21/07	<0.1	0.78
			07/25/07	<0.1	0.24
			09/20/07	<0.1	0.33
			11/28/07	<0.1	1.07
			01/24/08	<0.1	2.23
			03/18/08	<0.1	3.1
			05/21/08	<0.1	4.49
			07/22/08	<0.1	0.19
			09/17/08	<0.1	0.32
			11/17/08	<0.1	0.41
			02/02/09	<0.1	6.64
			03/10/09	<0.1	1.36
			05/19/09	<0.1	3.73
			07/21/09	<0.1	0.31

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Pb	01/27/05	<0.1	3.29
			03/21/05	<0.1	1.09
			05/24/05	<0.1	1.17
			07/12/05	<0.1	0.16
			09/20/05	<0.1	0.23
			11/09/05	<0.1	0.24
			01/24/06	<0.1	6.62
			03/08/06	<0.1	0.21
			05/16/06	<0.1	0.65
			07/11/06	<0.1	0.42
			09/19/06	<0.1	0.69
			11/14/06	<0.1	1.26
			01/30/07	<0.1	3.05
			03/21/07	<0.1	4.56
			05/21/07	0.11	0.23
			07/25/07	<0.1	0.45
			09/20/07	<0.1	0.14
			11/28/07	<0.1	0.35
			01/24/08	<0.1	2.28
			03/17/08	<0.1	2.64
			05/22/08	<0.1	4.64
			07/22/08	<0.1	0.48
			09/30/08	<0.1	0.15
			11/17/08	<0.1	0.14
			02/02/09	<0.1	4.42
			03/10/09	<0.1	1.55
			05/19/09	<0.1	2.97
			07/21/09	<0.1	0.2
L&D 52	939.9	Pb	01/27/05	<0.1	2.75
			03/21/05	<0.1	2.07
			05/24/05	<0.1	1.98
			07/12/05	<0.1	0.44
			09/20/05	<0.1	0.33
			11/09/05	<0.1	3.33
			01/24/06	<0.1	6.32
			03/08/06	<0.1	0.41
			05/16/06	<0.1	1.04
			07/11/06	<0.1	1.29
			09/19/06	<0.1	7.24
			11/14/06	<0.1	2.5
			01/30/07	<0.1	4.77
			03/21/07	<0.1	5.22
			05/21/07	<0.1	0.42
			07/25/07	<0.1	0.46
			09/20/07	<0.1	0.22
			11/28/07	<0.1	1.42
			01/24/08	<0.1	4.26
			03/17/08	<0.1	2.64
			05/22/08	<0.1	10.48
			07/21/08	<0.1	0.45
			09/16/08	<0.1	0.55
			11/17/08	<0.1	0.45
			02/02/09	<0.1	5.97
			03/11/09	<0.1	3.63
			05/19/09	<0.1	2.41
			07/21/09	<0.1	0.53

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Sb	01/20/05	<0.5	<0.5
			03/16/05	<0.5	<0.5
			05/12/05	<0.5	<0.5
			07/14/05	<0.5	<0.5
			09/07/05	<0.5	<0.5
			11/08/05	<0.5	<0.5
			01/04/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/04/06	<0.5	<0.5
			07/13/06	<0.5	<0.5
			09/14/06	<0.5	<0.5
			11/01/06	<0.5	<0.5
			01/12/07	<0.5	<0.5
			03/12/07	<0.5	<0.5
			05/07/07	<0.5	<0.5
			07/10/07	<0.5	<0.5
			09/17/07	<0.5	<0.5
			11/05/07	<0.5	<0.5
			01/08/08	<0.5	<0.5
			03/18/08	<0.5	<0.5
			05/28/08	<0.5	<0.5
			07/16/08	<0.5	<0.5
			09/24/08	<0.5	<0.5
			11/12/08	<0.5	<0.5
			02/09/09	<0.5	<0.5
			03/16/09	<0.5	<0.5
			05/18/09	<0.5	<0.5
			07/15/09	<0.5	<0.5
Pike Island	84.2	Sb	01/20/05	<0.5	<0.5
			03/16/05	<0.5	<0.5
			05/12/05	<0.5	<0.5
			07/14/05	<0.5	<0.5
			09/07/05	<0.5	<0.5
			11/08/05	<0.5	<0.5
			01/04/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/04/06	<0.5	<0.5
			07/13/06	<0.5	<0.5
			09/14/06	<0.5	<0.5
			11/01/06	<0.5	<0.5
			01/12/07	<0.5	<0.5
			03/12/07	<0.5	<0.5
			05/07/07	<0.5	<0.5
			07/10/07	<0.5	<0.5
			09/17/07	<0.5	<0.5
			11/05/07	<0.5	<0.5
			01/08/08	<0.5	<0.5
			03/18/08	<0.5	<0.5
			05/28/08	<0.5	<0.5
			07/16/08	<0.5	<0.5
			09/24/08	<0.5	<0.5
			11/12/08	<0.5	<0.5
			02/09/09	<0.5	<0.5
			03/16/09	<0.5	<0.5
			05/18/09	<0.5	<0.5
			07/15/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Sb	01/20/05	<0.5	<0.5
			03/16/05	<0.5	<0.5
			05/12/05	<0.5	<0.5
			07/14/05	<0.5	<0.5
			09/15/05	<0.5	<0.5
			11/15/05	<0.5	<0.5
			01/04/06	<0.5	<0.5
			03/13/06	<0.5	<0.5
			05/03/06	<0.5	<0.5
			07/18/06	<0.5	<0.5
			09/06/06	<0.5	<0.5
			11/07/06	<0.5	<0.5
			01/02/07	<0.5	<0.5
			03/13/07	<0.5	<0.5
			05/10/07	<0.5	<0.5
			07/12/07	<0.5	<0.5
			09/24/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/09/08	<0.5	<0.5
			03/26/08	<0.5	<0.5
			05/15/08	<0.5	<0.5
			07/17/08	<0.5	<0.5
			09/17/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			02/10/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/19/09	<0.5	<0.5
			07/22/09	<0.5	<0.5
Willow Island	161.8	Sb	01/04/05	<0.5	<0.5
			03/15/05	<0.5	<0.5
			05/04/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/15/05	<0.5	<0.5
			11/15/05	<0.5	<0.5
			01/03/06	<0.5	<0.5
			03/13/06	<0.5	<0.5
			05/03/06	<0.5	<0.5
			07/18/06	<0.5	<0.5
			09/06/06	<0.5	<0.5
			11/07/06	<0.5	<0.5
			01/02/07	<0.5	<0.5
			03/13/07	<0.5	<0.5
			05/10/07	<0.5	<0.5
			07/12/07	<0.5	<0.5
			09/24/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/09/08	<0.5	<0.5
			03/26/08	<0.5	<0.5
			05/15/08	<0.5	<0.5
			07/17/08	<0.5	<0.5
			09/08/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			02/10/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/19/09	<0.5	<0.5
			07/22/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Sb	01/04/05	<0.5	<0.5
			03/15/05	<0.5	<0.5
			05/04/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/13/05	<0.5	<0.5
			11/03/05	<0.5	<0.5
			01/03/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/11/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/19/06	<0.5	<0.5
			11/24/06	<0.5	<0.5
			01/04/07	<0.5	<0.5
			03/15/07	<0.5	<0.5
			05/09/07	<0.5	<0.5
			07/17/07	<0.5	<0.5
			09/19/07	<0.5	<0.5
			11/08/07	<0.5	<0.5
			01/07/08	<0.5	<0.5
			03/13/08	<0.5	<0.5
			05/19/08	<0.5	<0.5
			07/23/08	<0.5	<0.5
			09/08/08	<0.5	<0.5
			11/13/08	<0.5	<0.5
			01/22/09	<0.5	
			03/09/09	<0.5	<0.5
			05/13/09	<0.5	<0.5
			07/13/09	<0.5	<0.5
R.C. Byrd	279.2	Sb	01/04/05	<0.5	<0.5
			03/15/05	<0.5	<0.5
			05/04/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/13/05	<0.5	<0.5
			11/03/05	<0.5	<0.5
			01/03/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/11/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/19/06	<0.5	<0.5
			11/24/06	<0.5	<0.5
			01/04/07	<0.5	<0.5
			03/15/07	<0.5	<0.5
			05/09/07	<0.5	<0.5
			07/17/07	<0.5	<0.5
			09/19/07	<0.5	<0.5
			11/08/07	<0.5	<0.5
			01/07/08	<0.5	<0.5
			03/13/08	<0.5	<0.5
			05/19/08	<0.5	<0.5
			07/23/08	<0.5	<0.5
			09/17/08	<0.5	<0.5
			11/13/08	<0.5	<0.5
			01/22/09	<0.5	<0.5
			03/09/09	<0.5	<0.5
			05/13/09	<0.5	<0.5
			07/13/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Sb	01/26/05	<0.5	<0.5
			03/23/05	<0.5	<0.5
			05/24/05	<0.5	<0.5
			07/14/05	<0.5	<0.5
			09/20/05	<0.5	<0.5
			11/08/05	<0.5	<0.5
			01/19/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/10/06	<0.5	<0.5
			07/25/06	<0.5	<0.5
			09/12/06	<0.5	<0.5
			11/28/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/15/07	<0.5	<0.5
			05/09/07	<0.5	
			07/26/07	<0.5	<0.5
			09/13/07	<0.5	<0.5
			11/29/07	<0.5	<0.5
			01/29/08	<0.5	<0.5
			03/20/08	<0.5	<0.5
			05/29/08	<0.5	<0.5
			07/21/08	<0.5	<0.5
			09/25/08	<0.5	<0.5
			11/15/08	<0.5	<0.5
			01/22/09	<0.5	<0.5
			03/09/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/15/09	<0.5	<0.5
Meldahl	436.2	Sb	01/25/05	<0.5	<0.5
			03/23/05	<0.5	<0.5
			05/24/05	<0.5	<0.5
			07/14/05	<0.5	<0.5
			09/20/05	<0.5	<0.5
			11/08/05	<0.5	<0.5
			01/19/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/10/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/12/06	<0.5	<0.5
			11/28/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/15/07	<0.5	<0.5
			05/09/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/13/07	<0.5	<0.5
			11/29/07	<0.5	<0.5
			01/28/08	<0.5	<0.5
			03/26/08	<0.5	<0.5
			05/29/08	<0.5	<0.5
			07/21/08	<0.5	<0.5
			09/25/08	<0.5	<0.5
			11/15/08	<0.5	<0.5
			01/22/09	<0.5	<0.5
			03/09/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/29/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Sb	01/25/05	<0.5	<0.5
			03/24/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/27/05	<0.5	<0.5
			11/16/05	<0.5	<0.5
			01/20/06	<0.5	<0.5
			03/06/06	<0.5	<0.5
			05/09/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/11/06	<0.5	<0.5
			11/09/06	<0.5	<0.5
			01/24/07	<0.5	<0.5
			03/27/07	<0.5	<0.5
			05/08/07	<0.5	<0.5
			07/24/07	<0.5	<0.5
			09/18/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/09/08	<0.5	<0.5
			03/24/08	<0.5	<0.5
			05/13/08	<0.5	<0.5
			07/17/08	<0.5	<0.5
			09/23/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			01/14/09	<0.5	<0.5
			03/09/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/29/09	<0.5	<0.5
Markland	531.5	Sb	01/26/05	<0.5	<0.5
			03/24/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/27/05	<0.5	<0.5
			11/16/05	<0.5	<0.5
			01/20/06	<0.5	<0.5
			03/06/06	<0.5	<0.5
			05/09/06	<0.5	<0.5
			07/13/06	<0.5	<0.5
			09/13/06	<0.5	<0.5
			11/09/06	<0.5	<0.5
			01/24/07	<0.5	<0.5
			03/27/07	<0.5	<0.5
			05/22/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/18/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/09/08	<0.5	<0.5
			03/24/08	<0.5	<0.5
			05/13/08	<0.5	<0.5
			07/21/08	<0.5	<0.5
			09/24/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			02/02/09	<0.5	<0.5
			03/09/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/16/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Sb	01/26/05	<0.5	<0.5
			03/22/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/21/05	<0.5	<0.5
			11/10/05	<0.5	<0.5
			01/25/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/17/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/20/06	<0.5	<0.5
			11/15/06	<0.5	<0.5
			01/31/07	<0.5	<0.5
			03/22/07	<0.5	<0.5
			05/22/07	<0.5	<0.5
			07/24/07	<0.5	<0.5
			09/18/07	<0.5	<0.5
			11/26/07	<0.5	<0.5
			01/15/08	<0.5	<0.5
			03/20/08	<0.5	<0.5
			05/20/08	<0.5	<0.5
			07/14/08	<0.5	<0.5
			09/24/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			01/22/09	<0.5	<0.5
			03/12/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/16/09	<0.5	<0.5
West Point	625.9	Sb	01/27/05	<0.5	<0.5
			03/22/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/21/05	<0.5	<0.5
			11/10/05	<0.5	<0.5
			01/25/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/17/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/20/06	<0.5	<0.5
			11/15/06	<0.5	<0.5
			01/19/07	<0.5	<0.5
			03/22/07	<0.5	<0.5
			05/22/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/18/07	<0.5	<0.5
			11/26/07	<0.5	<0.5
			01/15/08	<0.5	<0.5
			03/20/08	<0.5	<0.5
			05/20/08	<0.5	<0.5
			07/14/08	<0.5	<0.5
			09/24/08	<0.5	<0.5
			11/19/08	<0.5	<0.5
			01/22/09	<0.5	<0.5
			03/12/09	<0.5	<0.5
			05/28/09	<0.5	<0.5
			07/16/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Sb	01/26/05	<0.5	<0.5
			03/22/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/21/05	<0.5	<0.5
			11/10/05	<0.5	<0.5
			01/25/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/09/06	<0.5	<0.5
			07/27/06	<0.5	<0.5
			09/14/06	<0.5	<0.5
			11/01/06	<0.5	<0.5
			01/31/07	<0.5	<0.5
			03/22/07	<0.5	<0.5
			05/08/07	<0.5	<0.5
			07/24/07	<0.5	<0.5
			09/19/07	<0.5	<0.5
			11/27/07	<0.5	<0.5
			01/23/08	<0.5	<0.5
			03/18/08	<0.5	<0.5
			05/21/08	<0.5	<0.5
			07/23/08	<0.5	<0.5
			09/18/08	<0.5	<0.5
			11/18/08	<0.5	<0.5
			02/03/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/21/09	<0.5	<0.5
			07/22/09	<0.5	<0.5
Newburgh	776	Sb	01/26/05	<0.5	<0.5
			03/22/05	<0.5	<0.5
			05/23/05	<0.5	<0.5
			07/13/05	<0.5	<0.5
			09/21/05	<0.5	<0.5
			11/09/05	<0.5	<0.5
			01/25/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/10/06	<0.5	<0.5
			07/12/06	<0.5	<0.5
			09/20/06	<0.5	<0.5
			11/15/06	<0.5	<0.5
			01/31/07	<0.5	<0.5
			03/22/07	<0.5	<0.5
			05/22/07	<0.5	<0.5
			07/24/07	<0.5	<0.5
			09/19/07	<0.5	<0.5
			11/27/07	<0.5	<0.5
			01/23/08	<0.5	<0.5
			03/25/08	<0.5	
			05/21/08	<0.5	<0.5
			07/15/08	<0.5	<0.5
			09/29/08	<0.5	<0.5
			11/18/08	<0.5	<0.5
			02/03/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/20/09	<0.5	<0.5
			07/22/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Sb	01/26/05	<0.5	<0.5
			03/21/05	<0.5	<0.5
			05/24/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/20/05	<0.5	<0.5
			11/09/05	<0.5	<0.5
			01/24/06	<0.5	<0.5
			03/08/06	<0.5	<0.5
			05/16/06	<0.5	<0.5
			07/11/06	<0.5	<0.5
			09/19/06	<0.5	<0.5
			11/15/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/22/07	<0.5	<0.5
			05/21/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/20/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/24/08	<0.5	<0.5
			03/18/08	<0.5	<0.5
			05/21/08	<0.5	<0.5
			07/22/08	<0.5	<0.5
			09/17/08	<0.5	<0.5
			11/17/08	<0.5	<0.5
			02/02/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/19/09	<0.5	<0.5
			07/21/09	<0.5	<0.5
Smithland	918.5	Sb	01/27/05	<0.5	<0.5
			03/21/05	<0.5	<0.5
			05/24/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/20/05	<0.5	<0.5
			11/09/05	<0.5	<0.5
			01/24/06	<0.5	<0.5
			03/08/06	<0.5	<0.5
			05/16/06	<0.5	<0.5
			07/11/06	<0.5	<0.5
			09/19/06	<0.5	<0.5
			11/14/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/21/07	<0.5	<0.5
			05/21/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/20/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/24/08	<0.5	<0.5
			03/17/08	<0.5	<0.5
			05/22/08	<0.5	<0.5
			07/22/08	<0.5	<0.5
			09/30/08	<0.5	<0.5
			11/17/08	<0.5	<0.5
			02/02/09	<0.5	<0.5
			03/10/09	<0.5	<0.5
			05/19/09	<0.5	<0.5
			07/21/09	<0.5	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Sb	01/27/05	<0.5	<0.5
			03/21/05	<0.5	<0.5
			05/24/05	<0.5	<0.5
			07/12/05	<0.5	<0.5
			09/20/05	<0.5	<0.5
			11/09/05	<0.5	<0.5
			01/24/06	<0.5	<0.5
			03/08/06	<0.5	<0.5
			05/16/06	<0.5	<0.5
			07/11/06	<0.5	<0.5
			09/19/06	<0.5	<0.5
			11/14/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/21/07	<0.5	<0.5
			05/21/07	<0.5	<0.5
			07/25/07	<0.5	<0.5
			09/20/07	<0.5	<0.5
			11/28/07	<0.5	<0.5
			01/24/08	<0.5	<0.5
			03/17/08	<0.5	<0.5
			05/22/08	<0.5	<0.5
			07/21/08	<0.5	<0.5
			09/16/08	<0.5	<0.5
			11/17/08	<0.5	<0.5
			02/02/09	<0.5	<0.5
			03/11/09	<0.5	<0.5
			05/19/09	<0.5	<0.5
			07/21/09	<0.5	<0.5
New Cumberland	54.4	Se	01/20/05	<0.5	<0.5
			03/16/05	<0.5	<0.5
			05/12/05	<0.5	<0.5
			07/14/05	0.96	1.09
			09/07/05	0.79	1
			11/08/05	<0.5	<0.5
			01/04/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/04/06	<0.5	<0.5
			07/13/06	0.53	0.63
			09/14/06	0.53	0.53
			11/01/06	<0.5	0.53
			01/12/07	<0.5	<0.5
			03/12/07	<0.5	0.59
			05/07/07	<0.5	<0.5
			07/10/07	0.89	0.77
			09/17/07	0.74	0.77
			11/05/07	0.69	0.77
			01/08/08	<0.5	0.61
			03/18/08	<0.5	<0.5
			05/28/08	<0.5	<0.5
			07/16/08	<0.5	0.67
			09/24/08	0.8	0.8
			11/12/08	0.97	1.21
			02/09/09	<0.5	<0.5
			03/16/09	<0.5	<0.5
			05/18/09	<0.5	0.53
			07/15/09	0.92	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Se	01/20/05	<0.5	<0.5
			03/16/05	<0.5	0.51
			05/12/05	<0.5	<0.5
			07/14/05	1.01	1.33
			09/07/05	1.03	0.86
			11/08/05	0.69	0.52
			01/04/06	0.51	<0.5
			03/07/06	<0.5	<0.5
			05/04/06	0.53	0.69
			07/13/06	<0.5	<0.5
			09/14/06	0.59	0.61
			11/01/06	0.58	<0.5
			01/12/07	<0.5	<0.5
			03/12/07	0.69	<0.5
			05/07/07	<0.5	<0.5
			07/10/07	0.81	0.85
			09/17/07	0.75	0.63
			11/05/07	1.1	1.11
			01/08/08	<0.5	0.89
			03/18/08	0.85	0.65
			05/28/08	<0.5	<0.5
			07/16/08	0.63	1.05
			09/24/08	1.03	1.8
			11/12/08	1.04	1.23
			02/09/09	0.6	<0.5
			03/16/09	<0.5	<0.5
			05/18/09	<0.5	0.57
			07/15/09	0.75	0.59
Hannibal	126.4	Se	01/20/05	<0.5	<0.5
			03/16/05	<0.5	0.54
			05/12/05	<0.5	<0.5
			07/14/05	0.98	0.95
			09/15/05	0.96	0.94
			11/15/05	0.83	<0.5
			01/04/06	<0.5	0.76
			03/13/06	<0.5	<0.5
			05/03/06	0.65	0.61
			07/18/06	0.53	0.72
			09/06/06	0.75	0.84
			11/07/06	<0.5	0.52
			01/02/07	0.57	0.51
			03/13/07	0.75	<0.5
			05/10/07	<0.5	0.6
			07/12/07	1.08	1.08
			09/24/07	0.93	0.94
			11/28/07	0.73	<0.5
			01/09/08	<0.5	0.67
			03/26/08	<0.5	<0.5
			05/15/08	0.56	0.78
			07/17/08	0.53	0.63
			09/17/08	1.11	1.42
			11/19/08	1.01	1.25
			02/10/09	<0.5	<0.5
			03/10/09	<0.5	0.72
			05/19/09	<0.5	<0.5
			07/22/09	1.1	0.63

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Se	01/04/05	<0.5	0.54
			03/15/05	<0.5	0.6
			05/04/05	<0.5	<0.5
			07/12/05	1	1.1
			09/15/05	0.88	1
			11/15/05	0.67	<0.5
			01/03/06	0.54	0.64
			03/13/06	<0.5	<0.5
			05/03/06	<0.5	0.53
			07/18/06	0.64	0.69
			09/06/06	0.96	0.9
			11/07/06	<0.5	0.51
			01/02/07	0.53	0.81
			03/13/07	0.56	0.69
			05/10/07	<0.5	<0.5
			07/12/07	0.91	0.96
			09/24/07	0.78	1.13
			11/28/07	0.89	0.98
			01/09/08	0.66	0.73
			03/26/08	<0.5	<0.5
			05/15/08	<0.5	0.91
			07/17/08	0.6	0.73
			09/08/08	0.62	0.8
			11/19/08	1.34	1.36
			02/10/09	0.53	<0.5
			03/10/09	<0.5	0.56
			05/19/09	<0.5	0.56
			07/22/09	0.86	<0.5
Belleville	203.9	Se	01/04/05	<0.5	0.61
			03/15/05	<0.5	0.63
			05/04/05	0.55	<0.5
			07/12/05	0.87	1.13
			09/13/05	0.69	0.71
			11/03/05	0.79	0.59
			01/03/06	<0.5	0.62
			03/09/06	<0.5	<0.5
			05/11/06	0.65	0.57
			07/12/06	0.61	0.52
			09/19/06	0.6	0.62
			11/24/06	<0.5	<0.5
			01/04/07	<0.5	0.58
			03/15/07	<0.5	0.77
			05/09/07	<0.5	0.59
			07/17/07	1	1.18
			09/19/07	0.65	0.86
			11/08/07	0.91	1.41
			01/07/08	<0.5	0.52
			03/13/08	<0.5	<0.5
			05/19/08	<0.5	<0.5
			07/23/08	0.65	0.73
			09/08/08	0.96	1.65
			11/13/08	1.35	1.39
			01/22/09	<0.5	
			03/09/09	0.52	0.64
			05/13/09	<0.5	0.51
			07/13/09	0.79	<0.5

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Se	01/04/05	<0.5	<0.5
			03/15/05	<0.5	0.52
			05/04/05	<0.5	<0.5
			07/12/05	0.64	0.76
			09/13/05	0.71	0.92
			11/03/05	1.07	0.84
			01/03/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/11/06	<0.5	0.58
			07/12/06	<0.5	0.61
			09/19/06	0.5	0.51
			11/24/06	<0.5	<0.5
			01/04/07	<0.5	<0.5
			03/15/07	0.54	<0.5
			05/09/07	<0.5	0.57
			07/17/07	0.81	0.78
			09/19/07	<0.5	0.76
			11/08/07	1.25	1.25
			01/07/08	<0.5	<0.5
			03/13/08	<0.5	<0.5
			05/19/08	<0.5	<0.5
			07/23/08	0.75	0.64
			09/17/08	0.75	0.96
			11/13/08	0.9	1.11
			01/22/09	0.55	<0.5
			03/09/09	<0.5	0.59
			05/13/09	<0.5	<0.5
			07/13/09	0.74	0.6
Greenup	341	Se	01/26/05	<0.5	0.74
			03/23/05	0.53	0.72
			05/24/05	0.57	<0.5
			07/14/05	0.74	0.84
			09/20/05	0.95	1.01
			11/08/05	0.81	0.84
			01/19/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/10/06	<0.5	0.62
			07/25/06	0.55	0.86
			09/12/06	0.86	0.95
			11/28/06	<0.5	<0.5
			01/30/07	<0.5	0.58
			03/15/07	<0.5	0.53
			05/09/07	<0.5	
			07/26/07	0.82	0.96
			09/13/07	0.83	0.94
			11/29/07	0.55	0.7
			01/29/08	0.61	0.65
			03/20/08	<0.5	0.69
			05/29/08	0.78	0.87
			07/21/08	<0.5	0.63
			09/25/08	1.02	0.97
			11/15/08	1.09	1.12
			01/22/09	0.57	0.59
			03/09/09	0.6	0.79
			05/28/09	0.82	<0.5
			07/15/09	0.78	0.64

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Se	01/25/05	<0.5	0.53
			03/23/05	<0.5	0.62
			05/24/05	0.57	<0.5
			07/14/05	0.71	0.85
			09/20/05	0.83	0.9
			11/08/05	0.84	1.11
			01/19/06	<0.5	<0.5
			03/07/06	<0.5	<0.5
			05/10/06	0.67	0.88
			07/12/06	0.64	0.72
			09/12/06	0.88	0.93
			11/28/06	<0.5	0.51
			01/30/07	<0.5	0.56
			03/15/07	<0.5	<0.5
			05/09/07	<0.5	<0.5
			07/25/07	0.85	0.9
			09/13/07	0.95	1.07
			11/29/07	0.68	1.13
			01/28/08	<0.5	0.77
			03/26/08	<0.5	<0.5
			05/29/08	<0.5	<0.5
			07/21/08	0.7	0.64
			09/25/08	1.16	1.34
			11/15/08	0.74	1.21
			01/22/09	0.51	0.54
			03/09/09	<0.5	0.56
			05/28/09	0.51	0.73
			07/29/09	0.89	1.36
Anderson Ferry	477.5	Se	01/25/05	<0.5	0.59
			03/24/05	<0.5	0.7
			05/23/05	0.59	0.52
			07/13/05	0.74	0.87
			09/27/05	0.9	0.93
			11/16/05	0.64	1.1
			01/20/06	<0.5	<0.5
			03/06/06	<0.5	<0.5
			05/09/06	<0.5	0.54
			07/12/06	0.62	0.82
			09/11/06	0.65	0.97
			11/09/06	<0.5	<0.5
			01/24/07	<0.5	0.58
			03/27/07	<0.5	0.59
			05/08/07	0.71	0.7
			07/24/07	0.65	0.85
			09/18/07	0.96	1.05
			11/28/07	0.95	0.74
			01/09/08	0.52	0.81
			03/24/08	<0.5	<0.5
			05/13/08	<0.5	<0.5
			07/17/08	0.77	0.67
			09/23/08	1.03	1.66
			11/19/08	0.78	1.17
			01/14/09	<0.5	<0.5
			03/09/09	0.53	0.72
			05/28/09	<0.5	0.61
			07/29/09	0.99	0.63

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Se	01/26/05	0.53	<0.5
			03/24/05	0.51	0.53
			05/23/05	0.69	<0.5
			07/13/05	0.67	0.86
			09/27/05	0.87	0.81
			11/16/05	0.86	0.82
			01/20/06	<0.5	0.6
			03/06/06	<0.5	<0.5
			05/09/06	0.73	0.76
			07/13/06	0.56	0.86
			09/13/06	0.74	0.8
			11/09/06	0.51	0.62
			01/24/07	<0.5	<0.5
			03/27/07	<0.5	<0.5
			05/22/07	<0.5	0.97
			07/25/07	0.8	0.83
			09/18/07	0.98	1.27
			11/28/07	0.77	0.92
			01/09/08	0.52	0.56
			03/24/08	<0.5	<0.5
			05/13/08	<0.5	0.58
			07/21/08	<0.5	0.64
			09/24/08	1.04	0.99
			11/19/08	1.5	1.17
			02/02/09	<0.5	0.52
			03/09/09	0.51	0.6
			05/28/09	<0.5	<0.5
			07/16/09	0.68	0.63
Louisville	600.6	Se	01/26/05	<0.5	<0.5
			03/22/05	<0.5	0.58
			05/23/05	<0.5	0.6
			07/13/05	0.66	0.75
			09/21/05	0.81	0.87
			11/10/05	0.95	1.18
			01/25/06	<0.5	<0.5
			03/09/06	<0.5	<0.5
			05/17/06	0.88	<0.5
			07/12/06	0.56	0.52
			09/20/06	0.64	0.78
			11/15/06	<0.5	<0.5
			01/31/07	<0.5	0.54
			03/22/07	<0.5	<0.5
			05/22/07	<0.5	0.86
			07/24/07	0.89	0.92
			09/18/07	1.16	1.16
			11/26/07	0.85	1.06
			01/15/08	0.77	0.77
			03/20/08	<0.5	<0.5
			05/20/08	<0.5	0.53
			07/14/08	0.69	0.68
			09/24/08	1.29	1.4
			11/19/08	1.08	1.41
			01/22/09	<0.5	<0.5
			03/12/09	0.64	0.71
			05/28/09	0.66	0.7
			07/16/09	0.73	0.51

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Se	01/27/05	0.57	0.7
			03/22/05	0.89	1.03
			05/23/05	0.98	1.06
			07/13/05	2.54	2.58
			09/21/05	2.56	2.61
			11/10/05	1.83	1.7
			01/25/06	0.62	<0.5
			03/09/06	0.7	0.65
			05/17/06	1.76	1.59
			07/12/06	2.91	3.14
			09/20/06	1.55	1.65
			11/15/06	0.81	1.01
			01/19/07	<0.5	<0.5
			03/22/07	<0.5	0.83
			05/22/07	2.55	3.08
			07/25/07	1.49	1.52
			09/18/07	2.86	3.19
			11/26/07	2.43	2.63
			01/15/08	<0.5	0.65
			03/20/08	0.65	0.71
			05/20/08	0.63	1.06
			07/14/08	2.01	2.48
			09/24/08	2.59	2.49
			11/19/08	3.22	2.88
			01/22/09	1.69	1.59
			03/12/09	1.37	1.3
			05/28/09	1.61	1.58
			07/16/09	2.53	2.93
Cannelton	720.7	Se	01/26/05	<0.5	<0.5
			03/22/05	0.51	0.61
			05/23/05	<0.5	0.5
			07/13/05	0.8	0.81
			09/21/05	0.9	0.92
			11/10/05	1.1	1.03
			01/25/06	<0.5	0.61
			03/09/06	<0.5	<0.5
			05/09/06	0.61	0.64
			07/27/06	0.56	0.69
			09/14/06	0.81	0.89
			11/01/06	<0.5	0.5
			01/31/07	0.52	<0.5
			03/22/07	<0.5	<0.5
			05/08/07	<0.5	0.62
			07/24/07	0.96	0.91
			09/19/07	1.24	1.17
			11/27/07	1.15	0.87
			01/23/08	<0.5	<0.5
			03/18/08	<0.5	0.6
			05/21/08	<0.5	<0.5
			07/23/08	0.77	0.53
			09/18/08	1.24	1.18
			11/18/08	1.36	1.25
			02/03/09	0.61	0.52
			03/10/09	0.63	0.63
			05/21/09	<0.5	0.8
			07/22/09	0.96	0.87

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Se	01/26/05	<0.5	<0.5
			03/22/05	<0.5	0.72
			05/23/05	0.52	0.66
			07/13/05	0.72	0.85
			09/21/05	0.88	0.71
			11/09/05	1.11	0.85
			01/25/06	0.52	<0.5
			03/09/06	<0.5	<0.5
			05/10/06	0.54	<0.5
			07/12/06	0.59	0.71
			09/20/06	0.67	0.96
			11/15/06	0.63	0.56
			01/31/07	<0.5	0.61
			03/22/07	<0.5	0.83
			05/22/07	0.6	0.72
			07/24/07	1	0.84
			09/19/07	0.89	1.17
			11/27/07	1.02	1.22
			01/23/08	0.9	1.21
			03/25/08	<0.5	
			05/21/08	<0.5	0.56
			07/15/08	0.92	0.59
			09/29/08	1.42	1.39
			11/18/08	1.49	1.19
			02/03/09	<0.5	<0.5
			03/10/09	0.54	0.62
			05/20/09	0.59	<0.5
			07/22/09	0.86	0.87
J.T. Myers	846	Se	01/26/05	<0.5	0.51
			03/21/05	<0.5	0.64
			05/24/05	0.53	<0.5
			07/12/05	0.86	0.69
			09/20/05	0.73	0.62
			11/09/05	1.09	0.88
			01/24/06	<0.5	0.69
			03/08/06	<0.5	<0.5
			05/16/06	0.52	<0.5
			07/11/06	0.66	1
			09/19/06	0.81	0.92
			11/15/06	0.63	0.59
			01/30/07	<0.5	0.52
			03/22/07	<0.5	0.63
			05/21/07	0.56	0.87
			07/25/07	0.87	0.9
			09/20/07	1.09	1.1
			11/28/07	0.74	1.05
			01/24/08	<0.5	0.52
			03/18/08	<0.5	0.98
			05/21/08	<0.5	0.57
			07/22/08	0.63	0.84
			09/17/08	0.87	1.38
			11/17/08	0.89	1.43
			02/02/09	<0.5	<0.5
			03/10/09	<0.5	0.67
			05/19/09	0.53	<0.5
			07/21/09	0.71	0.72

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Se	01/27/05	0.51	<0.5
			03/21/05	0.55	0.64
			05/24/05	0.64	0.59
			07/12/05	0.72	0.82
			09/20/05	0.68	0.69
			11/09/05	0.99	1.36
			01/24/06	<0.5	0.71
			03/08/06	<0.5	<0.5
			05/16/06	<0.5	0.55
			07/11/06	0.71	0.81
			09/19/06	0.83	0.69
			11/14/06	<0.5	0.52
			01/30/07	<0.5	<0.5
			03/21/07	<0.5	<0.5
			05/21/07	0.57	0.56
			07/25/07	1.07	0.93
			09/20/07	0.85	0.93
			11/28/07	1.07	0.87
			01/24/08	0.61	0.91
			03/17/08	<0.5	0.79
			05/22/08	<0.5	<0.5
			07/22/08	0.56	0.63
			09/30/08	1.02	1.06
			11/17/08	1.06	1.23
			02/02/09	0.53	0.54
			03/10/09	0.54	0.85
			05/19/09	0.53	<0.5
			07/21/09	0.77	0.86
L&D 52	939.9	Se	01/27/05	0.51	<0.5
			03/21/05	0.53	0.6
			05/24/05	0.73	0.56
			07/12/05	0.66	0.73
			09/20/05	0.66	0.6
			11/09/05	0.87	0.64
			01/24/06	0.52	0.77
			03/08/06	<0.5	<0.5
			05/16/06	0.76	0.81
			07/11/06	0.7	0.63
			09/19/06	0.8	0.87
			11/14/06	<0.5	<0.5
			01/30/07	<0.5	<0.5
			03/21/07	0.54	0.5
			05/21/07	0.71	0.73
			07/25/07	0.94	0.8
			09/20/07	0.76	0.66
			11/28/07	1.1	1.43
			01/24/08	0.73	0.87
			03/17/08	0.6	<0.5
			05/22/08	<0.5	0.98
			07/21/08	<0.5	0.76
			09/16/08	1.07	1.03
			11/17/08	0.77	0.95
			02/02/09	<0.5	0.59
			03/11/09	0.57	0.74
			05/19/09	<0.5	<0.5
			07/21/09	<0.5	0.87

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
New Cumberland	54.4	Tl	01/20/05	<0.1	0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/04/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	<0.1	<0.1
			09/17/07	0.1	0.12
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	0.11
			07/15/09	<0.1	<0.1
Pike Island	84.2	Tl	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/07/05	<0.1	<0.1
			11/08/05	<0.1	0.11
			01/04/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/04/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/12/07	<0.1	<0.1
			03/12/07	<0.1	<0.1
			05/07/07	<0.1	<0.1
			07/10/07	0.11	0.14
			09/17/07	0.12	<0.1
			11/05/07	<0.1	<0.1
			01/08/08	<0.1	<0.1
			03/18/08	<0.1	0.17
			05/28/08	<0.1	<0.1
			07/16/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/12/08	<0.1	<0.1
			02/09/09	<0.1	<0.1
			03/16/09	<0.1	<0.1
			05/18/09	<0.1	<0.1
			07/15/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Hannibal	126.4	Tl	01/20/05	<0.1	<0.1
			03/16/05	<0.1	<0.1
			05/12/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/04/06	<0.1	<0.1
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
Willow Island	161.8	Tl	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/15/05	<0.1	<0.1
			11/15/05	<0.1	<0.1
			01/03/06	0.1	<0.1
			03/13/06	<0.1	<0.1
			05/03/06	<0.1	<0.1
			07/18/06	<0.1	<0.1
			09/06/06	<0.1	<0.1
			11/07/06	<0.1	<0.1
			01/02/07	<0.1	<0.1
			03/13/07	<0.1	<0.1
			05/10/07	<0.1	<0.1
			07/12/07	<0.1	<0.1
			09/24/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/15/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/10/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Belleville	203.9	Tl	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	0.13
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	<0.1
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/08/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1
R.C. Byrd	279.2	Tl	01/04/05	<0.1	<0.1
			03/15/05	<0.1	<0.1
			05/04/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/13/05	<0.1	<0.1
			11/03/05	<0.1	<0.1
			01/03/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/11/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/24/06	<0.1	<0.1
			01/04/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/17/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/08/07	<0.1	<0.1
			01/07/08	<0.1	<0.1
			03/13/08	<0.1	<0.1
			05/19/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/13/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/13/09	<0.1	<0.1
			07/13/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Greenup	341	Tl	01/26/05	<0.1	0.11
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/25/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	
			07/26/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/29/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/15/09	<0.1	<0.1
Meldahl	436.2	Tl	01/25/05	<0.1	<0.1
			03/23/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/14/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/08/05	<0.1	<0.1
			01/19/06	<0.1	<0.1
			03/07/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/12/06	<0.1	<0.1
			11/28/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/15/07	<0.1	<0.1
			05/09/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/13/07	<0.1	<0.1
			11/29/07	<0.1	<0.1
			01/28/08	<0.1	<0.1
			03/26/08	<0.1	<0.1
			05/29/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/25/08	<0.1	<0.1
			11/15/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Anderson Ferry	477.5	Tl	01/25/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/27/05	0.1	<0.1
			11/16/05	<0.1	0.17
			01/20/06	<0.1	<0.1
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/11/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	0.16
			03/27/07	<0.1	<0.1
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	<0.1
			05/13/08	<0.1	<0.1
			07/17/08	<0.1	<0.1
			09/23/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/14/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/29/09	<0.1	<0.1
Markland	531.5	Tl	01/26/05	<0.1	<0.1
			03/24/05	<0.1	<0.1
			05/23/05	<0.1	0.17
			07/13/05	<0.1	<0.1
			09/27/05	<0.1	<0.1
			11/16/05	<0.1	<0.1
			01/20/06	<0.1	<0.1
			03/06/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/13/06	<0.1	<0.1
			09/13/06	<0.1	<0.1
			11/09/06	<0.1	<0.1
			01/24/07	<0.1	<0.1
			03/27/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/28/07	<0.1	0.11
			01/09/08	<0.1	<0.1
			03/24/08	<0.1	<0.1
			05/13/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/09/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Louisville	600.6	Tl	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	<0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	0.11	0.12
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/18/07	<0.1	<0.1
			11/26/07	<0.1	<0.1
			01/15/08	<0.1	<0.1
			03/20/08	<0.1	0.1
			05/20/08	<0.1	<0.1
			07/14/08	<0.1	<0.1
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	<0.1
			07/16/09	<0.1	<0.1
West Point	625.9	Tl	01/27/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	0.11	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	<0.1
			03/09/06	0.1	<0.1
			05/17/06	<0.1	<0.1
			07/12/06	0.11	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/19/07	<0.1	<0.1
			03/22/07	<0.1	0.13
			05/22/07	0.11	<0.1
			07/25/07	<0.1	0.11
			09/18/07	<0.1	0.12
			11/26/07	<0.1	0.11
			01/15/08	<0.1	<0.1
			03/20/08	<0.1	<0.1
			05/20/08	<0.1	0.15
			07/14/08	<0.1	0.25
			09/24/08	<0.1	<0.1
			11/19/08	<0.1	<0.1
			01/22/09	<0.1	<0.1
			03/12/09	<0.1	<0.1
			05/28/09	<0.1	0.14
			07/16/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Cannelton	720.7	Tl	01/26/05	<0.1	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	<0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/10/05	<0.1	<0.1
			01/25/06	<0.1	0.11
			03/09/06	<0.1	<0.1
			05/09/06	<0.1	<0.1
			07/27/06	<0.1	<0.1
			09/14/06	<0.1	<0.1
			11/01/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	0.16
			05/08/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/23/08	<0.1	<0.1
			09/18/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/21/09	<0.1	<0.1
			07/22/09	<0.1	<0.1
Newburgh	776	Tl	01/26/05	0.12	<0.1
			03/22/05	<0.1	<0.1
			05/23/05	<0.1	0.1
			07/13/05	<0.1	<0.1
			09/21/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/25/06	<0.1	0.12
			03/09/06	<0.1	<0.1
			05/10/06	<0.1	<0.1
			07/12/06	<0.1	<0.1
			09/20/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/31/07	<0.1	<0.1
			03/22/07	<0.1	<0.1
			05/22/07	<0.1	<0.1
			07/24/07	<0.1	<0.1
			09/19/07	<0.1	<0.1
			11/27/07	<0.1	<0.1
			01/23/08	<0.1	<0.1
			03/25/08	<0.1	
			05/21/08	<0.1	<0.1
			07/15/08	<0.1	<0.1
			09/29/08	<0.1	<0.1
			11/18/08	<0.1	<0.1
			02/03/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/20/09	<0.1	<0.1
			07/22/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
J.T. Myers	846	Tl	01/26/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	0.12
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/15/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/22/07	<0.1	0.14
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/18/08	<0.1	<0.1
			05/21/08	<0.1	<0.1
			07/22/08	<0.1	<0.1
			09/17/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1
Smithland	918.5	Tl	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	<0.1
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	<0.1
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	<0.1
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	<0.1
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	<0.1
			07/22/08	<0.1	<0.1
			09/30/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/10/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
L&D 52	939.9	Tl	01/27/05	<0.1	<0.1
			03/21/05	<0.1	<0.1
			05/24/05	<0.1	<0.1
			07/12/05	<0.1	<0.1
			09/20/05	<0.1	<0.1
			11/09/05	<0.1	<0.1
			01/24/06	<0.1	<0.1
			03/08/06	<0.1	<0.1
			05/16/06	<0.1	0.11
			07/11/06	<0.1	<0.1
			09/19/06	<0.1	0.16
			11/14/06	<0.1	<0.1
			01/30/07	<0.1	<0.1
			03/21/07	<0.1	<0.1
			05/21/07	<0.1	<0.1
			07/25/07	<0.1	<0.1
			09/20/07	<0.1	<0.1
			11/28/07	<0.1	<0.1
			01/24/08	<0.1	<0.1
			03/17/08	<0.1	<0.1
			05/22/08	<0.1	<0.1
			07/21/08	<0.1	<0.1
			09/16/08	<0.1	<0.1
			11/17/08	<0.1	<0.1
			02/02/09	<0.1	<0.1
			03/11/09	<0.1	<0.1
			05/19/09	<0.1	<0.1
			07/21/09	<0.1	<0.1
New Cumberland	54.4	Zn	01/20/05	4.26	13.82
			03/16/05	7.3	13.69
			05/12/05	1.76	6.68
			07/14/05	1.38	6.19
			09/07/05	2.35	6.08
			11/08/05	3.06	4.08
			01/04/06	3.25	20.42
			03/07/06	3.13	4.83
			05/04/06	2.54	4.41
			07/13/06	2.03	1.51
			09/14/06	2.63	7.67
			11/01/06	1.5	18.69
			01/12/07	2.03	11.23
			03/12/07	4.94	9.01
			05/07/07	1.53	4.86
			07/10/07	3.02	6.99
			09/17/07	3.31	4.98
			11/05/07	3.75	5.21
			01/08/08	4.23	9.18
			03/18/08	4	10.86
			05/28/08	3.73	6.14
			07/16/08	<1	4.89
			09/24/08	2.75	4.04
			11/12/08	4.02	8.7
			02/09/09	3.96	13.68
			03/16/09	2.11	9.39
			05/18/09	3.15	5.97
			07/15/09	1.15	3.81

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Pike Island	84.2	Zn	01/20/05	8.58	16.15
			03/16/05	8	19.94
			05/12/05	1.3	5.16
			07/14/05	1.08	3.38
			09/07/05	<1	4.76
			11/08/05	2.14	4.77
			01/04/06	2.45	40.37
			03/07/06	2.58	3.88
			05/04/06	1.18	3.4
			07/13/06	1.4	3.54
			09/14/06	1.16	8.39
			11/01/06	1.83	23.83
			01/12/07	1.57	15.06
			03/12/07	3.53	10.93
			05/07/07	<1	4.72
			07/10/07	1.38	3.38
			09/17/07	1.5	3.09
			11/05/07	1.93	3.57
			01/08/08	2.81	9.41
			03/18/08	3.8	12.97
			05/28/08	1.78	6.11
			07/16/08	<1	2.9
			09/24/08	1.51	2.5
			11/12/08	2.6	4.05
			02/09/09	4.89	19.37
			03/16/09	R	11.54
			05/18/09	2.09	5.45
			07/15/09	<1	1.94
Hannibal	126.4	Zn	01/20/05	3.12	18.15
			03/16/05	6.22	10.51
			05/12/05	1.26	3.77
			07/14/05	<1	2.01
			09/15/05	1.16	2.89
			11/15/05	1.85	4.25
			01/04/06	1.35	24.33
			03/13/06	1.37	6.24
			05/03/06	<1	2.36
			07/18/06	1.32	2.89
			09/06/06	<1	7.39
			11/07/06	1.03	6.44
			01/02/07	2	5.81
			03/13/07	1.37	8.81
			05/10/07	2.11	3.49
			07/12/07	2.6	3.1
			09/24/07	1.9	4.02
			11/28/07	1.79	17
			01/09/08	2.32	9.08
			03/26/08	2.12	11.65
			05/15/08	1.76	8.84
			07/17/08	<1	2.26
			09/17/08	1.19	3.53
			11/19/08	2.34	3.89
			02/10/09	4.23	11.16
			03/10/09	4.52	36.58
			05/19/09	1.34	3.95
			07/22/09	<1	2

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Willow Island	161.8	Zn	01/04/05	2.52	32.26
			03/15/05	3.3	8.93
			05/04/05	2.24	4.94
			07/12/05	1.38	5.94
			09/15/05	<1	2.41
			11/15/05	1.82	4.96
			01/03/06	3.26	16.71
			03/13/06	1.5	6.07
			05/03/06	<1	2.58
			07/18/06	1.06	2.34
			09/06/06	1.16	7.35
			11/07/06	1.92	8.61
			01/02/07	1.95	6.86
			03/13/07	2.14	8.9
			05/10/07	<1	2.85
			07/12/07	2	3.6
			09/24/07	1.26	2.44
			11/28/07	1.4	15.17
			01/09/08	2.49	16.38
			03/26/08	1.76	11.8
			05/15/08	1.14	10.46
			07/17/08	<1	2.36
			09/08/08	1.37	2.09
			11/19/08	1.74	3.75
			02/10/09	3.39	11.69
			03/10/09	3.76	20.96
			05/19/09	1.51	5.56
			07/22/09	<1	3.4
Belleville	203.9	Zn	01/04/05	1.52	14.47
			03/15/05	4.45	10.42
			05/04/05	1.47	9.39
			07/12/05	<1	2.47
			09/13/05	<1	1.6
			11/03/05	2.21	3.6
			01/03/06	2.28	20.54
			03/09/06	1.79	3.6
			05/11/06	<1	2.93
			07/12/06	1.17	2.33
			09/19/06	1.23	5.7
			11/24/06	<1	8.94
			01/04/07	1.7	4.71
			03/15/07	2.67	9.38
			05/09/07	1.14	4.61
			07/17/07	1.88	2.15
			09/19/07	1.46	2.14
			11/08/07	1.73	3.97
			01/07/08	<1	5.85
			03/13/08	<1	15.54
			05/19/08	1.24	13.71
			07/23/08	<1	2.21
			09/08/08	R	1.46
			11/13/08	1.72	3.06
			01/22/09	2.92	
			03/09/09	4.15	9.45
			05/13/09	1.51	10.01
			07/13/09	<1	1.91

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
R.C. Byrd	279.2	Zn	01/04/05	1.48	7.63
			03/15/05	2.64	5.5
			05/04/05	<1	5.39
			07/12/05	<1	6.7
			09/13/05	<1	3.1
			11/03/05	1.54	5.57
			01/03/06	1.95	7.35
			03/09/06	<1	3.52
			05/11/06	<1	4.17
			07/12/06	1.64	6.28
			09/19/06	<1	5.32
			11/24/06	1.11	5.34
			01/04/07	1.69	3.84
			03/15/07	1.08	10.63
			05/09/07	<1	9.75
			07/17/07	1.22	4.07
			09/19/07	<1	3.36
			11/08/07	1.49	6.15
			01/07/08	1.5	5.77
			03/13/08	<1	12.1
			05/19/08	1.12	7.3
			07/23/08	<1	4.81
			09/17/08	R	3
			11/13/08	1.09	4.68
			01/22/09	1.09	4.62
			03/09/09	2.09	5.41
			05/13/09	<1	5.8
			07/13/09	1.2	3.12
Greenup	341	Zn	01/26/05	1.09	68.21
			03/23/05	2.66	15.18
			05/24/05	1.05	3.75
			07/14/05	1.09	1.65
			09/20/05	1.03	3.06
			11/08/05	1.5	3.18
			01/19/06	2.75	18.4
			03/07/06	<1	5.01
			05/10/06	<1	2.58
			07/25/06	1.12	2.78
			09/12/06	<1	4.41
			11/28/06	<1	4.59
			01/30/07	2.35	49.33
			03/15/07	1.59	8.84
			05/09/07	4.21	
			07/26/07	<1	2.37
			09/13/07	1.56	3.89
			11/29/07	4.85	15.85
			01/29/08	1.95	7.9
			03/20/08	1.75	18.82
			05/29/08	<1	5.81
			07/21/08	<1	2.59
			09/25/08	2.4	5.82
			11/15/08	4.96	14.99
			01/22/09	2.25	5.95
			03/09/09	1.43	4.12
			05/28/09	2.88	9.2
			07/15/09	<1	9.26

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Meldahl	436.2	Zn	01/25/05	R	32.82
			03/23/05	2.73	4.84
			05/24/05	1.02	3.86
			07/14/05	<1	11.31
			09/20/05	<1	6.21
			11/08/05	1.9	7.49
			01/19/06	2.21	9.19
			03/07/06	1.39	2.63
			05/10/06	<1	2.94
			07/12/06	<1	2.48
			09/12/06	<1	5.19
			11/28/06	1.08	4.31
			01/30/07	<1	3.47
			03/15/07	<1	7.47
			05/09/07	1.55	8.03
			07/25/07	6.89	10.98
			09/13/07	1.34	2.65
			11/29/07	2.32	9.75
			01/28/08	1.91	4.53
			03/26/08	<1	19.15
			05/29/08	R	3.29
			07/21/08	<1	2.1
			09/25/08	R	2.8
			11/15/08	2.76	6.63
			01/22/09	<1	3.94
			03/09/09	1.13	3.4
			05/28/09	<1	3.24
			07/29/09	2.5	5.81
Anderson Ferry	477.5	Zn	01/25/05	3.83	16.33
			03/24/05	6.9	10.73
			05/23/05	1.86	9.26
			07/13/05	2.31	3.47
			09/27/05	1.79	6.84
			11/16/05	1.63	13.87
			01/20/06	2.84	25.03
			03/06/06	<1	1.83
			05/09/06	<1	4.58
			07/12/06	3.01	3.88
			09/11/06	<1	4.39
			11/09/06	1.04	9.93
			01/24/07	<1	90.06
			03/27/07	<1	20.43
			05/08/07	1.39	7.12
			07/24/07	1.93	4.15
			09/18/07	1.42	2.79
			11/28/07	2.24	5.98
			01/09/08	1.48	9.96
			03/24/08	<1	20.29
			05/13/08	2.73	21.71
			07/17/08	<1	6.47
			09/23/08	1.91	3.32
			11/19/08	1.63	3.37
			01/14/09	<1	13.37
			03/09/09	2.16	5.99
			05/28/09	1.33	5.55
			07/29/09	2.88	7.05

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Markland	531.5	Zn	01/26/05	1.04	16.88
			03/24/05	2.47	11.67
			05/23/05	1.05	6.88
			07/13/05	<1	3.62
			09/27/05	1.87	5.37
			11/16/05	1.94	8.05
			01/20/06	2.16	13.5
			03/06/06	1.23	2.97
			05/09/06	<1	1.41
			07/13/06	1.08	2.84
			09/13/06	1.53	8.54
			11/09/06	13.69	6.54
			01/24/07	1.1	16.9
			03/27/07	<1	20.68
			05/22/07	1.69	2.88
			07/25/07	1.57	2.08
			09/18/07	2.19	3
			11/28/07	1.39	4.73
			01/09/08	<1	7.09
			03/24/08	2.28	25.74
			05/13/08	R	18.6
			07/21/08	2.98	3.58
			09/24/08	1.42	2.39
			11/19/08	2.21	5.26
			02/02/09	1.85	12.76
			03/09/09	1.07	6.46
			05/28/09	1.3	4.03
			07/16/09	1.69	1.73
Louisville	600.6	Zn	01/26/05	<1	19.95
			03/22/05	2.25	9.17
			05/23/05	<1	8.26
			07/13/05	2.31	3.92
			09/21/05	<1	5.53
			11/10/05	2.11	5.11
			01/25/06	1.12	10.18
			03/09/06	1.11	1.96
			05/17/06	<1	3.29
			07/12/06	3.24	2.73
			09/20/06	<1	5.98
			11/15/06	<1	5.99
			01/31/07	1.05	7.01
			03/22/07	1	46.23
			05/22/07	<1	16.83
			07/24/07	1.29	2.76
			09/18/07	1.52	3.29
			11/26/07	2.18	3.31
			01/15/08	<1	10.98
			03/20/08	<1	27.74
			05/20/08	<1	9.43
			07/14/08	<1	23.62
			09/24/08	1.2	1.88
			11/19/08	1.64	8.68
			01/22/09	<1	3.92
			03/12/09	1.32	5.41
			05/28/09	1.25	7.46
			07/16/09	<1	4.59

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
West Point	625.9	Zn	01/27/05	<1	23.62
			03/22/05	4.97	7.93
			05/23/05	1.35	10.38
			07/13/05	2.02	3.51
			09/21/05	4.8	4.64
			11/10/05	2.77	6.67
			01/25/06	1.7	28.06
			03/09/06	1.25	8.53
			05/17/06	1.11	4.4
			07/12/06	3.68	5.67
			09/20/06	1.35	6.69
			11/15/06	1.61	10.96
			01/19/07	<1	13.98
			03/22/07	<1	45.65
			05/22/07	3.72	7.25
			07/25/07	1.71	2.79
			09/18/07	2.27	3.85
			11/26/07	4.08	7.35
			01/15/08	<1	19.86
			03/20/08	1.36	24.75
			05/20/08	<1	113.68
			07/14/08	<1	102.62
			09/24/08	1.87	3.34
			11/19/08	2.69	7.25
			01/22/09	1.76	13.41
			03/12/09	1.29	9.5
			05/28/09	1.37	16.27
			07/16/09	1.78	5.15
Cannelton	720.7	Zn	01/26/05	<1	30.18
			03/22/05	3.07	8.73
			05/23/05	<1	6.31
			07/13/05	1.18	2.31
			09/21/05	<1	1.85
			11/10/05	1.55	2.35
			01/25/06	8.44	41.77
			03/09/06	<1	1.27
			05/09/06	2.26	2.25
			07/27/06	<1	2.78
			09/14/06	<1	4.71
			11/01/06	<1	35.34
			01/31/07	<1	9.36
			03/22/07	<1	47.46
			05/08/07	<1	3.95
			07/24/07	1.26	1.74
			09/19/07	1.99	2.7
			11/27/07	1.41	3.51
			01/23/08	1.3	7.93
			03/18/08	1	17.13
			05/21/08	<1	16.83
			07/23/08	<1	1.93
			09/18/08	<1	2.79
			11/18/08	1.37	2.74
			02/03/09	<1	14.76
			03/10/09	2.03	11.63
			05/21/09	1.4	8.53
			07/22/09	2.39	2.34

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Newburgh	776	Zn	01/26/05	<1	27.42
			03/22/05	3.23	11.37
			05/23/05	1.07	30.14
			07/13/05	<1	1.93
			09/21/05	1.02	2.08
			11/09/05	2.08	3.6
			01/25/06	3.91	39.6
			03/09/06	<1	1.75
			05/10/06	1.68	3.97
			07/12/06	1.02	5.19
			09/20/06	1.39	5.16
			11/15/06	1.07	8.96
			01/31/07	<1	18.22
			03/22/07	<1	33.6
			05/22/07	<1	4.89
			07/24/07	<1	1.5
			09/19/07	1.43	2.71
			11/27/07	1.4	3.61
			01/23/08	1.06	25.3
			03/25/08	<1	
			05/21/08	<1	2.14
			07/15/08	1.4	1.44
			09/29/08	<1	1.64
			11/18/08	1.36	5.03
			02/03/09	<1	18.19
			03/10/09	<1	5.87
			05/20/09	2.31	10.87
			07/22/09	<1	3.65
J.T. Myers	846	Zn	01/26/05	<1	20.91
			03/21/05	1.18	8.68
			05/24/05	<1	5.51
			07/12/05	<1	3.04
			09/20/05	<1	2.89
			11/09/05	2.1	4.15
			01/24/06	<1	35.09
			03/08/06	<1	1.71
			05/16/06	<1	4.08
			07/11/06	1.43	4.29
			09/19/06	<1	4.38
			11/15/06	1.01	16.54
			01/30/07	<1	24.83
			03/22/07	<1	28.69
			05/21/07	<1	4.06
			07/25/07	<1	2.05
			09/20/07	1.26	2.52
			11/28/07	1.5	7.32
			01/24/08	1.47	13.28
			03/18/08	<1	16.88
			05/21/08	<1	21.05
			07/22/08	<1	<1
			09/17/08	<1	1.67
			11/17/08	1.14	2.59
			02/02/09	<1	31.37
			03/10/09	1.03	8.08
			05/19/09	1.48	15.74
			07/21/09	<1	2.08

Appendix C: Clean Metals Results Compared to Criteria

Sample Site	Mile Point	Parameter	Date	Dissolved Metals	Total Metals
Smithland	918.5	Zn	01/27/05	<1	26.96
			03/21/05	3.15	5.61
			05/24/05	1.22	5.91
			07/12/05	<1	1.76
			09/20/05	<1	2.68
			11/09/05	1.28	2.27
			01/24/06	1.36	30.33
			03/08/06	<1	2.25
			05/16/06	<1	5.23
			07/11/06	1.61	2.87
			09/19/06	<1	4.66
			11/14/06	<1	6.59
			01/30/07	2.56	16.9
			03/21/07	<1	23.2
			05/21/07	<1	1.36
			07/25/07	<1	3.14
			09/20/07	1.85	1.24
			11/28/07	1.08	3.61
			01/24/08	<1	12.51
			03/17/08	1	14.93
			05/22/08	<1	23.51
			07/22/08	<1	3.1
			09/30/08	1.36	1.66
			11/17/08	<1	1.15
			02/02/09	<1	21.94
			03/10/09	<1	8.86
			05/19/09	<1	14.6
			07/21/09	<1	1.48
L&D 52	939.9	Zn	01/27/05	1.25	15.11
			03/21/05	<1	10.48
			05/24/05	<1	7.63
			07/12/05	R	5.62
			09/20/05	<1	2.42
			11/09/05	1.85	82.76
			01/24/06	1.02	27.5
			03/08/06	<1	2.61
			05/16/06	1.05	5.19
			07/11/06	1.15	7.58
			09/19/06	1.08	40.43
			11/14/06	<1	12.24
			01/30/07	<1	22.15
			03/21/07	<1	23.81
			05/21/07	<1	2.28
			07/25/07	<1	2.38
			09/20/07	<1	1.4
			11/28/07	1.11	6.68
			01/24/08	1.44	18.92
			03/17/08	<1	12.48
			05/22/08	<1	48.55
			07/21/08	<1	2.19
			09/16/08	<1	3.02
			11/17/08	<1	3.07
			02/02/09	1.85	23.86
			03/11/09	<1	18.98
			05/19/09	1.03	13.66
			07/21/09	<1	3.74

Appendix D: Summary of Bimonthly Ohio River Stations 2005-2009

Station Name	River Mile	Stat	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)
New Cumberland	54.4	# Samples	29	29	29	29	29	29	29	27	16	29	29
		# Detects	29	29	29	29	29	26	29	0	0	29	28
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	40	146	164	0.124	1.96	0.31	1.23			53	7.85
		75th Percentile	12	80	132	0.048	0.555	0.11	1.01			42	3.5
		Median	8	66	108	0.036	0.514	0.07	0.854			30	2.77
		25th Percentile	6	58	92	0.028	0.431	0.06	0.787			26	2.245
Pike Island	84.2	# Samples	29	29	29	29	29	29	29	27	16	29	29
		# Detects	29	29	29	28.00	29	24	29	0	0	29	29
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	49	125	176	0.116	1.35	0.18	1.28			56	8.93
		75th Percentile	14	100	144	0.06	0.641	0.095	0.976			40	3.42
		Median	6	72	116	0.04	0.503	0.065	0.866			32	2.67
		25th Percentile	4	62	104	0.03	0.368	0.06	0.713			24	2.2
Hannibal	126.4	# Samples	28	28	29	28	29	29	29	27	16	28	29
		# Detects	28	28	29	25	29	27	29	0	0	28	29
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	77	155	212	0.21	1.01	0.2	1.29			70	5.72
		75th Percentile	15	97	134	0.07	0.553	0.1	0.956			48	3.45
		Median	8	80	118	0.04	0.455	0.07	0.852			36	2.6
		25th Percentile	5	71	96	0.03	0.367	0.05	0.767			28	2.25
Willow Island	161.8	# Samples	28	28	29	29	29	29	29	27	16	28	29
		# Detects	27	28	29	27	29	24	29	0	0	28	29
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	44	160	180	0.17	1.52	0.2	1.31			64	5.93
		75th Percentile	16	103	132	0.06	0.568	0.13	0.898			43	3.3
		Median	8	77	120	0.04	0.459	0.065	0.829			34.5	2.53
		25th Percentile	4	66	100	0.02	0.422	0.05	0.694			28	2.14
Belleville	203.9	# Samples	29	29	29	29	29	29	29	27	16	29	29
		# Detects	29	29	29	26	29	25	29	0	0	29	29
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	65	130	192	0.14	1.24	0.16	1.67			56	7.07
		75th Percentile	18	98	146	0.07	0.568	0.11	1			42	3.39
		Median	9	84	140	0.05	0.517	0.07	0.897			38	2.94
		25th Percentile	5	70	120	0.04	0.419	0.06	0.773			28	2.62
R.C. Byrd	279.2	# Samples	29	29	29	29	29	29	29	27	16	29	29
		# Detects	29	29	29	29	29	26	29	1	1	29	29
		# Violations	0	0	0	0	0	0	0	2	0	0	0
		Maximum	55	148	184	0.24	1.77	0.19	1.23	7.77	0.006	52	5.81
		75th Percentile	23	80	124	0.06	0.539	0.09	0.875	7.77	0.006	38	3.17
		Median	17	64	112	0.06	0.466	0.065	0.786	7.77	0.006	30	2.74
		25th Percentile	12	56	96	0.04	0.388	0.05	0.724	7.77	0.006	22	2.23

Appendix D: Summary of Bimonthly Ohio River Stations 2005-2009

Station Name	River Mile	Stat	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)
Greenup	341.0	# Samples	26	26	26	26	26	26	26	25	3	26	25
		# Detects	26	26	26	25	26	20	26	0	0	26	25
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	76	138	180	0.12	2.54	0.57	1.24			56	6.82
		75th Percentile	16	95	144	0.06	0.657	0.095	0.894			40	3.33
		Median	13	75	132	0.04	0.523	0.07	0.8075			27	3
		25th Percentile	10	66	104	0.03	0.412	0.05	0.663			22	2.3
Meldahl	436.2	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	29	29	29	28	29	24	29	1	0	29	28
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	91	150	192	0.95	1.89	0.36	1.47	8.8		70	8.22
		75th Percentile	18	114	144	0.08	0.617	0.075	1.09	8.8		35	3.915
		Median	10	74	132	0.06	0.474	0.05	0.856	8.8		30	2.92
		25th Percentile	7	66	116	0.03	0.371	0.04	0.662	8.8		24	2.285
Anderson Ferry	477.5	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	28	29	29	29	29	28	29	1	0	29	28
		# Violations	0	0	0	0	0	0	0	1	0	0	0
		Maximum	168	138	168	0.31	1.55	0.42	1.28	10		54	7.25
		75th Percentile	40	100	152	0.11	0.806	0.17	1.06	10		42	4.37
		Median	24	70	132	0.08	0.635	0.11	0.909	10		36	3.37
		25th Percentile	13	60	120	0.05	0.573	0.075	0.782	10		26	2.735
Markland	531.5	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	29	29	29	29	28	25	29	0	0	29	28
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	238	130	188	0.45	2.24	0.18	1.41			72	8.23
		75th Percentile	35	92	152	0.13	0.8635	0.12	1.16			40	3.925
		Median	15	71	144	0.07	0.5875	0.08	1.01			34	3.28
		25th Percentile	8	56	132	0.05	0.489	0.06	0.857			28	2.715
Louisville	600.6	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	29	29	29	29	28	23	29	0	0	29	28
		# Violations	0	0	0	0	0	0	0	1	0	0	0
		Maximum	1450	144	192	1.78	4.69	0.43	1.49			60	8.93
		75th Percentile	79	90	164	0.18	1.0105	0.11	1.26			36	4.18
		Median	27	74	144	0.10	0.6765	0.06	1.06			30	3.4
		25th Percentile	10	58	132	0.08	0.528	0.05	0.941			20	2.94
West Point	625.9	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	29	29	29	29	29	28	29	0	0	29	28
		# Violations	0	0	0	0	0	0	0	0	0	0	0
		Maximum	275	168	216	0.60	2.18	0.5	1.55			66	8.83
		75th Percentile	124	100	180	0.28	1.05	0.215	1.26			38	4.54
		Median	47	74	164	0.16	0.843	0.17	1.07			32	3.515
		25th Percentile	20	58	136	0.10	0.679	0.115	0.958			24	3.125

Appendix D: Summary of Bimonthly Ohio River Stations 2005-2009

Station Name	River Mile	Stat	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)
Cannelton	720.7	# Samples	26	26	26	26	26	26	26	25	3	26	25
		# Detects	26	26	26	26	26	23	26	0	0	26	25
		# Violations	0	0	0	0	0	0	0	1	0	0	0
		Maximum	356	120	200	0.75	2.77	0.15	1.65			54	10.4
		75th Percentile	53	88	168	0.17	0.698	0.08	1.3			40	4.12
		Median	13	70	148	0.08	0.5715	0.05	1.11			33	3.3
		25th Percentile	6	58	136	0.06	0.473	0.03	0.919			22	2.7
Newburgh	776.0	# Samples	29	29	29	29	29	29	29	27	3	29	29
		# Detects	29	29	29	29	29	24	29	2	0	29	29
		# Violations	0	0	0	0	0	0	0	2	0	0	0
		Maximum	219	120	200	0.50	1.71	0.18	1.77	7.61		50	7.79
		75th Percentile	76	80	160	0.16	0.748	0.09	1.41	7.61		34	3.91
		Median	27	70	148	0.09	0.647	0.055	1.21	6.955		26	3.49
		25th Percentile	9	65	136	0.05	0.517	0.04	1.05	6.3		22	3
J.T. Myers	846.0	# Samples	29	29	29	29	29	29	29	27	3	29	29
		# Detects	29	29	29	29	29	22	29	1	0	29	29
		# Violations	0	0	0	0	0	0	0	3	0	0	0
		Maximum	243	112	184	0.46	1.38	0.14	1.99	10		50	8.37
		75th Percentile	79	82	160	0.15	0.902	0.09	1.3	10		36	3.8
		Median	30	68	144	0.09	0.623	0.05	1.1	10		28	3.36
		25th Percentile	10	60	132	0.06	0.484	0.04	0.962	10		20	2.83
Smithland	918.5	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	29	29	29	29	29	22	29	1	0	29	28
		# Violations	0	0	0	0	0	0	0	1	0	0	0
		Maximum	302	125	260	0.48	1.55	0.2	2.87	12.7		110	11.6
		75th Percentile	75	80	178	0.21	0.924	0.11	1.84	12.7		50	4.69
		Median	21	66	172	0.09	0.682	0.08	1.48	12.7		32	3.79
		25th Percentile	11	56	156	0.07	0.512	0.06	1.03	12.7		22	3.23
L&D 52	938.9	# Samples	29	29	29	29	29	29	29	27	3	29	28
		# Detects	28	28	29	29	29	21	29	2	0	28	28
		# Violations	0	0	0	0	0	0	0	2	0	0	0
		Maximum	513	148	288	0.52	2.2	1.05	3.02	10		96	11.7
		75th Percentile	91	72	172	0.20	0.954	0.1	1.72	10		46	4.88
		Median	37	66	164	0.12	0.714	0.07	1.36	8.22		33	3.825
		25th Percentile	15	53	152	0.09	0.632	0.04	1	6.44		22	3.29

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
New Cumberland	54.4	20-Jan-05	12.5	64	88	0.04	0.89	0.06	1.01		<0.005	16	1.98	
		16-Mar-05	8	70	116	0.05	0.69	0.08	0.88		<0.005	53	2.41	
		12-May-05	8.4	64	104	0.05	1.16	<0.03	0.85	<5		22	5.36	
		14-Jul-05	8	80	136	0.03	0.66	0.04	0.93	<5		46	3.92	
		07-Sep-05	6.75	145	152	0.03	0.73	0.04	1.20	<5		42	7.85	
		08-Nov-05	2.8	95	120	0.05	0.44	0.06	0.85	<5	<0.005	38	3.01	
		04-Jan-06	39.7	65	108	0.11	0.85	0.13	1.14	<5	<0.005	46	2.64	
		07-Mar-06	2.86	76	120	0.02	0.45	0.1	0.93	<5	<0.005	50	1.82	
		04-May-06	4.2	64	100	0.03	0.15	<0.03	1.23	<5		30	1.95	
		13-Jul-06	8	66	108	0.05	0.52	0.05	0.84	<5		26	2.53	
		14-Sep-06	12.4	52	88	0.05	0.34	0.05	0.81	<5		28	3.48	
		01-Nov-06	38.3	48	76	0.06	0.51	0.05	0.60	<5	<0.005	20	3.46	
		12-Jan-07	13.6	48	92	0.04	0.54	<0.03	0.83	<5	<5	18	<0.5	
		12-Mar-07	7.67	56	100	0.02	0.31	0.13	1.22	<5	<0.005	40	2.3	
		07-May-07	8.96	58	96	0.03	0.42	0.04	0.68	<5		22	2.1	
		10-Jul-07	8.25	126	164	0.04	0.53	0.11	1.20	<5		52	2.8	
		17-Sep-07	4.2	92	112	0.03	0.53	0.28	1.06	<5		32	3.52	
		05-Nov-07	2.8	102	132	0.03	0.50	0.09	0.88	<5	<0.005	26	2.78	
		08-Jan-08	10.2	56	148	0.03	0.45	0.1	0.90	<6	<0.005	28	2.2	
		18-Mar-08	16.5	53	84	0.03	0.30	0.07	0.84	<5	<0.005	32	2.07	
		28-May-08	6.67	60	88	0.02	1.96	0.06	0.58	<5		16	2.29	
		16-Jul-08	9.5	76	148	0.02	0.56	0.31	0.80	<5		28	4.45	
		24-Sep-08	3.2	146	136	0.03	0.43	0.07	0.77	<5		40	2.9	
		12-Nov-08	5.83	68	148	0.05	0.51	0.12	0.92	<5	<0.005	52	2.5	
		09-Feb-09	36	80	120	0.12	0.53	0.17	1.10	<5	<0.005	50	3.62	
		16-Mar-09	24.5	34	68	0.08	0.44	0.09	0.70	<5	<0.005	22	2.91	0.119
		18-May-09	7.2	74	104	0.04	0.35	0.07	0.53	<5		26	2.19	<0.01
		15-Jul-09	7.09	92	108	0.03	0.13	0.06	0.57	<5		32	2.76	
		08-Sep-09	4.4	60	88	0.04	0.54	0.06	0.79	<5		30	3.66	
Pike Island	84.2	20-Jan-05	17	66	92	0.05	1.16	0.06	0.98		<0.005	16	2.15	
		16-Mar-05	12.8	70	152	0.04	0.51	0.08	0.87		<0.005	56	2.5	
		12-May-05	7.6	78	120	<0.01	0.80	<0.03	0.51	<5		20	5.26	
		14-Jul-05	3.33	120	152	0.03	0.60	0.06	0.96	<5		46	3.48	
		07-Sep-05	5.2	125	168	0.04	0.76	0.03	1.28	<5		46	8.93	
		08-Nov-05	3	115	124	0.03	0.50	0.07	0.92	<5	<0.005	38	2.91	
		04-Jan-06	45.5	75	116	0.11	0.72	0.12	1.01	<5	<0.005	40	2.31	
		07-Mar-06	2.86	82	128	0.03	0.43	0.09	0.90	<5	<0.005	40	1.75	
		04-May-06	2.8	70	108	0.02	0.22	<0.03	0.74	<5		28	1.85	
		13-Jul-06	4.8	72	108	0.12	1.35	0.07	0.81	<5		24	2.26	
		14-Sep-06	14	50	80	0.06	0.29	0.06	0.71	<5		24	3.42	
		01-Nov-06	49.3	50	76	0.09	0.65	0.05	0.57	<5	<0.005	18	3.47	
		12-Jan-07	25.6	44	88	0.05	0.61	<0.03	0.74	<5	<5	20	1.8	
		12-Mar-07	12.5	62	104	0.02	0.35	<0.03	1.19	<5	<0.005	38	2.2	
		07-May-07	6.51	60	96	0.04	0.34	0.03	0.63	<5		22	1.86	
		10-Jul-07	5.75	124	172	0.03	0.61	0.05	1.25	<5		52	3.25	
		17-Sep-07	3.8	104	128	0.03	0.41	0.17	1.04	<5		34	3.93	
		05-Nov-07	2.8	110	144	0.02	0.37	0.1	0.91	<5	<0.005	32	2.69	
		08-Jan-08	11.2	56	104	0.03	0.43	<0.03	0.86	<6	<0.005	26	2.2	
		18-Mar-08	23.3	67	112	0.04	0.40	0.09	0.79	<5	<0.005	34	1.96	
		28-May-08	5.67	62	80	0.03	0.87	0.06	0.55	<5		14	2.32	
		16-Jul-08	6.5	112	176	0.08	0.64	0.18	0.66	<5		22	4.4	
		24-Sep-08	2.8	100	144	0.04	0.32	0.06	1.22	<5		42	2.9	
		12-Nov-08	2.33	64	156	0.07	0.30	0.12	1.16	<5	<0.005	48	2.67	
		09-Feb-09	45.1	76	124	0.10	0.53	0.17	0.93	<5	<0.005	52	2.23	
		16-Mar-09	22.5	24	60	0.09	0.45	0.09	0.64	<5	<0.005	26	2.9	0.065
		18-May-09	5.4	84	104	0.04	0.38	0.06	0.51	<5		24	2.16	0.013
		15-Jul-09	5.09	84	116	0.03	0.21	0.05	0.73	<5		28	2.96	
		08-Sep-09	3.8	70	128	0.04	0.51	0.06	0.88	<5		40	3.46	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Hannibal	126.4	20-Jan-05	23.4	72	92	0.03	0.70	0.05	1.00		<0.005	16	2	
		16-Mar-05	11	80	80		0.72	0.08	0.81		<0.005	43	2.93	
		12-May-05	7.2	90	134	0.03	1.01	<0.03	0.77	<5		24	5.47	
		14-Jul-05	6.33	120	152	0.01	0.24	0.06	0.92	<5		52	3.45	
		15-Sep-05	4.33	155	212	0.03	0.66	0.04	1.11	<5		70	2.6	
		15-Nov-05	8.75	90	132	0.05	0.51	0.05	0.85	<5	<0.005	40	2.72	
		04-Jan-06	77	75	120	0.14	0.92	0.11	1.02	<5	<0.005	36	2.28	
		13-Mar-06	24.3	88	128	0.07	0.46	0.05	0.91	<5	<0.005	38	1.97	
		03-May-06	2	70	104	<0.01	0.11	0.03	0.90	<5		32	2.05	
		18-Jul-06	4	66	112	0.21	0.44	0.07	0.88	<5		28	3.39	
		14-Sep-06	10.8	56	80	0.04	0.37	0.05	0.73	<5		28	3.82	
		07-Nov-06			92	0.07	0.43	0.04	0.64	<5	<0.005		2.82	
		02-Jan-07	4.6	80	124	0.06	0.50	0.07	0.78	<5	<5	32	2.25	
		13-Mar-07	10.5	68	112	0.02	0.35	0.15	1.20	<5	<0.005	42	2.3	
		10-May-07	7.61	62	96	0.03	0.31	<0.03	0.58	<5		24	1.71	
		12-Jul-07	3	132	184	0.05	0.46	0.08	1.04	<5		64	3.36	
		24-Sep-07	5.2	90	136	0.01	0.27	0.05	0.96	<5		42	3.5	
		28-Nov-07	35.7	90	124	0.12	0.80	0.07	0.79	<5	<0.005	32	3.62	
		09-Jan-08	11.2	60	104	0.03	0.42	0.1	0.82	<5	<0.005	28	2.3	
		26-Mar-08	25.3	63	88	<0.01	0.25	0.05	0.82	<5	<0.005	24	2.1	
		15-May-08	8.33	72	92	0.03	0.49	0.05	0.56	<5		48	2.56	
		17-Jul-08	5.2	110	104	<0.01	0.36	0.05	0.61	<5		28	4.17	
		17-Sep-08	5.17	104	156	0.02	0.59	0.15	1.03	<5		52	5.72	
		19-Nov-08	4.91	134	156	0.04	0.37	0.14	1.29	<5	<0.005	56	2.51	
		10-Feb-09	19	72	132	0.09	0.39	0.18	0.92	<5	<0.005	56	2.26	
		10-Mar-09	24.3	74	96	0.07	0.51	0.2	0.95	<5	<0.005	34	2.22	<0.01
		19-May-09	10.2	86	108	0.04	0.46	0.07	0.50	<5		26	2.21	<0.01
		22-Jul-09	4.38	110	140	0.03	0.45	0.09	0.73	<5		36	2.76	
		15-Sep-09	4.5	78	118	0.04	0.55	0.08	0.77	<5		48	3.6	
Willow Island	161.8	04-Jan-05	44	68	108	0.07	1.15	0.14	0.69		<0.005	23	2.16	
		15-Mar-05	9.5	80	128	0.05	0.55	0.07	0.82		<0.005	41	2.3	
		04-May-05	11.7	76	126	0.04	1.52	<0.03	0.69	<5		24	5.93	
		12-Jul-05	<1	130	168	0.01	1.29	<0.03	0.83	<5		50	3.53	
		15-Sep-05	4	160	176	0.06	0.75	0.03	1.10	<5		52	2.65	
		15-Nov-05	5.5	110	136	0.06	0.57	0.05	0.89	<5	<0.005	44	2.8	
		03-Jan-06	39.3	90	120	0.09	0.77	0.13	0.95	<5	<0.005	40	1.9	
		13-Mar-06	32	82	120	0.07	0.45	0.03	0.86	<5	<0.005	52	2.14	
		03-May-06	3.6	62	100	0.01	0.28	<0.03	0.97	<5		28	1.95	
		18-Jul-06	3.2	66	128	0.07	0.41	0.04	0.90	<5		24	3.68	
		19-Sep-06	7	56	96	0.01	0.37	0.05	0.87	<5		34	3.02	
		07-Nov-06	14.2	42	92	0.04	0.39	0.06	0.63	<5	<0.005	26	3.18	
		02-Jan-07	3	88	128	0.02	0.46	0.07	0.77	<5	<5	32	2.08	
		13-Mar-07	14	72	104	0.05	0.48	0.15	1.10	<5	<0.005	40	2.1	
		10-May-07	5.8	65	100	0.01	0.31	<0.03	0.61	<5		24	1.75	
		12-Jul-07	1.75	116	180	0.03	0.48	0.05	0.84	<5		50	3.17	
		24-Sep-07	3	90	132	<0.01	0.44	<0.03	0.93	<5		42	3.41	
		28-Nov-07			120	0.03	0.48	0.19	0.84	<5	<0.005		3.3	
		09-Jan-08	15.6	64	88	0.02	0.48	0.13	0.83	<5	<0.005	28	2.1	
		26-Mar-08	28	61	88	0.01	0.40	0.06	0.83	<5	<0.005	30	2.12	
		15-May-08	14.5	78	96	0.02	0.44	0.05	0.58	<5		34	2.53	
		17-Jul-08	8	130	164	0.02	0.62	0.04	0.59	<5		26	3.64	
		08-Sep-08	2.83	96	96	<0.01	0.70	0.1	0.73	<5		40	3.6	
		19-Nov-08	3.09	134	156	0.06	0.27	0.08	1.31	<5	<0.005	64	2.23	
		10-Feb-09	29	72	132	0.08	0.42	0.19	0.87	<5	<0.005	56	2.25	
		10-Mar-09	26.7	72	100	0.17	0.53	0.2	0.98	<5	<0.005	34	2.32	<0.01
		19-May-09	8	76	100	0.02	0.42	0.06	0.50	<5		30	2.19	<0.01
		22-Jul-09	6.28	110	128	0.03	0.44	0.09	0.81	<5		40	2.99	
		15-Sep-09	6.17	62	96	0.04	0.42	0.06	0.63	<5		35	3.68	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Belleville	203.9	04-Jan-05	46	80	128	0.11	1.24	0.1	1.16		<0.005	28	2.39	
		15-Mar-05	14.8	90	140	0.11	0.43	0.06	0.85		<0.005	42	3.08	
		04-May-05	18.6	84	146	0.04	1.22	<0.03	0.93	<5		26	7.07	
		12-Jul-05	4.86	110	172	<0.01	1.04	0.05	0.76	<5		48	3.78	
		13-Sep-05	2.4	115	156	0.02	0.19	0.06	0.99	<5		40	2.98	
		03-Nov-05	7.2	130	172	0.09	0.56	0.07	1.61	<5	<0.005	50	2.81	
		03-Jan-06	53	90	140	0.14	0.91	0.12	1.18	<5	<0.005	40	2.68	
		09-Mar-06	5.71	90	144	0.05	0.53	<0.03	0.92	<5	<0.005	30	1.95	
		11-May-06	4.4	86	140	<0.01	0.43	<0.03	0.74	<5		38	2.23	
		12-Jul-06	6	78	140	0.07	0.52	0.07	1.27	<5		24	3.22	
		19-Sep-06	13.5	60	104	0.04	0.39	0.06	0.88	<5		32	3.72	
		09-Nov-06	9	60	108	0.04	0.40	0.07	0.80	<5	<0.005	24	3	
		04-Jan-07	4.67	84	140	0.05	0.53	0.04	0.89	<5	<5	28	2.7	
		15-Mar-07	21	64	124	0.03	0.40	0.16	1.17	<5	<0.005	42	1.9	
		09-May-07	10.5	74	132	0.06	0.43	0.03	0.90	<5		26	2.62	
		17-Jul-07	2.5	116	192	0.01	0.63	0.08	0.71	<5		50	3.33	
		19-Sep-07	3	94	136	0.09	0.34	0.06	0.96	<5		40	4.79	
		08-Nov-07	4.6	98	148	0.05	0.60	<0.03	1.67	<5	<0.005	50	3.61	
		07-Jan-08	9	62	99	0.03	0.43	0.14	0.99	<6	<0.005	34	2.4	
		13-Mar-08	65	63	104	0.11	0.59	0.07	1.00	<5	<0.005	30	2.94	
		19-May-08	28.6	70	108	0.04	0.42	0.04	0.67	<5		12	2.74	
		23-Jul-08	8.5	106	160	0.03	0.53	0.11	0.77	<5		30	3.88	
		08-Sep-08	1.5	120	144	<0.01	0.57	0.1	0.58	<5		48	3.39	
		13-Nov-08	3.67	70	176	0.05	0.21	0.09	1.24	<5	<0.005	56	2.2	
		22-Jan-09	9.33	76	116	0.05	0.48	0.11	0.84	<5	<0.005	36	3.04	
		09-Mar-09	18.4	60	124	0.06	0.48	0.13	0.92	<5	<0.005	48	2.3	<0.01
		13-May-09	22	68	108	0.07	0.33	0.03	0.58	<5		18	2.94	<0.01
		13-Jul-09	5.8	130	132	0.04	0.57	0.09	0.78	<5		40	2.92	
		09-Sep-09	5.2	74	120	0.06	0.56	0.12	0.65	<5		38	4.03	
R.C. Byrd	279.2	04-Jan-05	13.5	64	112	0.06	0.99	0.09	0.94		0.006	21	1.81	
		15-Mar-05	16	50	96	0.06	0.72	0.05	0.79		<0.005	30	2.24	
		04-May-05	21.3	34	68	0.06	1.42	0.03	0.61	<5		7	5	
		12-Jul-05	16.8	80	136	0.24	1.77	0.08	0.56	<5		32	3.17	
		13-Sep-05	12.8	125	184	0.03	0.35	<0.03	0.68	<5		40	2.88	
		03-Nov-05	14.5	115	164	0.06	0.40	0.05	1.13	<5	<0.005	50	2.27	
		03-Jan-06	18.7	65	100	0.12	0.79	0.09	0.79	<5	<0.005	26	1.9	
		09-Mar-06	22.5	72	116	0.08	0.39	<0.03	0.80	<5	<0.005	36	1.62	
		11-May-06	12.2	62	100	0.03	0.30	0.03	0.88	<5		26	1.91	
		12-Jul-06	22.5	62	104	0.05	0.50	0.04	0.87	<5		16	2.74	
		19-Sep-06	26	52	96	0.06	0.51	0.08	0.78	**7.77**		26	4.49	
		09-Nov-06	55.3	56	92	0.11	0.52	0.06	0.74	<5	<0.005	18	3.29	
		04-Jan-07	4	64	108	0.04	0.30	0.03	0.79	<5	<5	22	2.38	
		15-Mar-07	24.7	26	104	0.03	0.42	0.14	1.23	<5	<0.005	36	1.8	
		09-May-07	35.7	62	116	0.06	0.38	0.05	0.73	<5		22	2.13	
		17-Jul-07	12	94	156	0.06	0.57	0.07	0.56	<5		42	3.1	
		19-Sep-07	9.2	76	120	0.01	0.50	0.05	0.93	<5		26	4.25	
		08-Nov-07	22	100	112	0.05	0.54	0.03	1.18	<5	<0.005	50	3.11	
		07-Jan-08	12.8	50	92	0.04	0.39	0.09	0.91	<6	<0.005	22	2.1	
		13-Mar-08	48.3	43	72	0.08	0.46	0.06	0.80	<5	<0.005	26	2.98	
		19-May-08	32	148	68	0.04	0.48	0.04	0.44	<5		30	2.34	
		23-Jul-08	23	58	116	0.07	0.59	0.1	0.72	<5		20	4.44	
		17-Sep-08	7.83	98	136	0.17	0.47	0.19	0.73	<5		40	5.81	
		13-Nov-08	14.2	76	164	0.05	0.30	0.08	1.09	<5	<0.005	52	2.23	
		22-Jan-09	11.7	62	104	0.04	0.33	0.12	0.74	<5	<0.005	30	2.67	
		09-Mar-09	8.57	60	116	0.06	0.46	0.1	0.79	<5	<0.005	38	2.26	<0.01
		13-May-09	24.8	32	64	0.06	0.38	<0.03	0.43	<5		8	2.92	0.011
		13-Jul-09	20	90	124	0.05	0.52	0.07	0.87	<5		44	3.33	
		09-Sep-09	6.6	76	140	0.04	0.46	0.05	0.56	<5		32	2.97	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Greenup	341	03-Jan-05	13.3	82	124	0.06	0.58	0.09	0.99			22	2.13	
		23-Mar-05	11.6	66	132	0.06	0.49	0.04	0.73			31	2.67	
		24-May-05	16.4	80	132	0.03	2.54	<0.03	0.65	<5		24	6.82	
		14-Jul-05	3.33	90	140	0.01	1.10	0.07	0.69	<5		38	3.17	
		20-Sep-05	12.8	120	180	0.03	1.30	<0.03	0.79	<5		36	3.33	
		08-Nov-05	5.4	95	160	0.07	0.53	0.05	1.04	<5		46	2.32	
		19-Jan-06	70	80	112	0.18	0.88	0.05	0.72	<5		26	3	
		07-Mar-06	16.5	76	136	0.04	0.52	<0.03	0.82	<5		40	1.78	
		10-May-06	7.4	72	108	0.02	0.30	<0.03	0.66	<5		30	2.12	
		25-Jul-06	13.2	56	116	0.06	0.26	0.04	0.89	<5		18	3.09	
		12-Sep-06	12.5	80	148	0.05	0.52	<0.03	0.93	<5		36	3.66	
		28-Nov-06	10	54	100	<0.01	0.30	0.1	0.65	<5		20	2.57	
		30-Jan-07	13	62	112	0.05	0.49	0.05	0.84	<5		20		
		15-Mar-07	31.3	58	132	0.04	0.43	0.14	1.24	<5		36	1.8	
		09-May-07	15.6	66	112	0.03	0.35	<0.03	0.65	<5		18	1.82	
		26-Jul-07	4	118	156	0.02	0.41	0.03	0.69	<5		48	3.14	
		13-Sep-07	10	106	160	0.02	0.54	0.07	1.11	<5		40	4.26	
		29-Nov-07	36.6	138	140	0.12	0.61	0.1	0.87	<5		56	3	
		29-Jan-08	9.33	66	100	0.06	0.41	<0.03	1.03	<6		24	2.3	
		20-Mar-08	76	57	92	0.11	0.60	0.05	0.86	<5		24	3.72	
		29-May-08	10.6	64	84	0.05	0.71	0.06	0.53	<5		16	2.72	
		21-Jul-08	6.4	74	136	0.03	1.15	0.57	0.68	<5		20	3.75	
		25-Sep-08	12.6	124	156	0.04	0.42	0.05	0.62	<5		48	3.2	
		05-Nov-08	29	116	152	0.09	0.66	0.04	0.98	<5		52	3.07	
		22-Jan-09	11.2	68	100	0.03	0.36	0.08	0.74	<5		26	2.79	
		09-Mar-09	9.71	84	104	0.06	0.44	0.08	0.88	<5		32	2.08	<0.01
		28-May-09	15	68	104	0.03	0.45	0.07	0.55	<5		22	2.6	0.011
		15-Jul-09	11.8	66	144	0.06	0.56	0.1	0.88	<5		28	3.48	
		28-Sep-09	18.4	84	132	0.10	0.73	0.08	0.71	<5		26	3.61	
Meldahl	436.2	30-Jan-05	30.7	58	128	0.08	1.73	0.04	1.18			20	6.11	
		23-Mar-05	10	60	144	0.05	0.36	0.03	0.78			31	2.96	
		22-May-05	23	90	140	0.06	1.89	0.03	0.69	<5		22	8.22	
		24-Jul-05	6.67	130	144	0.02	0.47	<0.03	0.54	<5		35	4.3	
		24-Sep-05	5.5	125	168	0.05	0.12	0.04	0.66	<5		48	2.99	
		08-Nov-05	5.6	95	160	0.10	0.75	0.04	1.47	<5		70	2.6	
		19-Jan-06	58.5	80	128	0.13	0.86	0.05	1.09	<5		56	5.48	
		07-Mar-06	11	76	132	0.07	0.47	0.03	0.89	<5		38	1.89	
		10-May-06	6.2	68	108	<0.01	0.32	0.04	0.59	<5		30	1.98	
		12-Jul-06	8	70	132	0.05	0.54	<0.03	1.11	<5		30	2.18	
		12-Sep-06	18.3	66	128	0.08	0.58	<0.03	0.87	<5		34	4.07	
		28-Nov-06	10.7	60	112	0.02	0.44	0.1	0.80	**8.8**		26	2.92	
		31-Jan-07	18	59	120	0.06	0.47	0.03	1.09	<5		20		
		15-Mar-07	31.7	52	132	0.07	0.47	0.12	1.27	<5		34	2.1	
		09-May-07	11.2	68	116	0.04	0.36	<0.03	0.77	<5		24	1.96	
		25-Jul-07	3.4	114	192	0.01	0.57	0.03	0.50	<5		42	3.07	
		13-Sep-07	7	80	160	0.06	0.62	0.05	1.18	<5		38	4.72	
		29-Nov-07	43.6	150	152	0.95	0.61	0.07	0.93	<5		32	2.9	
		28-Jan-08	14	68	96	0.07	0.45	0.05	0.88	<6		24	2.1	
		26-Mar-08	90.8	50	124	0.11	0.65	<0.03	0.90	<5		28	3.68	
		29-May-08	8.67	146	96	0.06	0.18	0.05	0.65	<5		14	2.92	
		21-Jul-08	7	70	140	0.02	0.90	0.36	0.88	<5		22	3.76	
		25-Sep-08	4.8	132	148	0.02	0.37	0.06	0.68	<5		30	2.9	
		05-Nov-08	2.83	124	172	0.03	0.21	0.05	0.86	<5		50	2.39	
		22-Jan-09	15.5	62	112	0.05	0.44	0.1	0.75	<5		28	2.86	
		09-Mar-09	8.25	74	116	0.06	0.32	0.06	1.12	<5		32	2.05	
		28-May-09	10.4	66	112	0.03	0.54	0.09	0.60	<5		20	2.86	0.017
		29-Jul-09	10.3	120	140	0.04	0.57	0.07	0.63	<5		30	3.07	
		28-Sep-09	28.2	78	130	0.12	0.80	0.08	0.57	<5		28	4.76	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Anderson Ferry	477.5	25-Jan-05	59	52	120	0.13	1.54	0.06	1.11			20	2.64	
		24-Mar-05	28	60	148	0.10	0.59	0.07	0.84			36	4.35	
		11-May-05	12.7	68	132	0.05	0.80	0.11	0.93	<5		21	7.25	
		22-Jul-05	7	100	152	0.04	0.44	0.06	0.66	<5		37	4.45	
		27-Sep-05	8.14	120	168	0.25	0.68	0.11	0.78	<5		52	3.05	
		21-Nov-05	21.8	100	148	0.09	0.71	0.19	1.15	<5		36	3.56	
		12-Jan-06	34.7	60	136	0.12	0.81	0.12	1.24	<5		38	2.77	
		27-Mar-06	44.8	80	144	0.10	0.82	0.17	1.28	<5		42	2.91	
		08-May-06	12.4	70	120	0.04	0.31	0.11	0.61	<5		22	2.34	
		12-Jul-06	9	72	132	0.04	0.57	0.04	1.15	<5		34	2.5	
		11-Sep-06	19.8	72	128	0.08	0.64	0.05	0.91	<5		34	4.39	
		09-Nov-06	30.3	50	116	0.09	0.52	0.1	0.81	10		26	3.47	
		24-Jan-07	160	53	120	0.31	1.55	<0.03	0.93	<5		30		
		27-Mar-07	74	62	104	0.12	0.57	0.05	1.25	<5		42	2.5	
		08-May-07	24.3	70	120	0.05	0.73	0.08	0.89	<5		22	2.33	
		17-Jul-07	7.75	104	156	0.04	0.59	0.2	0.66	<5		44	3.39	
		18-Sep-07	8.4	100	164	0.04	0.59	0.19	1.02	<5		44	4.54	
		28-Nov-07	23.2	138	152	0.08	0.61	0.15	0.95	<5		54	3.4	
		09-Jan-08	33.8	58	144	0.06	0.55	0.11	1.06	<6		34	2.7	
		24-Mar-08	168	45	108	0.18	0.96	0.05	0.82	<5		28	4.53	
		13-May-08	73.2	78	128	0.11	0.81	0.1	0.58	<5		46	3.12	
		17-Jul-08	16.5	64	108	0.06	0.59	0.15	0.80	<5		24	3.92	
		23-Sep-08	6.4	112	164	0.04	0.81	0.22	1.03	<5		38	5.16	
		19-Nov-08	<1	8	156	0.06	0.37	0.17	1.21	<5		50	3.26	
		14-Jan-09	74	48	100	0.18	0.65	0.1	0.84	<5		22	5.88	
		09-Mar-09	14.3	64	124	0.06	0.46	0.18	0.93	<5		36	2.54	0.013
		28-May-09	24.4	60	108	0.06	0.61	0.17	0.64	<5		24	3	0.021
		29-Jul-09	13.4	110	144	0.08	0.70	0.14	0.78	<5		30	3.35	
		21-Sep-09	31.5	110	166	0.10	1.50	0.42	0.73	<5		38	4.27	
Markland	531.5	30-Jan-05	35	56	140	0.09	1.02	0.06	1.41			22	3.6	
		24-Mar-05	10.8	64	148	0.05	0.44	0.06	0.83			72	3.06	
		22-May-05	22.8	76	148	0.05	2.24	0.06	0.96	<5		28	8.23	
		24-Jul-05	3.78	100	148	0.04	0.46	<0.03	0.58	<5		35	6.05	
		24-Sep-05	6.29	80	152	0.09	<0.1	<0.03	1.16	<5		40	3.28	
		21-Nov-05	39.8	100	176	0.25	1.01	0.11	1.11	<5		50	3.08	
		20-Jan-06	72	75	140	0.20	1.12	0.06	1.24	<5		34	3.07	
		06-Mar-06	12	74	140	0.09	0.47	0.06	1.19	<5		26	1.99	
		10-May-06	2	66	152	0.02	0.43	0.08	0.86	<5		28	2.2	
		13-Jul-06	7.8	70	132	0.07	0.50	0.07	1.32	<5		34	2.52	
		13-Sep-06	24	64	132	0.08	0.67	0.03	0.88	<5		32	4.06	
		09-Nov-06	18.8	44	120	0.07	0.51	0.08	0.95	<5		20	3.77	
		24-Jan-07	72	47	128	0.16	0.78	<0.03	1.02	<5		30		
		27-Mar-07	90.1	46	120	0.29	0.58	0.03	1.39	<5		32	2.5	
		22-May-07	15	71	140	0.04	0.69	<0.03	0.72	<5		24	2.83	
		25-Jul-07	4.6	108	176	0.45	0.71	0.12	0.66	<5		42	3.28	
		18-Sep-07	4.8	130	168	0.06	0.47	0.14	1.33	<5		56	4.67	
		28-Nov-07	16	104	144	0.07	0.55	0.17	1.18	<5		50	3.4	
		09-Jan-08	16.4	56	144	0.04	0.58	0.11	1.11	<6		38	2.6	
		24-Mar-08	238	44	124	0.20	0.94	0.04	0.86	<5		32	4.98	
		13-May-08	54.9	68	128	0.10	0.87	0.07	1.00	<5		42	3.37	
		21-Jul-08	9.47	50	148	0.13	0.86	0.12	0.44	<5		24	5.5	
		24-Sep-08	2.4	88	156	0.04	0.59	0.13	0.96	<5		40	3.6	
		19-Nov-08	5.45	120	188	0.07	0.42	0.18	1.11	<5		62	2.43	
		02-Feb-09	75.2	68	132	0.15	0.70	0.16	1.03	<5		32	3.98	
		09-Mar-09	15.3	72	100	0.07	0.54	0.12	1.04	<5		38	2.54	
		28-May-09	13.2	52	116	0.03	0.42	0.06	0.80	<5		24	2.89	0.015
		16-Jul-09	9.45	92	148	0.06	1.03	0.1	1.01	<5		26	3.14	
		22-Sep-09	10.3	100	154	0.06	0.57	0.05	0.79	<5		35	3.87	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Louisville	600.6	26-Jan-05	52	50	128	0.12	1.74	0.05	1.26			16	3.67	
		22-Mar-05	20	58	148	0.10	0.73	0.04	0.97			45	3.54	
		31-May-05	64	76	164	0.09	2.14	<0.03	0.91	<5		28	8.93	
		18-Jul-05	8	100	168	0.04	0.77	<0.03	0.84	<5		33	4.49	
		27-Sep-05	7.4	85	148	0.08	0.64	0.04	0.96	<5		36	3.03	
		28-Nov-05	10.4	90	160	0.10	0.51	0.15	1.25	<5		38	2.88	
		26-Jan-06	240	75	160	0.60	1.52	0.04	1.30	<5		26	3.21	
		27-Mar-06	19.5	74	164	0.15	0.76	0.07	1.42	<5		30	3.22	
		22-May-06	24	66	148	0.12	0.64	0.08	1.45	<5		36	2.81	
		26-Jul-06	10.6	60	140	0.09	0.47	<0.03	1.15	<5		18	3.42	
		25-Sep-06	79.3	54	140	0.31	0.83	0.03	0.94	<5		20	4.86	
		27-Nov-06	40.8	60	140	0.10	0.38	0.43	1.10	<5		20	2.69	
		22-Jan-07	142	46	124	0.25	0.91	<0.03	1.02	<5		20		
		22-Mar-07	81.5	46	124	0.12	0.67	0.08	1.26	<5		30	2.5	
		08-May-07	21	67	144	0.06	0.46	0.06	0.91	<5		20	2.33	
		18-Jul-07	5.6	78	140	0.05	0.59	<0.03	0.88	<5		36	3.16	
		18-Sep-07	7.2	144	180	0.05	0.70	<0.03	1.30	<5		50	4.36	
		26-Nov-07	6	98	168	0.03	<0.1	0.05	1.32	<5		60	3.79	
		15-Jan-08	60	50	116	0.18	0.55	0.04	1.49	<6		22	4	
		20-Mar-08	252	25	116	0.53	1.73	0.05	0.94	<5		20	6.8	
		20-May-08	1450	102	160	1.78	4.69	0.18	0.59	<5		16	7.21	
		14-Jul-08	290	70	192	0.34	1.11	0.23	1.25	<5		24	3.76	
		24-Sep-08	2.4	104	168	0.08	0.48	0.05	1.06	<5		38	3	
		19-Nov-08	9.82	114	168	0.08	0.38	0.11	1.19	<5		56	2.64	
		22-Jan-09	117	50	132	0.22	1.12	0.09	1.01	<5		36	4.82	
		12-Mar-09	27.5	82	128	0.09	0.43	0.11	1.30	<5		30	2.39	<0.01
		28-May-09	45.6	58	128	0.08	0.55	0.06	1.00	<5		18	3.23	0.027
		16-Jul-09	27.4	92	140	0.08	0.58	0.05	0.85	<5		24	3.38	
		23-Sep-09	22.3	84	144	0.09	0.68	0.07	0.89	<5		33	3.87	
West Point	625.9	26-Jan-05	61.3	54	132	0.15	2.18	0.1	1.20			18	4.87	
		22-Mar-05	102	66	180	0.29	1.05	0.16	0.95			57	4.56	
		31-May-05	19.7	84	160	0.06	2.10	0.17	0.97	<5		32	8.83	
		18-Jul-05	275	100	172	0.40	1.93	0.47	1.14	<5		35	6.01	
		27-Sep-05	10.4	130	176	0.07	0.88	0.13	1.02	<5		38	3.29	
		28-Nov-05	195	95	188	0.60	1.63	0.5	1.33	<5		40	3.72	
		26-Jan-06	125	75	128	0.34	1.01	0.07	1.21	<5		24	3.52	
		27-Mar-06	47	74	176	0.19	0.81	0.23	1.45	<5		36	3.03	
		22-May-06	27.3	64	144	0.21	0.64	0.16	1.44	<5		30	2.92	
		26-Jul-06	117	72	172	0.25	0.76	0.16	1.11	<5		22	3.22	
		25-Sep-06	131	54	140	0.44	1.06	0.05	0.83	<5		26	4.87	
		27-Nov-06	33.1	58	132	0.11	0.54	0.17	0.86	<5		22	2.86	
		22-Jan-07	95.6	47	128	0.19	0.81	<0.03	0.96	<5		16		
		22-Mar-07	243	48	204	0.58	0.91	0.17	1.26	<5		26	2.4	
		08-May-07	28	66	132	0.09	0.42	0.14	0.92	<5		20	2.37	
		18-Jul-07	5	86	164	0.09	0.84	0.22	0.78	<5		40	3.96	
		18-Sep-07	7.4	168	216	0.06	0.54	0.21	1.21	<5		66	3.79	
		26-Nov-07	15.8	134	212	0.11	1.08	0.21	1.24	<5		52	4.4	
		15-Jan-08	124	52	136	0.28	0.93	0.18	1.55	<6		28	3.5	
		20-Mar-08	204	35	116	0.47	1.19	0.04	1.03	<5		16	5.48	
		20-May-08	171	52	96	0.25	0.98	0.06	0.83	<5		14	4.54	
		14-Jul-08	27	86	180	0.12	0.77	0.41	1.39	<5		26	4.54	
		24-Sep-08	4.2	134	188	0.05	0.40	0.09	1.07	<5		42	3.3	
		19-Nov-08	22.5	146	200	0.10	0.68	0.31	1.36	<5		66	2.93	
		22-Jan-09	50	74	160	0.16	0.99	0.27	1.00	<5		34	4.08	
		12-Mar-09	40.5	76	140	0.12	0.52	0.18	1.32	<5		34	2.47	<0.01
		28-May-09	70	70	148	0.18	0.81	0.18	1.07	<5		24	3.32	0.055
		16-Jul-09	18	130	204	0.12	0.82	0.19	1.06	<5		38	3.51	
		09-Sep-09	15.8	140	180	0.07	0.54	0.07	0.92	<5		38	3.43	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
Cannelton	720.7	06-Jan-05	356	75	168	0.75	2.34	0.03	1.46			18	3.54	
		22-Mar-05	25.6	62	148	0.08	0.57	0.05	0.89			37	3.26	
		23-May-05	53.3	69	144	0.13	2.22	0.03	1.12	<5		22	10.4	
		13-Jul-05	5.75	95	148	0.02	1.69	0.09	0.92	<5		34	4.15	
		21-Sep-05	6.83	80	148	0.04	1.12	<0.03	0.84	<5		36	3.66	
		10-Nov-05	5.2	120	200	0.21	0.67	0.06	1.65	<5		54	3.3	
		25-Jan-06	270	85	148	0.43	1.43	0.06	1.29	<5		22	3.08	
		09-Mar-06	9.71	70	148	0.07	0.32	0.04	1.24	<5		40	2	
		09-May-06	5.25	64	132	0.04	0.27	0.04	0.81	<5		22	2.86	
		27-Jul-06	7.2	66	140	0.13	0.52	0.03	1.10	<5		20	3.15	
		14-Sep-06	22.2	68	140	0.09	0.43	0.04	0.86	<5		34	2.96	
		01-Nov-06	212	56	152	0.38	1.20	0.03	0.89	<5		20	4.3	
		31-Jan-07	28.4	50	140	0.09	0.57	0.05	1.24	<5		22		
		13-Mar-07	67	44	168	0.10	0.57	0.1	1.26	<5		40	2.7	
		08-May-07	25.1	55	132	0.07	0.48	0.05	1.03	<5		20	2.5	
		24-Jul-07	3	84	156	0.03	0.57	0.06	0.92	<5		42	3.12	
		19-Sep-07	6.4	120	180	0.03	0.47	0.03	0.90	<5		54	3.81	
		27-Nov-07	9.8	98	160	0.07	0.66	0.13	1.23	<5		52	2.68	
		23-Jan-08	25.6	58	124	0.09	0.50	<0.03	1.49	<6		24	2.7	
		18-Mar-08	83	42	152	0.20	0.54	<0.03	1.34	<5		38	3.29	
		21-May-08	96.3	46	112	0.17	2.77	0.04	0.90	<5		16	4.12	
		23-Jul-08	8	70	136	0.06	0.40	0.04	1.09	<5		28	4.28	
		18-Sep-08	4.83	88	184	0.04	0.45	0.08	1.43	<5		40	5.84	
		18-Nov-08	4.54	112	168	0.06	0.36	0.07	1.39	<5		44	2.68	
		03-Feb-09	106	64	128	0.24	0.64	0.15	1.22	<5		40	4.12	
		10-Mar-09	15.3	62	124	0.07	0.43	0.11	1.30	<5		30	2.58	0.033
		20-May-09	42.8	58	168	0.28	0.64	0.06	0.99	<5		18	4.3	
		22-Jul-09	10.5	120	148	0.07	0.59	0.08	1.06	<5		40	2.97	
		23-Sep-09	15.4	78	146	0.10	0.70	0.03	0.82	<5		32	3.34	
Newburgh	776	06-Jan-05	212	70	148	0.37	1.71	0.03	1.37			21	3.49	
		03-Mar-05	38.7	40	144	0.06	0.92	0.05	1.19			24	2.7	
		12-May-05	34.4	62	128	0.05	1.29	<0.03	1.18	<5		14	7.79	
		14-Jul-05	7.25	90	160	0.02	0.75	0.08	1.05	<5		30	3.83	
		15-Sep-05	7.6	95	152	0.04	0.85	0.04	0.99	**7.61**		38	3.36	
		10-Nov-05	11	120	192	0.10	0.71	0.06	1.65	<5		50	3.14	
		05-Jan-06	86.5	65	152	0.22	1.13	0.08	1.77	<5		34	3.31	
		02-Mar-06	15.2	66	156	0.09	0.50	0.05	1.62	<5		44	2.42	
		04-May-06	24	70	140	0.08	0.30	0.04	0.81	<5		18	2.72	
		13-Jul-06	26.8	72	136	0.10	0.66	0.04	1.44	<5		22	2.29	
		14-Sep-06	31.3	76	148	0.12	0.65	<0.03	0.96	<5		34	4.26	
		09-Nov-06	77	62	128	0.17	0.63	0.03	0.95	**6.3**		16	4.36	
		11-Jan-07	122	56	180	0.26	1.04	<0.03	1.25	<5		24	3.91	
		08-Mar-07	219	54	140	0.50	1.45	0.12	1.10	<5		36	3.7	
		03-May-07	42.5	70	136	0.08	0.37	<0.03	1.10	<5		18	2.94	
		19-Jul-07	2.8	80	152	0.01	0.46	0.04	0.93	<5		30	3.32	
		13-Sep-07	3.6	110	176	0.05	0.38	0.18	1.19	<5		46	3.1	
		08-Nov-07	4.4	98	144	0.08	0.69	0.05	1.70	<5		32	4.72	
		10-Jan-08	76.3	68	128	0.14	0.67	0.17	1.44	<6		34	3	
		06-Mar-08	173	56	136	0.26	0.70	0.05	1.25	<5		32	3.7	
		01-May-08	22.6	72	152	0.05	0.52	<0.03	0.88	<5		34	2.31	
		10-Jul-08	16.5	74	200	0.05	0.58	0.14	1.23	<5		18	3.54	
		04-Sep-08	9.25	80	164	0.03	0.71	0.06	1.28	<5		26	4.25	
		06-Nov-08	4.18	114	184	0.09	0.26	0.05	1.51	<5		46	3.14	
		08-Jan-09	43.7	60	128	0.13	0.51	0.13	1.37	<5		24	4.38	
		05-Mar-09	94	68	124	0.24	0.59	0.1	1.41	<5		26	4.36	
		07-May-09	57.7	66	160	0.16	0.52	0.06	1.21	<5		10	3.55	0.027
		23-Jul-09	14	100	120	0.08	0.56	0.06	1.12	<5		22	2.94	
		03-Sep-09	9.2	74	156	0.07	0.57	0.04	0.79	<5		22	3.72	

Appendix D: Ohio River Bimonthly Data 2005-2009

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
		06-Jan-05	153	60	148	0.15	0.97	0.07	1.21			25	3.36	
		03-Mar-05	44	40	144	0.06	0.83	0.05	1.18			22	2.83	
		12-May-05	45	56	124	0.05	1.15	<0.03	1.08	<5		11	8.37	
		14-Jul-05	6.4	70	164	0.03	0.41	0.11	0.73	<5		36	4.49	
		15-Sep-05	9.5	80	144	0.06	1.37	0.07	0.91	<5		28	3.59	
		10-Nov-05	10.6	105	176	0.08	0.56	<0.03	1.48	<5		50	2.44	
		05-Jan-06	78.5	65	160	0.20	0.93	0.09	1.60	<5		36	3.23	
		02-Mar-06	11.8	66	160	0.10	0.41	0.09	1.48	<5		36	2.18	
		04-May-06	36.3	68	132	0.09	0.48	<0.03	1.00	<5		20	2.13	
		13-Jul-06	14.4	76	144	0.11	0.65	0.03	1.21	<5		30	1.89	
		14-Sep-06	30	70	148	0.12	0.27	<0.03	1.03	<5		42	3.36	
		09-Nov-06	92	64	124	0.19	0.90	<0.03	0.96	**10**		16	3.47	
		11-Jan-07	64	60	172	0.15	0.58	0.03	1.28	<5		24	3.33	
		08-Mar-07	243	50	140	0.46	1.38	<0.03	1.06	<5		36	3.8	
J.T. Myers	846	03-May-07	49.1	64	160	0.09	0.39	0.04	1.00	<5		16	2.15	
		19-Jul-07	4.6	84	144	0.01	0.47	0.03	0.92	<5		32	3.13	
		13-Sep-07	7.6	96	176	0.01	0.32	0.05	0.85	<5		36	2.72	
		08-Nov-07	6.2	104	124	0.09	0.66	0.05	1.99	<5		32	4.44	
		10-Jan-08	104	58	128	0.16	0.62	0.05	1.59	<6		34	2.9	
		06-Mar-08	102	86	116	0.23	1.07	0.03	1.14	<5		34	3.39	
		01-May-08	12.8	58	144	0.04	0.46	<0.03	0.90	<5		16	2.28	
		10-Jul-08	10.4	74	144	0.04	0.51	0.14	1.61	<5		20	3.76	
		04-Sep-08	9	82	164	0.03	0.91	0.1	0.87	<5		14	4.51	
		06-Nov-08	6.86	112	184	0.08	0.51	0.05	0.98	<5		38	3.04	
		08-Jan-09	79.6	56	116	0.18	0.85	0.12	1.30	<5		22	5.23	
		05-Mar-09	84	56	120	0.20	0.58	0.12	1.44	<5		30	4.05	
		07-May-09	59.7	70	132	0.12	0.60	0.06	1.10	<5		10	3.53	0.021
		23-Jul-09	22	98	156	0.09	0.68	0.03	1.13	<5		22	3.24	
		03-Sep-09	9.8	64	136	0.07	0.63	0.04	0.79	<5		16	4.07	
		03-Jan-05	94	70	176	0.23	1.05	0.1	1.48			28	2.95	
		01-Mar-05	37.6	48	176	0.09	0.92	0.1	2.22			100	11.6	
		04-May-05	75	58	178	0.05	1.55	<0.03	2.29	<5		51	10.5	
		05-Jul-05	11.5	75	180	0.05	0.72	0.08	0.82	<5		52	3.02	
		06-Sep-05	11	90	156	0.06	0.90	0.06	0.88	<5		86	10.9	
		07-Nov-05	10.8	125	212	0.09	1.00	<0.03	1.52	<5		110	3.91	
		03-Jan-06	37.3	65	156	0.15	0.86	0.14	1.54	<5		42	3.51	
		08-Mar-06	11	70	188	0.08	0.49	<0.03	1.90	<5		34	2.47	
		16-May-06	21.8	62	172	0.11	0.51	0.07	2.14	<5		26	3.55	
		10-Jul-06	9.2	80	168	0.09	0.53	0.05	1.50	<5		86	2.52	
		19-Sep-06	21.4	66	148	0.08	0.46	0.04	1.03	<5		34	3.62	
		14-Nov-06	33	56	156	0.11	0.51	<0.03	1.27	**12.7**		18	3.77	
		30-Jan-07	81	47	172	0.22	0.98	<0.03	2.07	<5		20		
		21-Mar-07	302	42	260	0.48	0.98	0.06	1.73	<5		30	3.3	
Smithland	918.5	21-May-07	7.75	71	164	0.04	0.47	0.05	1.12	<5		46	3.16	
		25-Jul-07	1.8	82	168	0.02	0.59	0.2	0.61	<5		32	3.41	
		20-Sep-07	3.2	88	180	0.03	0.50	0.09	0.61	<5		44	2.68	
		28-Nov-07	10.8	88	172	0.08	0.64	0.07	1.20	<5		50	4.56	
		24-Jan-08	86	52	164	0.23	0.66	<0.03	2.87	<6		20	4.1	
		17-Mar-08	68	40	184	0.21	0.50	0.03	1.84	<5		86	4.36	
		22-May-08	239	42	144	0.38	1.13	0.08	1.65	<5		16	4.77	
		22-Jul-08	19.3	52	164	0.11	0.57	<0.03	1.61	<5		16	4.62	
		17-Sep-08	6.83	74	176	0.04	1.06	0.18	0.78	<5		30	5.71	
		17-Nov-08	3.27	100	192	0.10	0.47	0.13	1.01	<5		40	2.92	
		02-Feb-09	185	56	140	0.27	0.91	0.15	1.39	<5		26	4.76	
		10-Mar-09	59	66	152	0.19	0.63	0.11	2.03	<5		30	3.81	0.027
		19-May-09	111	62	136	0.21	0.78	0.05	1.03	<5		14	6.6	
		21-Jul-09	11.4	82	172	0.07	0.70	0.08	1.06	<5		22	3.33	
		16-Sep-09	8.5	67	146	0.07	0.68	0.11	0.68	<5		20	3.96	

Station Name	River Mile	Date	TSS (mg/L)	SO4 (mg/L)	Hardness (mg/L)	TPhos (mg/L)	TKN (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	Total CN (ug/L)	Chloride (mg/L)	TOC (mg/L)	Ortho-Phosphate (Dissolved mg/L)
Criteria				250 mg/L (HH)					10 mg/L (HH)	5 mg/L (HH)	700 ug/L (HH)	250 mg/L (HH)		
		03-Jan-05	94	70	152	0.22	0.97	0.07	1.33			50	2.86	
		01-Mar-05	88.8	47	172	0.14	0.99	0.04	2.11			61	11.7	
		04-May-05	95	54	174	0.09	0.95	<0.03	2.22	<5		41	10.4	
		05-Jul-05	14.8	67	152	0.06	0.79	<0.03	0.85	<5		68	2.99	
		06-Sep-05	16	90	160	0.07	0.74	0.03	0.97	<5		58	9.78	
		07-Nov-05	13.4	95	180	0.11	0.72	<0.03	1.36	<5		96	3.46	
		03-Jan-06	58	70	156	0.16	0.70	0.14	1.56	<5		92	3.28	
		08-Mar-06	28.5	66	188	0.11	0.71	0.09	1.80	<5		32	2.6	
		16-May-06	30.5	60	164	0.12	0.66	0.07	2.04	<5		26	3.7	
		10-Jul-06	13.4	78	184	0.13	0.67	<0.03	1.59	<5		52	2.76	
		19-Sep-06	42.7	66	136	0.09	0.78	0.03	1.01	**6.44**		32	3.56	
		14-Nov-06	76	50	144	0.18	0.63	<0.03	1.17	**10**		18	4.65	
		30-Jan-07	96.5	39	148	0.26	0.99	0.03	1.84	<5		16		
		21-Mar-07			288	0.29	0.86	0.04	1.72	<5			3.3	
L&D 52	938.9	21-May-07	15.2	65	172	0.06	0.57	0.05	1.32	<5		36	3.24	
		25-Jul-07	15.8	66	164	0.04	0.61	0.06	0.55	<5		34	3.49	
		20-Sep-07	7.4	64	152	0.03	0.52	<0.03	0.45	<5		32	3.86	
		28-Nov-07	45	98	172	0.12	0.58	0.09	1.27	<5		42	4.48	
		24-Jan-08	124	42	164	0.31	0.96	<0.03	3.02	<6		20	3.9	
		17-Mar-08	64	40	104	0.20	0.55	<0.03	1.71	<5		38	4.96	
		22-May-08	513	148	176	0.52	1.85	0.1	1.47	<5		12	5.14	
		21-Jul-08	28.8	60	164	0.12	0.53	0.04	1.48	<5		22	4.32	
		16-Sep-08	17.5	74	180	0.06	2.20	1.05	1.00	<5		28	6	
		17-Nov-08	14.7	82	160	0.09	0.55	0.1	0.72	<5		34	3.17	
		02-Feb-09	248	56	164	0.31	0.99	0.15	1.40	<5		22	4.8	
		11-Mar-09	131	58	148	0.30	0.71	0.12	2.01	<5		34	4.66	0.027
		19-May-09	83.2	52	116	0.15	0.76	0.05	1.03	<5		16	5.85	
		21-Jul-09	9.52	70	156	0.09	0.71	0.09	0.95	<5		22	3.58	
		16-Sep-09	9.67	50	130	0.07	0.63	0.1	0.45	<5		16	3.79	

2006-2009 Daily Dissolved Oxygen Data

Ohio River Station	2006 % Days Exceeding Daily Average	2006 # Months > 10% Days Exceeding Daily Average	2007 % Days Exceeding Daily Average	2007 # Months > 10% Days Exceeding Daily Average	2008 % Days Exceeding Daily Average	2008 # Months > 10% Days Exceeding Daily Average	2009 % Days Exceeding Daily Average	2009 # Months > 10% Days Exceeding Daily Average	2006-2009 # Months with Data	2006-2009 # Months > 10% Days Exceeding Daily Average	2006-2009 % Months > 10% Days Exceeding Daily Average	2006-2009 % Days Exceeding Daily Average
MONTGOMERY MP 31.7	0.0%	0	0.0%	0	0.0%	0	0.0%	0	19	0	0.0%	0.0%
HANNIBAL MP 126.4	0.0%	0	0.0%	0	0.0%	0	0.0%	0	23	0	0.0%	0.0%
RACINE MP 237.5	0.0%	0	0.0%	0	0.88%	0	0.0%	0	23	0	0.0%	0.13%
KYGER MP 260.0	0.0%	0	0.0%	0	0.0%	0	3.6%	0	23	0	0.0%	0.50%
GREENUP MP 341.0												
UPSTREAM	0.0%	0	6.6%	2	13.0%	1	4.7%	1	24	4	16.6%	3.5%
DOWNSTREAM	0.0%	0	0.0%	0	0.88%	0	1.9%	1	24	1	4.0%	0.37%
MARKLAND MP 531.5												
DO #1	0.0%	0	0	0	1.1%	0	13.8%	1	23	1	4.3%	2.4%
DO #2	0.0%	0	0	0	0.0%	0	0.0%	0	17	0	0.0%	0.0%
CANNELTON MP 720.7	28.8%	1	29.9%	1	33.0%	4	0.0%	0	21	6	28.5%	12.8%
NEWBURGH MP 776.1	0.0%	0	19.0%	1	0.0%	0	0.0%	0	18	1	5.5%	1.5%
JOHN T. MYERS MP 846.0	5.8%	1	18.7%	2	4.7%	1	0.0%	0	21	4	19.0%	4.2%
SMITHLAND MP 919.0	No Data Available	No Data Available	No Data Available	No Data Available	22.4%	3	5.0%	1	20	8	40.0%	9.0%

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen May 2006

CALENDAR DAY JULIAN DAY		2-May 122	3-May 123	4-May 124	5-May 125	8-May 128	9-May 129	10-May 130	11-May 131	12-May 132	15-May 135	16-May 136	17-May 137	18-May 138	19-May 139	22-May 142	23-May 143	24-May 144	25-May 145	26-May 146	30-May 150	31-May 151	Monthly % Exceedance
MONTGOMERY	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 31.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
HANNIBAL***	MAX	8.96	9.65	9.53	9.24	9.14	9.05	9.18	9.21	9.12	7.85	9.53	8.97	9.23	9.12	12.45	9.27	9.35	9.35	9.44	8.94	8.94	
MP 126.4	MIN	8.51	8.60	8.57	8.57	8.79	8.55	8.52	9.03	8.97	7.70	9.08	7.61	8.58	8.81	9.08	8.88	8.81	8.78	8.93	6.80	8.58	
UPSTREAM	AVG	8.79	8.81	8.95	9.09	8.98	8.77	8.79	9.09	9.04	7.79	9.31	8.42	8.73	8.98	9.32	9.00	8.93	8.95	9.21	8.40	8.74	0.00%
RACINE***	MAX	No	No	11.88	13.27	No	No	11.28	12.31	No	12.74	11.95	No	9.94	8.90	9.86	9.58	9.36	8.69	8.76	7.73	7.66	
MP 237.5	MIN	Data	Data	10.56	11.90	Data	Data	9.98	11.16	Data	11.16	10.82	Data	7.56	8.40	8.45	8.28	8.26	8.21	8.06	7.51	7.51	
	AVG	Available	Available	11.21	12.83	Available	Available	10.66	11.67	Available	11.91	11.26	Available	9.06	8.72	8.89	8.71	8.57	8.44	8.36	7.65	7.58	0.00%
KYGER	MAX	8.81	8.81	8.95	8.93	9.07	8.88	9.02	9.05	9.12	8.64	8.57	No	9.84	9.41	9.19	9.19	10.49	9.05	8.95	8.78	8.42	
MP 260.0	MIN	8.64	8.69	8.59	8.64	8.78	8.57	8.57	8.54	8.42	8.30	8.35	Data	8.95	8.81	8.98	8.83	8.76	8.81	8.78	8.33	7.94	
	AVG	8.70	8.76	8.84	8.85	8.93	8.76	8.88	8.85	8.74	8.52	8.48	Available	9.36	9.09	9.10	8.96	9.04	8.94	8.87	8.54	8.14	0.00%
GREENUP***	MAX	7.73	8.21	8.11	8.11	9.17	9.72	9.19	8.06	7.68	7.44	8.16	8.26	8.18	8.21	7.94	7.68	7.51	7.78	7.97	8.16	7.78	
MP 341.0	MIN	6.98	6.98	7.87	7.58	8.38	8.38	8.06	7.56	7.13	6.72	6.82	7.30	7.85	7.54	7.68	7.37	6.98	7.10	7.25	7.15	7.18	
UPSTREAM	AVG	7.24	7.69	8.00	7.86	8.82	9.06	8.67	7.77	7.50	6.95	7.94	8.18	8.09	7.96	7.83	7.55	7.15	7.49	7.74	7.62	7.53	0.00%
DOWNSTREAM	MAX	6.82	7.49	7.34	7.42	9.84	10.22	9.91	9.31	9.24	8.52	10.39	8.40	8.35	No	No	7.56	6.58	7.90	7.94	8.18	8.09	
	MIN	6.41	6.55	6.65	6.86	9.36	9.41	9.31	9.05	8.81	8.33	7.80	5.52	7.92	Data	Data	6.43	6.07	6.02	7.75	7.66	7.56	
	AVG	6.62	7.14	7.09	7.17	9.60	9.73	9.61	9.19	9.00	8.45	8.39	8.19	8.19	Available	Available	6.76	6.31	7.73	7.86	8.04	7.81	0.00%
MARKLAND***	MAX	8.47	8.52	8.78	9.07	9.48	9.84	9.65	9.14	8.69	8.02	8.11	8.38	8.54	8.50	8.04	7.87	7.22	No	8.04	No	No	
MP 531.5	MIN	5.52	8.33	8.50	8.62	8.81	8.83	8.74	8.69	8.06	7.73	7.82	8.09	8.30	8.21	7.73	7.37	5.14	Data	7.32	Data	Data	
D.O. #1	AVG	7.05	8.47	8.65	8.84	9.14	9.26	9.30	8.90	8.37	7.84	7.97	8.28	8.44	8.36	7.91	7.63	5.92	Available	7.53	Available	Available	0.00%
D.O. #2	MAX	8.47	No	8.95	9.24	9.86	10.13	9.94	9.46	8.95	7.99	7.92	8.18	8.35	8.30	7.82	7.70	7.85	8.11	7.87	No	No	
	MIN	5.81	Data	8.57	8.81	9.14	9.17	9.14	8.90	8.42	7.63	7.66	7.90	8.16	8.02	7.61	7.22	4.87	5.86	7.44	Data	Data	
	AVG	7.25	Available	8.81	9.00	9.48	9.57	9.65	9.21	8.70	7.76	7.80	8.08	8.27	8.17	7.73	7.51	6.23	7.44	7.65	Available	Available	0.00%
CANNELTON	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORASNCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen Levels June 2006

CALENDAR DAY JULIAN DAY		1-Jun 152	2-Jun 153	5-Jun 156	12-Jun 163	13-Jun 164	14-Jun 165	15-Jun 166	16-Jun 167	19-Jun 170	20-Jun 171	21-Jun 172	22-Jun 173	23-Jun 174	26-Jun 177	27-Jun 178	28-Jun 179	29-Jun 180	30-Jun 181	Monthly % Exceedance
MONTGOMERY	MAX	10.27	10.38	9.14	10.65	11.71	11.46	12.79	12.43	11.81	11.33	14.93	13.23	11.43	10.99	11.49	10.82	10.25	10.42	
MP 31.7	MIN	10.00	10.00	8.89	9.72	10.35	9.65	10.32	10.43	10.02	10.02	9.30	11.37	10.61	9.90	11.10	10.38	9.95	10.05	
	AVG	10.15	10.16	8.98	10.21	10.81	10.67	11.16	11.00	11.00	10.41	12.21	12.31	11.01	10.53	11.30	10.63	10.12	10.15	0.00%
HANNIBAL***	MAX	8.96	8.79	9.66	8.25	8.55	9.05	8.97	8.82	9.48	8.58	8.25	8.28	8.13	7.76	8.22	8.37	8.94	8.84	
MP 126.4	MIN	8.46	8.37	7.88	8.01	8.03	8.37	8.54	8.37	8.19	8.13	7.79	7.53	7.34	6.95	6.98	8.18	8.21	7.40	
UPSTREAM	AVG	8.66	8.55	8.44	8.14	8.28	8.63	8.77	8.58	8.74	8.37	8.06	7.96	7.85	7.37	7.39	8.28	8.48	8.27	0.00%
RACINE***	MAX	7.75	10.27	7.34	6.74	7.08	7.03	6.86	6.86	7.42	No	No	7.40	7.24	6.04	6.04	5.87	5.99	5.85	
MP 237.5	MIN	7.54	7.51	6.77	6.58	6.62	6.74	6.58	6.48	7.13	Data	Data	7.23	6.99	5.54	5.54	5.35	5.70	5.72	
	AVG	7.66	8.17	7.06	6.65	6.85	6.88	6.74	6.68	7.26	Available	Available	7.30	7.11	5.72	5.72	5.54	5.81	5.79	0.00%
KYGER	MAX	8.11	7.90	7.61	6.98	6.94	7.15	7.13	7.20	7.32	8.21	8.26	7.39	7.56	6.46	5.40	5.86	5.90	5.81	
MP 260.0	MIN	7.78	7.70	7.25	6.84	6.84	6.86	6.86	6.86	6.72	7.15	7.34	7.03	6.98	4.97	5.02	4.78	5.30	5.64	
	AVG	7.93	7.81	7.46	6.91	6.88	7.03	6.99	7.02	7.08	7.68	7.76	7.23	7.20	5.59	5.22	5.14	5.64	5.74	0.00%
GREENUP***	MAX	7.34	7.08	6.34	6.02	6.48	6.60	8.18	7.94	8.23	7.68	7.94	7.56	7.08	5.98	6.12	5.69	*	*	
MP 341.0	MIN	6.98	6.79	5.95	5.69	5.66	5.88	6.43	7.06	7.58	7.42	7.06	6.19	5.90	5.26	5.14	5.06	*	*	
UPSTREAM	AVG	7.15	6.96	6.19	5.82	6.18	6.29	7.23	7.48	7.88	7.53	7.55	6.82	6.35	5.50	5.53	5.34	*	*	0.00%
DOWNSTREAM	MAX	7.63	7.37	6.26	5.47	*	7.30	8.98	9.34	8.66	8.18	8.42	7.94	8.33	6.50	*	6.19	*	5.62	
	MIN	7.39	6.96	5.47	5.02	*	6.86	7.15	8.09	7.99	7.94	7.75	6.91	6.46	6.22	*	5.88	*	4.39	
	AVG	7.49	7.17	5.75	5.21	*	7.02	8.15	8.63	8.34	8.04	8.09	7.37	7.08	6.41	*	6.06	*	5.17	0.00%
MARKLAND***	MAX	9.29	6.50	*	7.94	7.75	7.08	7.27	7.22	6.96	7.87	7.75	6.46	7.01	*	*	6.43	6.31	5.88	
MP 531.5	MIN	7.97	5.33	*	6.94	6.94	6.72	6.60	5.76	5.86	6.74	5.88	5.74	5.86	*	*	5.95	5.83	4.90	
D.O. #1	AVG	8.46	5.86	*	7.57	7.31	6.90	6.84	6.72	6.23	7.49	6.83	6.04	6.20	*	*	6.27	6.10	5.54	0.00%
D.O. #2	MAX	9.22	7.80	5.90	7.08	6.41	6.05	5.74	5.38	*	6.74	6.65	5.81	6.07	*	6.02	6.43	6.31	6.05	
	MIN	8.02	6.89	5.47	5.86	5.88	5.62	5.30	5.11	*	4.39	5.30	5.18	5.33	*	4.18	5.98	6.10	5.14	
	AVG	8.45	7.30	5.73	6.58	6.06	5.81	5.48	5.28	*	6.15	5.94	5.41	5.63	*	5.70	6.24	6.22	5.74	0.00%
CANNELTON	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen July 2009

CALENDAR DAY JULIAN DAY		2-Jul 184	5-Jul 186	6-Jul 187	7-Jul 188	10-Jul 191	11-Jul 192	12-Jul 193	13-Jul 194	14-Jul 195	17-Jul 198	18-Jul 199	19-Jul 200	20-Jul 201	21-Jul 202	24-Jul 205	25-Jul 206	26-Jul 207	27-Jul 208	31-Jul 212	Monthly % Exceedance
MONTGOMERY	MAX	9.84	8.80	9.37	8.61	8.38	8.37	8.65	8.67	8.53	8.72	8.76	8.98	9.74	9.67	8.29	8.12	8.54	9.15	8.58	
MP 31.7	MIN	9.44	8.53	8.28	8.12	8.14	8.18	8.31	8.00	8.07	8.50	8.47	8.44	9.35	9.16	7.99	7.48	7.85	8.12	8.32	
	AVG	9.71	8.69	8.52	8.37	8.23	8.24	8.55	8.36	8.29	8.61	8.64	8.59	9.57	9.37	8.10	7.94	8.04	8.75	8.46	0.00%
HANNIBAL***	MAX	9.23	8.46	8.45	8.09	9.14	8.66	8.96	8.07	8.04	8.64	8.21	8.15	8.37	8.10	7.82	7.85	7.74	8.39	7.70	
MP 126.4	MIN	8.70	8.10	7.89	7.64	8.60	8.18	8.00	7.97	7.80	8.30	7.88	7.77	7.92	7.70	7.17	7.19	7.37	7.26	7.13	
UPSTREAM	AVG	8.88	8.35	8.15	7.80	8.79	8.44	8.13	8.01	7.98	8.49	8.07	7.96	8.11	7.95	7.55	7.55	7.56	7.89	7.55	0.00%
RACINE***	MAX	6.19	6.78	6.95	7.04	7.16	7.02	6.78	6.88	6.94	No	6.81	6.65	6.61	6.73	6.55	6.95	7.10	6.99	7.53	
MP 237.5	MIN	6.07	6.51	6.78	6.85	6.89	6.79	6.69	6.72	6.83	Data	6.42	6.45	6.47	6.56	6.42	6.51	6.74	6.89	6.65	
	AVG	6.12	6.62	6.87	6.94	6.96	6.93	6.74	6.80	6.88	Available	6.60	6.55	6.53	6.63	6.49	6.77	6.94	6.94	7.01	0.00%
KYGER	MAX	5.81	6.70	6.70	6.14	6.24	6.07	5.95	5.81	5.88	5.42	+	+	5.71	5.40	+	10.61	8.35	8.54	8.40	
MP 260.0	MIN	5.62	5.52	5.69	5.93	5.86	5.66	5.57	5.45	5.45	4.82	+	+	5.18	5.16	+	5.02	7.30	8.06	7.92	
	AVG	5.76	5.76	5.91	6.03	6.03	5.86	5.72	5.60	5.63	5.03	+	+	5.34	5.26	+	7.95	7.68	8.27	8.18	0.00%
GREENUP***	MAX	7.78	5.88	5.93	5.54	6.00	6.29	6.19	5.95	6.26	5.59	5.54	5.57	5.54	5.88	5.54	5.76	5.86	6.02	6.82	
MP 341.0	MIN	5.42	5.50	5.42	4.94	5.59	5.59	5.74	5.40	5.40	5.30	5.30	5.26	5.16	5.66	5.28	5.35	5.50	5.38	5.59	
UPSTREAM	AVG	6.03	5.66	5.64	5.29	5.82	5.76	5.96	5.69	5.87	5.47	5.43	5.40	5.34	5.76	5.37	5.52	5.68	5.64	6.30	0.00%
DOWNSTREAM	MAX	+	6.29	6.41	6.29	6.50	6.43	6.41	6.43	6.77	6.26	6.29	6.38	6.46	9.07	6.46	6.60	6.86	6.96	9.46	
	MIN	+	5.95	5.98	5.40	6.05	6.05	6.26	6.22	6.19	4.27	4.20	5.88	6.34	8.66	6.07	6.38	6.43	6.46	6.62	
	AVG	+	6.10	6.21	6.01	6.29	6.32	6.34	6.31	6.54	5.11	5.52	6.16	6.39	8.96	6.30	6.48	6.66	6.70	7.12	0.00%
MARKLAND***	MAX	5.30	5.66	5.45	5.64	8.28	8.28	6.17	6.02	5.88	5.86	No	No	No	No	6.98	5.86	5.90	6.07	5.57	
MP 531.5	MIN	4.94	5.26	5.21	5.35	4.99	6.02	5.83	5.66	5.62	5.59	Data	Data	Data	Data	5.33	5.28	5.18	5.59	**4.82**	
D.O. #1	AVG	5.17	5.41	5.31	5.51	5.36	6.41	5.98	5.85	5.74	5.73	Available	Available	Available	Available	5.56	5.54	5.58	5.74	5.18	0.00%
D.O. #2	MAX	5.64	5.86	5.62	5.86	8.30	8.30	6.22	6.10	6.02	6.12	No	No	No	No	5.90	5.95	5.90	6.07	5.62	
	MIN	5.42	5.47	5.50	5.71	5.45	6.05	5.95	5.78	5.78	5.88	Data	Data	Data	Data	5.45	5.42	5.45	5.66	**4.78**	
	AVG	5.57	5.64	5.56	5.80	5.82	6.41	6.03	5.94	5.91	6.05	Available	Available	Available	Available	5.63	5.66	5.69	5.84	5.21	0.00%
CANNELTON	MAX	No	No	No	No	No	No	6.23	6.28	6.27	6.25	5.53	5.93	5.99	5.96	6.05	6.12	6.33	7.09	7.28	
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	5.90	6.00	6.01	5.78	4.94	5.58	5.77	5.69	5.71	5.77	6.10	6.77	6.73	
	AVG	Available	Available	Available	Available	Available	Available	6.11	6.13	6.15	6.09	5.18	5.78	5.91	5.81	5.89	5.98	6.23	6.93	6.96	0.00%
NEWBURGH	MAX	No	No	No	No	No	6.91	6.57	6.63	6.27	6.24	6.21	5.53	5.85	6.21	5.79	6.43	6.90	+	8.09	
MP 776.1	MIN	Data	Data	Data	Data	Data	6.61	6.45	6.26	5.92	6.00	6.00	5.00	5.65	5.79	5.42	5.65	6.63	+	6.99	
	AVG	Available	Available	Available	Available	Available	6.76	6.51	6.43	6.11	6.13	6.12	5.34	5.75	5.91	5.65	5.97	6.75	+	7.43	0.00%
JOHN T. MYERS	MAX	No	No	No	No	No	No	7.20	7.21	6.99	No	No	6.47	6.41	5.73	5.81	6.38	6.03	6.81	8.89	
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	6.83	6.42	5.91	Data	Data	5.93	5.40	5.13	4.67	6.05	5.64	+	8.18	
	AVG	Available	Available	Available	Available	Available	Available	6.91	6.92	6.50	Available	Available	6.17	5.85	5.42	5.23	6.23	5.79	5.76	8.62	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen August 2006

CALENDAR DAY JULIAN DAY		1-Aug 213	2-Aug 214	3-Aug 215	4-Aug 216	7-Aug 219	8-Aug 220	9-Aug 221	10-Aug 222	14-Aug 226	15-Aug 227	16-Aug 228	17-Aug 229	21-Aug 233	22-Aug 234	23-Aug 235	24-Aug 236	25-Aug 237	28-Aug 240	29-Aug 241	31-Aug 242	31-Aug 243	Monthly % Exceedance
MONTGOMERY	MAX	8.79	9.04	8.75	8.18	9.16	9.35	8.43	8.23	8.35	8.39	8.43	8.18	9.08	8.73	6.99	4.76	9.30	8.06	7.80	7.70	8.07	
MP 31.7	MIN	8.53	8.52	8.37	7.88	8.72	8.55	7.67	7.61	7.76	7.72	7.33	7.53	7.84	6.86	4.97**	4.22	7.34	7.37	7.26	7.44	7.65	
	AVG	8.65	8.87	8.65	8.04	8.89	8.79	7.98	7.95	8.10	8.01	8.00	7.90	8.53	7.33	5.65	4.42*	8.37	7.64	7.46	7.54	7.77	0.00%
HANNIBAL***	MAX	7.80	8.61	8.34	7.95	9.33	8.01	7.65	7.77	8.97	7.71	8.06	7.37	7.10	7.10	8.03	7.61	7.80	7.55	7.44	7.53	7.95	
MP 126.4	MIN	7.29	7.35	7.43	7.31	7.04	6.99	6.95	7.16	7.55	7.49	7.32	6.95	6.75	6.53	7.02	7.08	7.29	7.11	6.62	7.02	7.37	
UPSTREAM	AVG	7.54	8.03	7.98	7.66	8.13	7.47	7.25	7.42	8.19	7.60	7.64	7.16	6.95	6.73	7.41	7.32	7.49	7.35	7.07	7.32	7.72	0.00%
RACINE***	MAX	7.18	6.81	6.76	6.76	No	No	8.07	7.50	6.62	7.21	6.14	6.80	No	No	5.67	5.67	5.88	5.74	*	*	5.75	
MP 237.5	MIN	6.77	6.42	6.38	6.38	Data	Data	7.18	6.79	6.27	6.06	5.88	5.90	Data	Data	5.03	5.03	5.19	5.01	*	*	5.38	
	AVG	6.97	6.57	6.55	6.55	Available	Available	7.47	7.11	6.45	6.52	5.99	6.16	Available	Available	5.19	5.32	5.47	5.36	*	*	5.51	0.00%
KYGER	MAX	8.93	8.64	8.14	8.18	9.24	8.88	8.59	9.00	8.38	8.21	7.99	7.66	7.66	7.13	6.96	7.61	7.75	7.20	7.06	6.31	6.72	
MP 260.0	MIN	8.18	8.09	7.61	7.63	8.09	7.78	8.02	6.36	7.66	7.66	7.42	7.34	7.03	6.82	6.62	6.58	6.84	6.94	6.26	6.02	5.81	
	AVG	8.52	8.41	7.90	7.82	8.85	8.21	8.26	8.26	7.90	7.88	7.74	7.49	7.33	6.97	6.78	6.90	7.24	7.07	6.73	6.13	6.05	0.00%
GREENUP***	MAX	7.42	7.32	7.01	7.06	7.22	6.58	6.53	6.53	5.93	6.79	6.94	6.14	5.88	6.17	6.10	6.41	6.46	6.58	5.52	*	*	
MP 341.0	MIN	6.07	6.50	6.29	6.22	5.86	5.95	5.88	5.90	5.23	5.40	6.02	5.04	4.73	5.57	5.50	5.45	5.47	5.06	4.66	*	*	
UPSTREAM	AVG	6.92	6.85	6.60	6.53	6.48	6.19	6.16	6.10	5.50	6.12	6.23	5.57	5.62	5.79	5.70	5.83	5.76	5.71	5.06	*	*	0.00%
DOWNSTREAM	MAX	7.08	6.77	6.22	5.74	7.18	6.77	6.38	6.12	6.48	6.86	7.97	7.34	6.72	6.65	6.50	6.26	6.19	*	6.70	6.43	*	
	MIN	6.41	6.02	5.64	5.21	5.54	5.98	5.71	5.71	5.83	5.90	6.60	5.59	4.92	6.31	6.00	5.66	5.86	*	5.76	5.62	*	
	AVG	6.72	6.51	5.91	5.50	6.47	6.31	6.03	5.91	6.02	6.45	7.10	6.29	6.12	6.46	6.17	6.06	6.02	*	6.25	6.13	*	0.00%
MARKLAND***	MAX	*	*	*	*	6.77	6.77	5.42	5.28	*	*	*	*	5.23	5.54	5.86	6.05	6.98	*	*	5.42	5.16	
MP 531.5	MIN	*	*	*	*	4.37	5.38	5.21	4.90	*	*	*	*	4.56	4.68	4.82	4.73	5.33	*	*	5.18	4.92	
D.O. #1	AVG	*	*	*	*	5.26	5.59	5.31	5.11	*	*	*	*	4.80**	5.12	5.14	5.22	6.03	*	*	5.28	5.03	0.00%
D.O. #2	MAX	*	*	*	*	8.78	8.78	5.62	5.42	*	*	5.78	5.81	5.42	5.81	6.22	6.31	7.27	*	5.76	5.57	5.28	
	MIN	*	*	*	*	4.70	5.50	5.28	4.97	*	*	4.80	4.82	4.80	4.90	5.06	4.94	5.59	*	4.06	5.30	5.06	
	AVG	*	*	*	*	5.39	5.81	5.47	5.21	*	*	5.24	5.27	5.00	5.34	5.41	5.46	6.29	*	5.29	5.42	5.16	0.00%
CANNELTON	MAX	6.45	6.38	6.48	6.53	8.54	7.66	7.47	6.50	6.32	5.37	5.35	6.01	Data	Data	Data	Data	Data	*	*	*	*	
MP 720.7	MIN	6.18	6.09	5.92	6.43	6.39	6.27	6.80	6.29	5.36	5.04	4.99	4.76	Quality	Quality	Quality	Quality	Quality	*	*	*	*	
	AVG	6.30	6.23	6.22	6.49	7.64	7.09	7.10	6.43	5.64	5.15	5.12	5.22	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	*	*	*	*	0.00%
NEWBURGH	MAX	8.38	8.41	7.66	8.25	7.79	10.17	8.49	7.36	7.23	7.03	6.98	7.39	7.15	8.13	10.82	11.70	11.74	8.25	9.44	7.74	7.16	
MP 776.1	MIN	7.42	6.78	6.00	7.24	6.92	8.14	7.00	6.47	5.82	5.48	5.56	6.39	5.79	7.06	10.07	8.44	8.97	6.98	7.58	7.32	6.53	
	AVG	7.80	7.40	7.06	7.49	7.36	9.24	7.91	6.86	6.30	6.14	6.42	6.95	6.40	7.59	10.55	10.03	10.02	7.66	8.39	7.55	6.89	0.00%
JOHN T. MYERS	MAX	8.77	7.54	7.36	No	8.63	8.31	6.54	6.35	6.42	5.82	6.65	7.86	6.45	8.73	9.74	12.67	11.99	11.39	11.02	10.53	7.76	
MP 846.0	MIN	7.76	6.53	6.81	Data	7.50	6.46	5.91	5.73	5.58	5.43	5.72	6.02	6.25	8.20	8.66	9.91	9.93	9.39	9.96	9.43	6.99	
	AVG	8.32	7.17	7.06	Available	7.96	7.17	6.30	5.96	5.91	5.66	6.20	6.58	6.35	8.35	9.11	10.66	10.64	9.98	10.31	10.07	7.31	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissovled Oxygen September 2006

CALENDAR DAY JULIAN DAY		1-Sep 244	5-Sep 248	6-Sep 249	7-Sep 250	8-Sep 251	11-Sep 254	12-Sep 255	13-Sep 256	14-Sep 257	15-Sep 258	18-Sep 261	19-Sep 262	20-Sep 263	21-Sep 264	22-Sep 265	25-Sep 268	26-Sep 269	27-Sep 270	28-Sep 271	29-Sep 272	Monthly % Exceedance
MONTGOMERY	MAX	7.83	8.75	8.75	8.82	8.70	7.89	7.67	7.21	6.89	6.36	5.32	4.91	4.54	9.33	9.40	9.44	9.47	9.77	9.61	9.42	
MP 31.7	MIN	7.67	8.55	8.56	8.73	8.52	7.70	7.36	6.93	6.56	6.13	5.03	4.63	4.27	9.06	9.17	9.26	9.19	9.46	9.30	9.22	
	AVG	7.76	8.68	8.67	8.76	8.62	7.82	7.50	7.06	6.70	6.24	5.19	4.79**	4.41**	9.17	9.31	9.37	9.34	9.58	9.45	9.35	0.00%
HANNIBAL***	MAX	8.84	8.94	9.14	10.95	8.48	8.61	8.43	8.12	8.46	8.16	8.81	8.64	8.63	8.43	8.19	8.46	8.48	8.36	8.43	8.30	
MP 126.4	MIN	8.01	8.42	6.92	6.63	8.01	8.13	8.15	7.83	8.12	7.50	8.51	8.36	8.40	8.04	7.94	7.47	7.79	7.68	8.00	7.98	
UPSTREAM	AVG	8.40	8.78	8.25	8.21	8.17	8.40	8.30	7.97	8.24	7.89	8.70	8.49	8.50	8.28	8.09	7.78	8.18	8.00	8.30	8.11	0.00%
RACINE***	MAX	5.65	5.49	5.70	5.70	6.38	No	6.80	6.93	7.12	6.46	7.03	7.15	6.92	7.55	7.19	7.26	7.52	7.38	7.18	7.00	
MP 237.5	MIN	5.16	4.83	5.41	5.41	6.08	Data	6.57	6.64	6.30	6.10	6.71	6.61	6.69	6.76	6.98	7.10	7.08	7.00	6.94	6.80	
	AVG	5.33	5.12	5.59	5.59	6.20	Available	6.66	6.79	6.60	6.29	6.89	6.82	6.81	6.99	7.08	7.17	7.17	7.12	7.04	6.91	0.00%
KYGER	MAX	7.01	6.53	6.53	6.89	7.22	7.90	8.28	8.26	8.21	8.04	6.77	6.89	6.86	6.82	6.91	6.98	6.86	6.67	6.67	6.36	
MP 260.0	MIN	6.46	6.10	6.05	6.55	6.86	7.63	7.92	7.87	7.97	6.34	6.50	6.31	6.70	6.72	6.79	6.84	6.65	6.53	6.41	5.14	
	AVG	6.64	6.33	6.33	6.75	7.09	7.80	8.09	8.10	8.08	6.58	6.68	6.69	6.80	6.76	6.84	6.88	6.78	6.60	6.56	5.80	0.00%
GREENUP***	MAX	*	5.78	5.52	5.52	5.88	6.82	6.53	6.41	6.65	6.12	5.42	5.52	5.74	5.57	5.88	6.79	6.22	6.10	6.05	6.19	
MP 341.0	MIN	*	5.52	5.38	5.11	5.40	5.83	6.02	6.14	6.10	5.66	5.23	5.38	5.33	5.35	5.59	6.02	5.59	5.57	5.98	6.05	
UPSTREAM	AVG	*	5.67	5.44	5.36	5.67	6.09	6.27	6.29	6.42	5.81	5.34	5.42	5.42	5.46	5.80	6.35	5.92	5.89	6.02	6.12	0.00%
DOWNSTREAM	MAX	5.71	8.57	8.18	6.29	8.50	9.05	9.53	9.70	10.37	9.67	6.12	6.26	6.31	6.46	6.82	6.82	6.84	6.96	7.01	7.13	
	MIN	3.89	8.18	5.95	5.06	5.04	8.64	8.86	9.24	9.67	9.10	5.98	6.10	6.17	6.31	6.48	*	4.78**	4.73**	6.26	6.24	
	AVG	5.20	8.44	7.40	5.77	6.73	8.86	9.22	9.55	10.05	9.29	6.06	6.18	6.24	6.39	6.68	5.19	6.13	5.53	6.76	6.62	0.00%
MARKLAND***	MAX	5.04	5.40	5.38	5.78	6.58	6.67	6.19	6.02	6.41	6.31	5.45	5.54	5.64	5.57	5.47	6.07	5.69	5.18	5.23	4.97	
MP 531.5	MIN	4.39	5.26	4.97	5.04	5.16	6.07	5.93	5.81	6.14	5.54	5.26	5.40	5.45	5.38	5.30	5.81	5.23	4.99	5.02	4.78	
D.O. #1	AVG	4.81**	5.32	5.21	5.55	5.97	6.34	6.05	5.90	6.31	5.86	5.36	5.48	5.55	5.47	5.39	5.94	5.44	5.08	5.10	4.87**	0.00%
D.O. #2	MAX	11.66	*	*	*	*	*	*	*	*	*	5.93	5.76	5.40	5.26	5.14	5.78	5.30	4.97	5.18	5.23	
	MIN	4.49	*	*	*	*	*	*	*	*	*	5.66	5.33	5.26	4.99	4.90	5.30	4.82	4.49	4.68	4.82	
	AVG	5.18	*	*	*	*	*	*	*	*	*	5.80	5.48	5.32	5.14	5.03	5.55	4.99**	4.72**	4.92**	5.02	0.00%
CANNELTON	MAX	4.69	3.38	4.72	4.93	5.17	5.51	5.52	5.71	5.76	5.78	5.78	5.78	4.25	4.14	4.21	4.12	4.15	4.13	4.38	4.51	
MP 720.7	MIN	4.52	3.13	4.54	4.86	4.98	5.34	5.39	5.47	5.57	5.55	5.56	5.63	4.16	4.02	4.09	4.02	4.01	4.01	4.18	4.41	
	AVG	4.63**	3.25**	4.64**	4.89**	5.08	5.42	5.45	5.58	5.67	5.66	5.70	5.70	**4.19**	**4.08**	**4.15**	**4.06**	**4.06**	**4.05**	**4.26**	**4.47**	40.00%
NEWBURGH	MAX	6.13	5.65	4.71	4.69	5.26	6.08	5.78	5.71	5.74	5.79	6.22	6.04	7.02	7.46	No	6.64	6.64	No	No	No	
MP 776.1	MIN	5.57	5.35	4.61	4.54	5.20	5.84	5.47	5.51	5.37	5.67	5.93	5.74	6.83	6.93	Data	6.59	5.98	Data	Data	Data	
	AVG	5.84	5.56	4.65**	4.59**	5.23	5.97	5.61	5.60	5.57	5.73	6.10	5.94	6.95	7.17	Available	6.62	6.34	Available	Available	Available	0.00%
JOHN T. MYERS	MAX	7.96	6.04	5.81	5.83	5.59	5.94	6.27	6.28	6.37	5.96	6.75	6.39	5.63	5.77	5.99	5.26	4.91	4.44	4.53	4.61	
MP 846.0	MIN	7.12	5.75	5.74	5.51	5.46	5.86	6.15	6.21	6.17	5.54	6.60	6.25	5.42	5.56	5.79	4.87	4.71	4.32	4.39	4.49	
	AVG	7.58	5.88	5.76	5.68	5.53	5.91	6.22	6.24	6.31	5.79	6.67	6.31	5.51	5.64	5.88	5.05	**4.79**	**4.38**	**4.44**	**4.53**	20.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen October 2006

CALENDAR DAY JULIAN DAY		2-Oct 275	3-Oct 276	4-Oct 277	5-Oct 278	6-Oct 279	9-Oct 282	10-Oct 283	11-Oct 284	12-Oct 285	13-Oct 286	16-Oct 289	17-Oct 290	18-Oct 291	19-Oct 292	20-Oct 293	23-Oct 296	24-Oct 297	25-Oct 298	26-Oct 299	27-Oct 300	30-Oct 303	31-Oct 304	Monthly % Exceedance
MONTGOMERY	MAX	9.85	9.99	9.99	10.08	10.27	10.00	9.93	9.95	10.00	No	No	No	No	No	No	No	No	No	No	No	No	No	
MP 31.7	MIN	9.53	9.66	9.79	9.84	9.86	9.78	9.67	9.77	9.62	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG	9.67	9.81	9.90	9.97	10.08	9.89	9.83	9.85	9.84	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
HANNIBAL***	MAX	8.67	9.20	9.09	8.66	8.54	8.73	9.32	9.41	8.57	8.39	8.45	9.18	9.20	9.26	10.65	8.97	9.41	9.35	9.42	9.18	9.66	9.32	
MP 126.4	MIN	8.34	8.55	8.36	8.34	8.15	8.21	8.63	8.43	8.36	8.16	7.34	8.28	8.90	8.85	8.31	7.05	8.97	8.82	8.60	8.57	8.34	7.73	
UPSTREAM	AVG	8.50	8.83	8.69	8.50	8.34	8.51	9.03	8.81	8.46	8.30	7.86	8.67	9.04	9.04	9.44	7.90	9.21	9.11	9.11	8.81	9.16	8.51	0.00%
RACINE***	MAX	No	No	No	No	No	No	No	No	No	No	7.88	8.10	No	7.70	7.00	8.29	No	8.49	8.53	8.87	No	9.07	
MP 237.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	7.62	7.85	Data	6.85	6.98	7.48	Data	5.24	5.32	8.25	Data	8.58	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	7.79	7.97	Available	7.21	6.94	7.86	Available	7.33	7.45	8.60	Available	8.87	0.00%
KYGER	MAX	4.87	4.82	4.66	4.49	4.37	2.26	2.42	2.52	2.50	2.45	*	*	*	No	No	10.58	10.18	8.11	7.54	7.85	7.73	8.74	
MP 260.0	MIN	4.73	4.63	4.46	4.25	3.72	2.11	2.21	2.33	2.35	2.30	*	*	*	Data	Data	10.22	8.06	7.70	6.36	7.32	7.58	7.73	
	AVG	4.77**	4.74**	4.58**	4.39**	4.09**	2.19**	2.34**	2.44**	2.44**	2.37**	*	*	*	Available	Available	10.42	8.28	7.97	6.87	7.75	7.67	7.83	0.00%
GREENUP***	MAX	8.33	7.15	7.08	7.06	7.06	6.82	6.89	6.60	8.16	7.03	7.58	7.66	7.92	7.54	7.54	7.75	8.35	8.86	9.26	9.24	9.67	9.79	
MP 341.0	MIN	6.31	7.03	6.86	6.86	6.74	6.65	6.34	6.26	6.26	6.74	7.30	7.46	7.37	7.37	7.20	6.60	7.75	8.38	8.83	8.64	8.78	9.67	
UPSTREAM	AVG	6.99	7.09	6.97	6.98	6.92	6.76	6.63	6.44	6.75	6.94	7.44	7.59	7.53	7.47	7.42	7.39	8.05	8.77	9.10	9.11	9.49	9.71	0.00%
DOWNSTREAM	MAX	8.14	7.37	7.34	7.39	7.44	7.25	7.15	7.08	7.20	7.51	8.04	8.11	8.18	7.85	7.85	8.35	8.64	9.24	9.38	9.41	9.89	9.89	
	MIN	7.10	7.27	7.25	7.30	7.34	6.74	6.67	6.96	0.70	7.18	7.87	7.99	7.42	7.37	7.06	6.58	6.65	7.87	9.19	8.88	7.90	7.97	
	AVG	7.26	7.34	7.31	7.36	7.41	6.95	6.94	7.03	5.99	7.38	7.96	8.04	7.90	7.64	7.57	7.88	8.07	8.99	9.29	9.32	8.86	9.19	0.00%
MARKLAND***	MAX	5.33	7.08	7.27	7.25	7.37	7.08	6.72	6.74	6.86	6.89	7.44	7.49	7.42	7.20	6.74	5.69	9.58	7.75	8.09	8.35	8.78	8.57	
MP 531.5	MIN	4.75	6.77	7.08	7.03	7.20	6.82	6.41	6.46	6.72	6.65	7.18	7.30	7.20	6.72	6.36	4.56	7.03	7.39	7.80	8.09	8.54	7.90	
D.O. #1	AVG	4.85**	6.97	7.15	7.17	7.27	6.95	6.51	6.55	6.78	6.75	7.32	7.37	7.30	6.86	6.62	5.09	7.31	7.59	7.94	8.24	8.65	8.14	0.00%
D.O. #2	MAX	5.40	7.37	7.39	7.39	7.49	7.18	6.82	6.77	6.84	6.79	7.39	7.42	7.32	7.03	6.58	5.66	8.83	7.61	7.94	8.09	8.52	8.28	
	MIN	5.04	6.79	7.18	7.22	7.32	6.84	6.53	6.62	6.74	6.70	7.13	7.18	7.03	6.41	6.05	4.80	6.86	7.30	7.63	7.94	8.26	7.68	
	AVG	5.17	7.08	7.31	7.31	7.39	7.04	6.62	6.68	6.79	6.75	7.24	7.25	7.16	6.67	6.41	5.23	7.13	7.46	7.79	8.03	8.37	7.88	0.00%
CANNELTON	MAX	4.32	4.35	4.42	4.48	4.62	4.95	5.03	4.88	4.77	4.79	4.92	5.19	5.41	5.48	5.53	5.47	5.53	5.56	5.60	5.81	6.33	No	
MP 720.7	MIN	4.15	4.22	4.33	4.41	4.52	4.81	4.89	4.81	4.68	4.67	4.84	4.97	5.25	5.36	5.16	5.36	5.38	5.43	5.45	5.57	6.12	Data	
	AVG	**4.24**	**4.28**	**4.39**	**4.45**	**4.57**	**4.87**	**4.95**	**4.85**	**4.72**	**4.73**	**4.87**	5.09	5.33	5.40	5.44	5.41	5.46	5.50	5.49	5.69	6.24	Available	52.00%
NEWBURGH	MAX	7.71	7.87	7.47	7.71	7.77	7.81	7.91	8.02	7.97	8.24	8.46	8.64	8.56	8.70	8.93	8.01	8.23	No	No	No	No	No	
MP 776.1	MIN	7.37	7.56	7.23	7.51	7.66	7.66	7.68	7.70	7.77	8.01	8.16	8.50	8.27	8.40	8.66	7.86	8.08	Data	Data	Data	Data	Data	
	AVG	7.55	7.68	7.34	7.62	7.73	7.74	7.77	7.80	7.87	8.12	8.33	8.57	8.43	8.57	8.83	7.94	8.15	Available	Available	Available	Available	Available	0.00%
JOHN T. MYERS	MAX	5.21	5.44	5.48	5.60	5.66	6.14	5.88	5.86	5.86	6.14	6.71	7.04	6.82	6.61	6.59	6.61	6.17	No	No	No	No	No	
MP 846.0	MIN	4.94	5.25	5.34	5.41	5.44	6.03	5.72	5.62	5.74	6.06	6.60	6.82	6.61	6.43	6.43	6.47	5.99	Data	Data	Data	Data	Data	
	AVG	5.05	5.34	5.42	5.48	5.52	6.08	5.80	5.71	5.82	6.10	6.65	6.92	6.69	6.52	6.49	6.56	6.09	Available	Available	Available	Available	Available	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissovled Oxygen May 2007

CALENDAR DAY JULIAN DAY		1-May 121	2-May 122	3-May 123	7-May 127	8-May 128	9-May 129	10-May 130	11-May 131	14-May 134	15-May 135	16-May 136	17-May 137	18-May 138	21-May 141	22-May 142	23-May 143	24-May 144	25-May 145	29-May 149	30-May 150	31-May 151	Monthly % Exceedance
MONTGOMERY	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 31.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
HANNIBAL***	MAX	8.31	8.34	8.28	7.88	7.82	7.85	8.70	13.88	7.67	7.55	7.38	7.73	7.70	7.70	7.71	7.71	8.43	8.21	8.43	8.61	8.61	
MP 126.4	MIN	7.71	7.82	8.04	7.61	7.62	7.62	6.92	2.42	6.68	7.28	7.11	7.16	7.44	7.56	7.56	7.55	7.61	8.04	8.30	8.45	8.51	
UPSTREAM	AVG	8.17	8.13	8.17	7.71	7.70	7.70	7.79	7.61	7.48	7.44	7.24	7.44	7.58	7.62	7.64	7.63	8.13	8.11	8.35	8.54	8.56	0.00%
RACINE***	MAX	10.71	10.61	10.58	No	10.35	10.24	10.20	10.14	11.15	11.54	11.18	10.56	10.31	69.42	10.51	10.68	11.07	11.21	10.40	10.12	9.74	
MP 237.5	MIN	10.57	10.47	10.38	Data	10.11	9.90	9.90	9.95	10.58	10.57	10.54	10.12	9.75	68.79	9.92	9.90	10.45	10.72	10.05	9.74	9.07	
	AVG	10.66	10.55	10.50	Available	10.20	10.08	10.03	10.05	10.86	10.91	10.91	10.40	10.10	69.15	10.18	10.15	10.73	10.95	10.19	9.95	9.43	0.00%
KYGER	MAX	10.30	10.25	10.15	No	9.74	9.94	10.03	9.96	10.58	10.99	11.04	10.51	10.13	10.44	10.08	10.32	10.97	9.72	9.84	9.46	9.29	
MP 260.0	MIN	9.96	9.72	9.74	Data	9.50	5.86	9.70	9.65	9.82	10.03	10.15	9.89	9.53	9.79	9.53	9.65	9.41	9.38	9.38	9.00	8.88	
	AVG	10.23	9.92	9.93	Available	9.65	7.38	9.85	9.80	10.28	10.65	10.67	10.22	9.85	10.15	9.82	9.96	9.85	9.58	9.62	9.17	9.05	0.00%
GREENUP***	MAX	9.12	9.79	8.78	9.07	8.81	8.93	9.19	9.50	9.60	9.74	9.65	9.41	9.48	10.68	10.97	11.18	11.54	11.52	9.79	9.72	9.14	
MP 341.0	MIN	8.76	8.59	8.59	8.38	8.64	8.71	8.88	9.07	9.00	8.90	8.64	8.59	8.98	9.41	9.67	9.72	10.10	10.25	9.00	8.83	8.18	
UPSTREAM	AVG	8.95	8.77	8.68	8.65	8.73	8.84	9.05	9.26	9.28	9.28	9.12	9.07	9.23	10.04	10.35	10.37	10.87	10.81	9.39	9.21	8.71	0.00%
DOWNSTREAM	MAX	10.10	9.74	9.65	9.50	9.34	9.00	8.78	9.82	10.37	10.63	10.34	10.15	10.56	11.93	12.48	10.46	12.41	11.35	9.02	9.14	8.23	
	MIN	9.70	9.36	8.62	9.17	8.98	8.71	8.38	8.16	7.97	9.86	8.88	8.81	10.03	10.44	10.15	9.29	9.58	10.44	8.50	7.97	7.25	
	AVG	9.88	9.64	9.15	9.38	9.22	8.87	8.57	8.89	9.68	10.17	10.01	9.57	10.28	11.21	11.22	9.82	11.49	10.87	8.72	8.47	7.82	0.00%
MARKLAND***	MAX	7.37	7.97	5.74	8.81	8.86	8.93	9.05	9.31	9.60	10.97	9.89	9.26	8.74	10.63	10.87	10.49	10.22	9.89	9.26	9.02	9.67	
MP 531.5	MIN	3.19	5.11	4.80	8.64	8.62	8.86	8.88	8.86	9.07	8.98	9.05	8.74	8.40	8.74	9.10	9.22	9.31	8.71	8.50	8.09	8.14	
D.O. #1	AVG	4.84**	6.52	5.35	8.74	8.74	8.89	8.99	9.06	9.27	9.66	9.48	9.01	8.59	9.58	9.81	9.75	9.79	9.38	8.96	8.57	9.03	0.00%
D.O. #2	MAX	8.57	8.42	6.50	9.00	9.10	9.14	9.36	9.60	9.82	11.16	10.25	9.53	8.78	10.44	10.97	10.68	10.37	9.82	9.12	8.88	9.62	
	MIN	5.74	5.76	4.94	8.83	8.86	9.05	9.12	9.12	9.22	9.17	9.24	8.86	8.54	8.66	9.22	9.34	9.41	8.90	8.42	8.09	8.11	
	AVG	7.16	7.74	5.99	8.92	8.98	9.10	9.27	9.33	9.45	9.84	9.79	9.31	8.66	9.53	9.87	9.83	9.94	9.51	8.85	8.48	9.02	0.00%
CANNELTON	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	9.89	11.21	10.07	9.31	9.58	
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	9.47	9.36	9.40	8.81	8.25	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	9.69	9.99	9.75	9.14	8.93	0.00%
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	9.57	10.25	No	No	No	
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	8.86	9.18	Data	Data	Data	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	9.24	9.55	Available	Available	Available	0.00%
JOHN T. MYERS	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	10.76	9.73	9.33	9.46	8.88	
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	8.00	8.39	8.35	8.32	7.22	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	9.66	9.00	8.70	8.87	8.01	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen June 2007

CALENDAR DAY JULIAN DAY		1-Jun 152	4-Jun 155	5-Jun 156	6-Jun 157	7-Jun 158	8-Jun 159	11-Jun 162	12-Jun 163	13-Jun 164	14-Jun 165	15-Jun 166	18-Jun 169	19-Jun 170	20-Jun 171	21-Jun 172	22-Jun 173	25-Jun 176	26-Jun 177	27-Jun 178	28-Jun 179	29-Jun 180	Monthly % Exceedance
MONTGOMERY	MAX	No	No	No	No	No	9.32	9.05	8.76	9.85	10.74	8.95	8.62	9.39	7.99	7.92	7.82	8.13	10.14	10.94	10.97	9.73	
MP 31.7	MIN	Data	Data	Data	Data	Data	7.39	7.81	7.69	7.26	7.97	7.60	7.07	6.70	7.12	6.54	6.21	7.16	7.10	9.41	7.99	7.98	
	AVG	Available	Available	Available	Available	Available	8.28	8.42	8.33	8.49	9.15	8.20	7.72	8.23	7.48	7.34	7.22	7.77	8.86	9.97	9.36	8.82	0.00%
HANNIBAL***	MAX	8.69	8.85	8.93	9.03	9.12	9.08	8.90	9.12	9.08	9.18	9.38	7.26	8.60	8.09	6.72	8.01	7.44	8.43	8.73	9.05	7.68	
MP 126.4	MIN	8.57	8.75	8.79	8.82	8.85	8.78	8.75	8.75	8.96	9.00	9.11	7.02	6.96	6.71	5.94	5.55	5.60	6.65	8.09	7.20	6.99	
UPSTREAM	AVG	8.64	8.79	8.86	8.95	8.94	8.88	8.82	8.93	9.04	9.10	9.28	7.13	7.55	7.12	6.29	6.57	6.36	7.36	8.45	7.98	7.36	0.00%
RACINE***	MAX	8.94	7.79	7.28	6.51	5.99	6.69	6.57	6.71	No	7.35	7.50	8.68	8.58	8.10	8.19	8.06	7.19	7.58	7.24	7.88	7.61	
MP 237.5	MIN	8.34	7.27	6.43	5.86	5.55	5.52	6.30	6.37	Data	6.51	6.89	7.63	7.82	7.64	7.63	6.90	6.17	6.90	6.90	7.09	7.18	
	AVG	8.65	7.62	6.80	6.21	5.72	6.28	6.43	6.52	Available	6.88	7.15	8.02	8.05	7.86	7.94	7.36	6.62	7.28	7.03	7.51	7.39	0.00%
KYGER	MAX	10.27	7.39	10.56	7.34	7.03	6.72	7.78	6.29	6.41	6.34	7.20	6.86	7.99	7.58	7.25	6.94	*	*	*	*	7.99	
MP 260.0	MIN	8.40	6.79	6.96	6.98	6.53	6.38	5.98	5.93	5.88	5.98	6.19	6.43	7.20	6.72	6.31	5.11	*	*	*	*	7.06	
	AVG	8.97	7.10	7.33	7.12	6.72	6.55	6.49	6.08	6.15	6.14	6.42	6.61	7.61	7.25	6.72	5.69	*	*	*	*	7.50	0.00%
GREENUP***	MAX	8.26	10.73	10.06	6.77	6.86	6.84	8.35	6.62	6.65	No	No	No	8.81	6.38	6.50	6.98	No	6.05	6.19	9.10	5.59	
MP 341.0	MIN	7.78	9.24	6.36	6.07	6.05	6.19	6.53	6.36	6.24	Data	Data	Data	6.07	5.26	5.59	6.17	Data	4.61	4.54	4.70	4.42	
UPSTREAM	AVG	8.06	9.86	7.82	6.39	6.42	6.44	7.08	6.51	6.41	Available	Available	Available	6.65	5.74	6.20	6.49	Available	5.29	5.58	5.98	5.14	0.00%
DOWNSTREAM	MAX	7.61	8.52	8.33	7.94	8.30	7.75	11.98	6.74	6.60	No	No	No	8.45	6.43	6.67	6.96	No	8.86	10.34	16.54	11.16	
	MIN	7.13	5.81	7.85	7.32	7.44	5.28	6.60	6.41	6.22	Data	Data	Data	4.61	5.64	5.71	6.31	Data	7.01	7.15	9.89	10.44	
	AVG	7.33	7.74	8.09	7.61	7.81	6.52	7.10	6.59	6.40	Available	Available	Available	6.56	6.09	6.31	6.59	Available	7.86	8.77	10.52	10.89	0.00%
MARKLAND***	MAX	9.24	7.03	6.82	6.70	6.38	6.10	6.02	7.90	7.30	8.02	7.70	5.38	5.76	5.98	5.54	4.94	5.90	5.98	6.19	No	6.60	
MP 531.5	MIN	7.54	6.24	4.94	5.57	5.33	5.33	4.68	5.26	5.71	6.02	5.23	4.22	4.87	4.99	4.42	4.25	4.80	4.70	4.61	Data	5.18	
D.O. #1	AVG	8.62	6.67	5.70	6.02	5.89	5.73	5.38	6.60	6.61	6.74	6.45	4.86**	5.29	5.59	4.97**	4.52**	5.23	5.32	5.32	Available	5.87	0.00%
D.O. #2	MAX	9.10	7.13	6.22	7.10	6.17	5.71	5.50	8.11	7.56	8.11	7.80	4.61	4.87	4.92	4.51	3.46	5.81	5.98	6.29	No	7.22	
	MIN	7.49	6.26	5.23	5.57	5.11	5.06	4.27	4.30	5.98	5.98	5.14	3.72	3.91	4.49	3.31	3.02	4.75**	4.75**	4.66**	Data	5.74	
	AVG	8.52	6.73	5.54	6.09	5.72	5.39	4.84**	6.57	6.82	6.77	6.41	4.24**	4.49**	4.69**	4.04**	3.22**	5.18	5.40	5.38	Available	6.36	0.00%
CANNELTON	MAX	8.78	7.43	6.84	6.92	6.41	6.51	6.22	6.13	6.43	6.21	7.42	9.15	6.20	5.90	6.65	8.57	6.34	6.62	6.77	6.28	7.42	
MP 720.7	MIN	8.14	6.55	6.14	6.15	5.59	5.97	5.37	5.42	5.49	5.65	5.21	5.31	5.15	5.07	5.63	5.76	5.75	5.66	5.33	5.31	4.88	
	AVG	8.44	6.95	6.46	6.54	5.99	6.19	5.72	5.69	5.85	6.02	6.13	7.23	5.62	5.38	5.98	7.08	6.01	6.00	5.91	5.65	6.08	0.00%
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	7.90	7.01	6.58	6.86	6.77	6.77	6.46	6.57	7.23	8.04	9.88	8.83	7.43	7.00	7.41	7.77	6.87	6.62	6.08	5.81	5.38	
MP 846.0	MIN	7.27	6.26	5.88	6.31	5.92	5.68	5.28	5.69	5.46	6.50	7.43	6.43	5.99	6.35	6.71	6.37	5.95	5.14	5.03	5.17	4.17	
	AVG	7.67	6.58	6.21	6.55	6.25	6.40	5.96	6.09	6.23	7.08	8.24	7.41	6.62	6.62	6.97	7.04	6.46	5.79	5.56	5.46	4.98**	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen July 2007

CALENDAR DAY JULIAN DAY		2-Jul 183	3-Jul 184	5-Jul 186	6-Jul 187	9-Jul 190	10-Jul 191	11-Jul 192	12-Jul 193	13-Jul 194	16-Jul 197	17-Jul 198	18-Jul 199	19-Jul 200	20-Jul 201	23-Jul 204	24-Jul 205	25-Jul 206	26-Jul 207	31-Jul 212	Monthly % Exceedance
MONTGOMERY	MAX	10.77	9.96	8.97	7.63	8.61	No	9.52	9.72	7.86	10.67	10.15	9.54	9.22	8.16	8.46	8.82	8.75	8.42	8.34	
MP 31.7	MIN	9.55	7.55	5.28	6.67	7.35	Data	6.64	7.09	6.36	8.63	6.69	5.25	6.31	5.51	6.19	8.20	7.89	7.14	5.55	
	AVG	10.08	8.61	6.89	7.21	8.14	Available	8.36	8.22	7.30	9.50	8.76	8.00	7.98	6.90	7.34	8.56	8.39	7.96	7.59	0.00%
HANNIBAL***	MAX	8.06	8.43	8.33	8.19	8.36	9.14	8.45	8.03	8.87	8.34	8.42	7.14	7.89	8.10	9.74	9.42	8.24	8.99	8.24	
MP 126.4	MIN	7.02	7.25	7.86	7.14	7.68	7.89	7.28	7.04	7.50	7.73	6.89	6.65	6.44	6.75	9.05	7.94	7.91	8.39	7.35	
UPSTREAM	AVG	7.44	7.93	8.15	7.68	8.05	8.65	7.93	7.55	8.16	7.94	7.65	6.95	6.84	7.70	9.28	8.96	8.05	8.68	7.78	0.00%
RACINE***	MAX	7.34	8.63	8.80	8.20	7.23	No	No	No	No	No	No	No	No	7.20	7.22	7.13	7.14	7.04	7.05	
MP 237.5	MIN	6.25	6.58	7.81	7.68	6.61	Data	Data	Data	Data	Data	Data	Data	Data	6.46	6.79	6.76	6.75	6.62	6.37	
	AVG	7.04	7.74	8.28	7.92	6.93	Available	Available	Available	Available	Available	Available	Available	Available	6.90	6.98	6.94	6.89	6.82	6.81	0.00%
KYGER	MAX	7.85	8.06	7.20	7.25	6.55	6.48	6.60	6.72	7.51	7.37	7.37	6.89	6.98	6.72	5.86	6.19	6.17	5.64	6.84	
MP 260.0	MIN	6.77	7.13	6.89	6.53	6.02	5.90	5.86	6.22	6.55	6.29	6.14	5.40	2.50	5.98	5.23	4.82	5.59	4.15	4.39	
	AVG	7.14	7.60	7.03	6.94	6.27	6.09	6.14	6.51	6.95	6.71	6.84	6.49	5.94	6.41	5.54	5.52	5.85	4.75**	5.57	0.00%
GREENUP***	MAX	9.72	7.51	9.58	7.58	No	8.42	6.86	5.16	6.82	6.91	6.58	6.65	6.26	6.05	5.83	5.42	6.41	6.31	6.24	
MP 341.0	MIN	4.22	4.75	6.79	6.72	Data	6.29	5.26	4.66	6.02	6.10	5.45	5.64	4.49	4.42	5.09	4.94	5.06	5.26	4.73	
UPSTREAM	AVG	5.30	6.37	7.22	7.06	Available	7.19	6.36	4.87**	6.28	6.42	5.99	6.08	5.24	5.39	5.38	5.15	5.60	5.77	5.42	0.00%
DOWNSTREAM	MAX	8.09	7.32	13.03	7.27	No	8.83	6.86	6.58	6.65	6.43	6.38	6.65	7.99	7.25	6.72	7.22	7.06	7.08	9.07	
	MIN	4.94	4.70	6.84	6.38	Data	6.50	6.14	6.12	5.57	5.45	5.59	5.54	6.74	6.60	5.54	5.52	6.17	6.19	6.70	
	AVG	6.27	6.08	7.52	6.87	Available	7.32	6.51	6.34	6.05	5.83	5.96	5.91	7.30	6.91	5.99	6.00	6.48	6.62	7.78	0.00%
MARKLAND***	MAX	5.59	5.83	5.88	5.93	7.68	6.02	5.95	5.28	6.02	5.28	6.70	6.17	4.44	No	6.07	5.66	7.20	6.05	7.68	
MP 531.5	MIN	5.16	5.23	3.55	4.13	5.18	5.09	4.87	4.54	4.44	4.87	4.97	4.51	3.58	Data	5.21	4.85	4.94	4.54	6.07	
D.O. #1	AVG	5.40	5.53	4.40**	5.49	6.25	5.39	5.35	4.83**	5.55	5.08	5.87	5.25	4.04**	Available	5.56	5.23	6.04	5.26	6.77	0.00%
D.O. #2	MAX	5.64	5.83	6.05	5.74	7.34	5.86	5.38	5.06	5.71	5.45	6.89	6.22	5.54	No	6.62	6.65	7.85	6.72	7.27	
	MIN	5.21	5.26	3.53	4.15	4.92	4.70	4.63	4.20	**4.25**	5.11	5.30	5.09	4.94	Data	5.83	5.71	5.69	3.17	4.49	
	AVG	5.46	5.53	4.40**	5.32	6.02	5.11	5.00	4.54**	5.20	5.25	6.10	5.61	5.18	Available	6.14	6.02	6.66	5.53	6.23	0.00%
CANNELTON	MAX	5.81	6.28	6.13	No	No	No	No	6.23	7.37	7.20	7.60	8.46	7.49	6.87	7.42	7.73	8.10	7.14	5.34	
MP 720.7	MIN	5.13	5.42	5.66	Data	Data	Data	Data	5.89	6.13	5.93	5.78	5.94	6.03	5.66	5.73	5.58	5.92	5.70	4.56	
	AVG	5.44	5.85	5.85	Available	Available	Available	Available	6.05	6.91	6.35	6.65	7.34	6.79	6.17	6.21	6.18	6.37	6.43	**4.94**	7.00%
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	5.93	6.87	7.30	6.77	5.71	6.53	6.19	6.97	7.41	6.56	7.24	6.92	6.49	6.71	7.17	6.32	5.95	6.53	6.81	
MP 846.0	MIN	5.15	5.91	6.45	5.52	4.78	5.15	5.36	6.19	5.63	5.58	5.42	5.07	5.42	5.07	5.75	5.05	4.89	5.04	5.37	
	AVG	5.54	6.25	6.89	6.10	5.27	5.58	5.77	6.60	6.52	5.86	6.23	5.90	5.78	5.54	6.42	5.67	5.54	5.83	6.06	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissovled Oxygen August 2007

CALENDAR DAY JULIAN DAY		1-Aug 213	2-Aug 214	3-Aug 215	6-Aug 218	7-Aug 219	8-Aug 220	9-Aug 221	10-Aug 222	13-Aug 225	14-Aug 226	15-Aug 227	16-Aug 228	21-Aug 229	20-Aug 232	21-Aug 233	22-Aug 234	23-Aug 235	24-Aug 236	27-Aug 239	28-Aug 240	29-Aug 241	30-Aug 242	31-Aug 243	Monthly % Exceedance
MONTGOMERY	MAX	8.34	9.57	No	9.83	8.05	6.85	7.19	7.74	7.48	7.47	7.91	8.33	No	No	7.96	7.98	7.90	8.28	8.54	8.62	8.76	8.80	8.99	
MP 31.7	MIN	5.55	6.58	Data	7.66	6.95	6.22	6.60	7.16	7.35	7.29	7.43	7.87	Data	Data	7.53	7.23	7.42	8.19	8.43	8.35	8.53	8.38	8.30	
	AVG	7.10	8.17	Available	8.98	7.44	6.58	7.05	7.46	7.40	7.39	7.74	8.07	Available	Available	7.73	7.61	7.66	8.23	8.49	8.43	8.62	8.54	8.51	0.00%
HANNIBAL***	MAX	8.79	9.47	8.99	7.52	7.65	8.19	8.31	8.79	7.64	8.13	8.39	9.35	8.93	7.92	8.55	9.59	8.85	8.67	8.69	9.45	9.06	9.38	9.21	
MP 126.4	MIN	7.14	7.17	7.59	7.32	6.99	7.29	6.54	7.22	6.99	7.32	7.52	8.13	8.36	6.20	5.96	7.02	8.28	7.88	7.10	1.34	8.22	8.91	8.49	
UPSTREAM	AVG	7.79	8.02	8.24	7.43	7.23	7.79	7.60	8.11	7.39	7.84	8.05	8.67	8.67	7.15	7.52	7.71	8.58	8.33	8.09	6.35	8.75	9.16	8.89	0.00%
RACINE***	MAX	7.78	9.95	10.27	10.18	9.65	6.65	6.47	6.96	6.11	6.15	6.12	6.25	7.08	7.32	8.58	6.97	6.00	5.65	6.74	6.50	6.42	6.41	6.47	
MP 237.5	MIN	6.67	7.33	9.51	9.44	6.70	5.72	5.54	6.38	5.75	5.81	5.53	5.76	6.02	6.68	6.79	5.80	5.48	5.15	6.42	6.35	5.64	6.08	6.22	
	AVG	7.16	8.53	9.84	9.77	8.66	6.14	6.00	6.62	5.96	5.94	5.81	5.92	6.35	6.94	7.34	6.18	5.71	5.47	6.56	6.44	6.10	6.30	6.35	0.00%
KYGER	MAX	6.62	8.64	7.68	8.42	7.18	7.10	6.41	5.18	5.16	5.23	9.55	5.81	6.17	6.86	7.03	6.48	6.67	5.64	5.40	5.64	6.89	5.78	5.69	
MP 260.0	MIN	5.14	5.95	6.38	7.27	5.86	6.05	5.02	4.39	4.73	4.87	4.87	4.58	5.35	5.54	5.81	4.10	3.70	4.37	4.80	5.40	5.28	5.35	5.28	
	AVG	5.64	7.47	7.44	7.72	6.18	6.35	5.55	**4.66**	**4.90**	**4.97**	5.28	5.29	5.84	6.11	6.52	5.56	**4.94**	**4.84**	5.22	5.54	5.50	5.51	5.49	22.00%
GREENUP***	MAX	6.38	7.61	8.45	6.07	6.43	6.58	6.48	5.69	5.71	5.81	7.20	6.07	6.07	5.88	5.93	6.24	4.63	5.18	7.56	4.58	6.72	4.87	*	
MP 341.0	MIN	5.09	5.06	6.60	4.13	3.62	5.30	5.23	4.92	4.10	5.09	5.40	5.02	5.23	4.92	4.85	4.44	3.79	3.89	4.08	4.01	4.03	4.08	*	
UPSTREAM	AVG	5.87	6.66	7.59	5.26	5.03	5.77	5.74	5.28	**4.90**	5.41	5.99	5.54	5.66	5.31	5.56	5.29	**4.15**	**4.50**	**4.51**	**4.25**	**4.64**	**4.42**	*	32.00%
DOWNSTREAM	MAX	8.21	8.54	10.32	7.34	7.13	7.58	7.46	6.38	6.24	6.43	7.08	7.15	6.05	7.54	13.46	7.80	6.31	5.88	5.90	6.22	6.19	6.41	6.58	
	MIN	6.77	6.79	7.63	6.00	6.29	6.29	5.78	4.92	5.50	5.50	5.54	5.23	4.51	5.81	6.48	6.17	5.57	4.70	4.92	4.13	5.54	5.64	5.64	
	AVG	7.46	7.72	8.78	6.96	6.66	6.69	6.45	5.67	5.80	5.85	6.01	5.81	5.23	6.39	7.45	6.85	5.91	5.32	5.51	5.69	5.83	5.97	5.90	0.00%
MARKLAND***	MAX	7.85	8.88	8.45	6.77	7.10	6.17	5.04	6.98	6.02	6.62	6.29	6.19	6.17	5.64	5.18	5.09	5.04	5.14	4.61	5.62	6.24	6.19	6.50	
MP 531.5	MIN	6.00	6.02	6.14	6.34	6.19	4.70	3.74	5.26	4.73	4.63	4.70	4.87	5.09	4.08	3.94	4.80	4.42	4.51	4.34	4.39	4.85	4.90	5.30	
D.O. #1	AVG	6.76	6.90	6.99	6.53	6.59	5.74	4.53*	6.45	5.39	5.31	5.34	5.67	5.45	4.89**	4.63**	4.97**	4.67**	4.75**	4.46**	5.02	5.33	5.69	5.80	0.00%
D.O. #2	MAX	7.78	8.38	8.45	6.94	7.94	7.13	5.83	7.75	6.53	7.03	6.65	6.70	6.36	4.61	4.90	4.63	4.06	4.15	4.56	6.41	6.72	6.74	6.79	
	MIN	5.95	6.10	6.19	6.46	6.53	5.50	4.42	6.02	5.14	5.02	4.97	5.23	5.02	3.96	4.01	3.91	3.72	3.84	3.62	3.72	4.80	4.94	5.74	
	AVG	6.69	6.78	7.08	6.70	7.25	6.55	5.27	6.95	5.83	5.67	5.66	6.05	5.54	4.33**	4.45**	4.01**	3.87**	3.98**	3.79**	4.93**	5.22	5.70	6.23	0.00%
CANNELTON	MAX	5.34	4.93	No	7.04	7.25	7.49	8.15	6.74	5.27	5.61	7.22	6.86	No	No	5.03	5.06	5.31	4.82	4.78	5.00	4.30	4.07	4.20	
MP 720.7	MIN	4.56	4.05	Data	4.16	5.02	4.43	4.61	4.49	4.28	4.12	3.97	4.54	Data	Data	4.30	4.11	4.67	4.25	4.49	4.58	3.86	4.01	3.91	
	AVG	**4.94**	**4.46**	Available	5.45	6.28	5.41	5.70	5.34	**4.79**	**4.64**	5.27	5.60	Available	Available	**4.67**	**4.63**	**4.96**	**4.53**	**4.64**	**4.73**	**4.05**	**4.04**	**3.97**	65.00%
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	6.06	
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	5.20	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	5.64	0.00%
JOHN T. MYERS	MAX	6.81	7.75	No	6.38	6.89	6.68	6.72	6.35	7.48	7.30	8.29	11.65	No	No	5.73	5.24	6.13	5.82	4.80	5.41	6.46	6.26	6.04	
MP 846.0	MIN	5.25	5.57	Data	4.54	5.42	5.73	5.74	4.72**	5.76	6.24	6.26	6.16	Data	Data	4.89	4.77	5.46	4.79	4.59	5.02	5.75	5.80	5.43	
	AVG	5.96	6.48	Available	5.49	6.22	6.24	6.14	5.75	6.40	6.67	6.88	7.30	Available	Available	5.27	4.97**	5.93	5.22	4.73**	5.18	6.11	5.93	5.75	0.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen September 2007

CALENDAR DAY JULIAN DAY		4-Sep 247	5-Sep 248	6-Sep 249	7-Sep 250	10-Sep 253	11-Sep 254	12-Sep 255	13-Sep 256	14-Sep 257	17-Sep 260	18-Sep 261	19-Sep 262	20-Sep 263	21-Sep 264	24-Sep 267	25-Sep 268	26-Sep 269	27-Sep 270	28-Sep 271	Monthly % Exceedance
MONTGOMERY	MAX	9.86	9.40	9.72	8.94	6.98	6.95	7.01	7.33	7.90	8.80	9.25	9.05	9.41	10.22	9.23	9.08	8.43	No	No	
MP 31.7	MIN	8.90	8.82	8.86	8.35	6.48	6.23	6.38	6.86	7.41	8.20	8.47	8.56	8.91	9.11	8.30	7.73	8.10	Data	Data	
	AVG	9.26	9.12	9.30	8.71	6.68	6.79	6.74	7.15	7.65	8.54	8.82	8.79	9.11	9.57	8.72	8.17	8.27	Available	Available	0.00%
HANNIBAL***	MAX	9.27	8.54	8.69	9.08	8.78	8.90	8.60	8.09	8.22	8.75	9.24	8.69	8.85	9.12	9.00	8.57	8.18	7.89	7.52	
MP 126.4	MIN	7.92	7.10	7.47	7.82	6.48	5.19	4.82	6.12	7.55	8.33	8.45	8.39	8.51	8.42	8.22	8.12	7.88	7.47	7.28	
UPSTREAM	AVG	8.88	7.87	8.00	8.61	7.79	7.59	6.83	7.67	7.80	8.45	8.95	8.51	8.69	8.75	8.63	8.30	8.06	7.69	7.39	0.00%
RACINE***	MAX	6.86	7.24	7.23	7.12	7.18	6.99	6.76	6.96	6.70	6.58	7.87	6.98	7.18	7.56	6.47	6.55	6.44	6.54	6.46	
MP 237.5	MIN	6.33	6.58	6.69	6.78	6.78	6.64	6.55	6.56	6.28	6.33	6.37	6.42	6.65	6.51	6.16	6.11	6.13	5.70	6.22	
	AVG	6.50	6.79	6.92	6.94	6.94	6.79	6.67	6.71	6.47	6.44	6.60	6.70	6.90	6.82	6.32	6.24	6.28	6.33	6.31	0.00%
KYGER	MAX	5.33	*	*	*	8.21	7.68	7.20	6.82	7.06	7.22	7.49	7.78	7.92	9.02	8.59	7.63	7.75	7.01	7.75	
MP 260.0	MIN	4.73	*	*	*	7.54	7.25	6.70	6.60	6.60	6.96	6.94	7.13	7.39	7.51	7.56	7.27	6.98	6.74	6.65	
	AVG	5.03	*	*	*	7.96	7.42	6.94	6.70	6.84	7.10	7.18	7.38	7.59	8.07	8.01	7.46	7.36	6.89	6.85	0.00%
GREENUP***	MAX	5.90	5.09	5.47	5.62	5.90	5.40	No	5.23	5.14	5.76	6.53	6.53	5.52	6.02	5.90	6.86	7.63	6.86	5.71	
MP 341.0	MIN	3.19	4.20	4.18	4.54	4.75	4.90	Data	4.82	4.30	4.39	5.09	5.11	4.70	4.63	2.26	5.42	5.38	5.38	5.30	
UPSTREAM	AVG	5.23	**4.70**	**4.76**	**4.91**	5.29	5.18	Available	**4.97**	**4.76**	**4.99**	5.64	5.59	5.09	5.23	**4.98**	5.95	6.16	6.02	5.52	39.00%
DOWNSTREAM	MAX	8.18	7.25	7.46	7.99	6.53	6.22	6.24	6.53	6.05	6.22	5.78	6.29	5.86	6.72	7.58	7.39	7.66	7.20	6.82	
	MIN	6.34	6.10	5.90	6.91	6.19	5.98	5.69	5.81	4.42	4.51	4.97	5.35	5.59	4.78	6.74	6.91	6.91	6.74	6.46	
	AVG	7.16	6.64	6.78	7.33	6.30	6.11	6.09	6.06	5.42	5.42	5.42	5.79	5.68	6.13	7.04	7.11	7.19	6.96	6.71	0.00%
MARKLAND***	MAX	6.50	6.31	6.77	6.41	5.28	6.00	5.95	6.10	5.83	5.59	6.07	6.00	5.83	6.07	6.07	5.93	5.90	5.86	5.50	
MP 531.5	MIN	5.16	3.72	5.16	5.69	3.84	5.21	5.40	4.87	3.58	4.94	5.71	5.81	5.57	5.57	5.57	5.54	5.59	5.42	5.18	
D.O. #1	AVG	5.92	5.23	5.87	6.10	4.69**	5.72	5.71	5.60	4.90**	5.23	5.89	5.90	5.68	5.77	5.79	5.70	5.74	5.59	5.35	0.00%
D.O. #2	MAX	6.62	6.72	7.08	6.48	6.50	6.00	5.98	6.00	5.66	5.26	5.83	5.64	5.50	5.54	5.54	5.57	5.64	5.57	5.26	
	MIN	5.42	**4.87**	5.66	6.00	4.61	5.40	5.54	5.28	4.25	4.70	5.54	5.52	5.16	5.14	5.14	5.23	5.38	5.23	5.02	
	AVG	6.17	5.84	6.30	6.24	5.24	5.76	5.77	5.66	5.15	4.87**	5.66	5.56	5.30	5.31	5.33	5.38	5.53	5.42	5.16	0.00%
CANNELTON	MAX	5.03	5.61	5.52	4.15	4.07	3.95	3.47	3.54	3.73	4.23	3.77	4.20	3.96	4.69	3.77	6.20	5.63	5.49	5.78	
MP 720.7	MIN	4.13	4.17	4.43	3.97	3.86	3.52	3.35	3.26	3.52	3.58	3.35	3.37	3.43	3.27	3.05	5.52	5.31	5.30	5.60	
	AVG	**4.55**	**4.77**	**4.72**	**4.04**	**3.99**	**3.72**	**3.42**	**3.44**	**3.61**	**3.75**	**3.55**	**3.67**	**3.68**	**3.82**	**3.28**	5.77	5.45	5.38	5.68	79.00%
NEWBURGH	MAX	8.46	8.15	8.58	6.32	5.63	5.86	4.58	4.58	4.61	4.97	4.70	5.34	5.23	5.70	4.31	8.48	7.18	7.06	6.51	
MP 776.1	MIN	6.17	6.23	6.00	5.08	4.50	4.90	4.09	3.84	4.01	4.14	3.92	4.24	4.22	4.46	3.74	6.73	6.56	6.30	5.97	
	AVG	7.00	6.90	7.12	5.74	5.17	5.28	**4.26**	**4.13**	**4.23**	**4.34**	**4.28**	**4.54**	**4.54**	5.22	**3.96**	7.36	6.89	6.55	6.26	42.00%
JOHN T. MYERS	MAX	6.23	7.21	5.95	5.77	5.04	6.51	4.49	5.00	4.60	4.24	4.38	4.32	4.29	4.35	4.95	6.66	5.77	5.53	5.32	
MP 846.0	MIN	5.37	5.54	5.38	5.23	4.85	4.32	4.28	4.39	4.15	3.79	3.68	3.73	3.93	4.02	4.39	5.74	5.43	5.21	5.07	
	AVG	5.82	6.01	5.63	5.40	**4.97**	5.38	**4.38**	**4.52**	**4.32**	**3.97**	**3.94**	**3.88**	**4.08**	**4.17**	**4.65**	6.05	5.59	5.34	5.21	53.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectri dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen October 2007

CALENDAR DAY JULIAN DAY		1-Oct 274	2-Oct 275	3-Oct 276	4-Oct 277	5-Oct 278	8-Oct 281	9-Oct 282	10-Oct 283	11-Oct 284	12-Oct 285	15-Oct 288	16-Oct 289	17-Oct 290	18-Oct 291	19-Oct 292	22-Oct 295	23-Oct 296	24-Oct 297	25-Oct 298	26-Oct 299	29-Oct 302	30-Oct 303	31-Oct 304	Monthly % Exceedance
MONTGOMERY	MAX	7.53	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
MP 31.7	MIN	7.31	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG	7.43	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
HANNIBAL***	MAX	7.55	8.51	8.57	12.48	8.72	8.79	8.58	8.69	8.51	8.37	8.39	8.73	9.08	9.29	9.15	8.96	8.94	9.29	8.99	9.39	9.68	10.01	10.14	
MP 126.4	MIN	7.11	7.40	8.21	8.27	8.24	7.97	8.07	8.12	7.94	7.91	7.98	8.00	8.70	8.73	8.78	8.70	8.82	8.88	8.70	8.94	9.51	9.56	9.53	
UPSTREAM	AVG	7.45	8.36	8.37	8.58	8.42	8.50	8.27	8.49	8.23	8.11	8.25	8.24	8.92	9.04	8.97	8.84	8.88	9.06	8.86	9.12	9.59	9.81	9.83	0.00%
RACINE***	MAX	6.60	6.80	6.47	6.67	7.24	7.23	7.09	6.93	*	*	*	10.51	7.49	7.44	7.48	7.67	7.52	7.47	7.25	7.19	7.69	7.87	8.27	
MP 237.5	MIN	6.21	6.34	6.27	6.22	6.37	6.30	6.57	6.57	*	*	*	7.03	7.35	7.31	7.32	7.23	7.23	7.12	6.99	6.84	7.40	7.65	7.77	
	AVG	6.37	6.53	6.37	6.41	6.78	6.74	6.79	6.72	*	*	*	8.02	7.43	7.37	7.39	7.36	7.34	7.29	7.16	7.01	7.52	7.75	8.09	0.00%
KYGER	MAX	7.10	No	7.80	7.80	8.04	9.82	9.79	10.51	11.04	10.99	7.34	7.46	7.63	7.73	7.63	7.70	7.78	7.73	7.66	8.38	7.78	8.54	*	
MP 260.0	MIN	6.79	Data	6.91	7.25	7.58	9.02	9.24	9.48	8.76	9.53	7.15	7.15	7.25	7.25	7.27	7.44	7.56	7.51	7.51	7.15	7.61	7.06	*	
	AVG	6.97	Available	7.41	7.64	7.78	9.38	9.44	9.64	9.63	10.15	7.27	7.33	7.46	7.59	7.50	7.60	7.66	7.63	7.58	7.77	7.70	7.93	*	0.00%
GREENUP***	MAX	5.62	5.57	6.14	5.81	6.07	6.24	5.50	5.45	5.42	5.57	5.64	5.95	5.86	6.36	6.02	6.65	6.55	6.07	6.31	5.83	8.45	6.70	7.15	
MP 341.0	MIN	5.18	5.16	5.26	4.87	5.28	3.36	4.92	4.94	5.26	5.18	4.94	4.94	5.47	5.78	5.78	5.83	6.07	5.78	4.87	4.13**	6.43	6.55	6.60	
UPSTREAM	AVG	5.32	5.35	5.54	5.47	5.77	5.03	5.17	5.19	5.37	5.36	5.30	5.61	5.70	5.99	5.88	6.14	6.23	5.92	5.68	**4.77**	6.83	6.62	6.90	4.00%
DOWNSTREAM	MAX	6.60	6.77	7.30	6.65	7.34	7.01	6.53	6.98	6.98	6.86	7.08	7.10	7.03	7.22	7.18	7.54	7.51	7.03	7.08	6.96	7.63	7.51	7.61	
	MIN	6.29	6.41	6.53	6.38	6.43	6.46	6.31	6.46	6.72	6.72	6.77	6.77	6.84	6.86	6.91	7.25	6.98	4.22	3.34	6.00	5.93	7.49	7.49	
	AVG	6.42	6.57	6.73	6.52	6.80	6.72	6.41	6.65	6.82	6.79	6.90	6.87	6.92	7.01	7.07	7.43	7.17	6.26	5.99	6.86	7.31	7.50	7.55	0.00%
MARKLAND***	MAX	5.86	5.38	5.40	5.18	5.57	5.33	5.30	4.34	4.68	4.94	5.06	7.20	7.58	5.62	5.47	5.76	No	6.29	6.48	6.70	7.06	No	8.06	
MP 531.5	MIN	5.40	5.11	5.02	4.97	4.78	4.39	4.34	3.94	3.91	4.61	4.66	4.63	4.94	5.30	5.06	5.30	Data	6.12	6.24	6.29	6.53	Data	7.73	
D.O. #1	AVG	5.58	5.25	5.15	5.10	4.94**	4.95**	4.86**	4.13**	4.31**	4.84**	4.83**	4.89**	5.71	5.42	5.26	5.53	Available	6.20	6.39	6.55	6.84	Available	7.96	0.00%
D.O. #2	MAX	5.83	5.40	5.45	5.18	5.62	5.76	5.64	4.56	4.51	4.87	4.99	5.04	7.32	5.52	5.23	5.57	No	6.38	6.36	6.60	6.96	No	7.63	
	MIN	5.42	5.11	5.06	4.99	4.87	4.87	4.56	3.94	3.96	4.44	4.61	4.61	5.21	5.06	4.85	5.33	Data	6.12	6.17	6.22	6.46	Data	7.27	
	AVG	5.61	5.26	5.19	5.11	5.01	5.39	5.16	4.22**	4.25**	4.72**	4.78**	4.77**	5.83	5.28	5.04	5.46	Available	6.23	6.28	6.45	6.73	Available	7.49	0.00%
CANNELTON	MAX	5.97	6.00	6.54	6.02	6.35	6.45	5.95	5.56	No	No	No	6.70	6.73	No	6.53	6.70	6.69	7.06	7.37	No	7.29	7.41	No	
MP 720.7	MIN	5.79	5.79	5.92	5.80	5.88	5.43	5.28	5.31	Data	Data	Data	6.33	6.14	Data	5.65	6.37	6.40	6.61	6.93	Data	7.11	7.17	Data	
	AVG	5.87	5.89	6.17	5.91	6.10	5.92	5.53	5.45	Available	Available	Available	6.50	6.33	Available	6.02	6.60	6.52	6.78	7.15	Available	7.20	7.28	Available	0.00%
NEWBURGH	MAX	7.02	6.95	7.33	7.21	7.18	10.71	11.13	9.26	8.34	7.78	8.06	7.90	8.39	8.23	8.00	8.10	7.39	8.06	No	8.47	No	8.05	7.97	
MP 776.1	MIN	6.45	6.34	6.60	6.37	6.12	7.97	7.85	7.12	7.27	7.05	7.16	6.98	7.37	7.64	7.09	7.07	6.86	7.81	Data	7.73	Data	7.53	7.25	
	AVG	6.61	6.73	6.86	6.73	6.60	8.99	9.54	8.07	7.82	7.48	7.64	7.45	7.82	7.95	7.55	7.48	7.00	7.94	Available	8.22	Available	7.90	7.58	0.00%
JOHN T. MYERS	MAX	5.29	5.35	5.46	6.08	5.29	5.93	7.26	6.52	6.90	6.72	5.74	5.00	4.48	4.22	4.51	4.63	4.10	4.10	4.43	4.41	5.12	5.24	5.30	
MP 846.0	MIN	4.95	5.07	5.03	4.79	4.81	4.94	5.47	6.07	6.10	5.92	4.67	4.51	3.85	3.83	4.41	4.18	3.72	3.95	4.13	4.27	4.87	5.02	5.19	
	AVG	5.09	5.20	5.26	5.19	5.01	5.41	6.11	6.33	6.43	6.39	5.17	**4.76**	**4.23**	**4.07**	**4.46**	**4.45**	**3.91**	**4.02**	**4.29**	**4.34**	**4.94**	5.12	5.25	43.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen May 2008

CALENDAR DAY JULIAN DAY		1-May 122	2-May 123	5-May 126	6-May 127	7-May 128	8-May 129	9-May 130	14-May 134	15-May 135	16-May 136	16-May 137	19-May 140	20-May 141	21-May 142	22-May 143	23-May 144	24-May 144	29-May 150	30-May 151	Monthly % Exceedance
MONTGOMERY MP 31.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
HANNIBAL*** MP 126.4 UPSTREAM	MAX MIN AVG	9.38 8.24 8.78	8.96 8.43 8.74	10.49 9.45 9.92	10.82 10.22 10.57	12.09 9.83 10.82	9.98 9.69 9.83	10.14 9.48 9.93	10.11 7.68 9.39	10.34 9.29 10.05	11.01 9.84 10.14	10.94 10.11 10.35	10.88 10.02 10.40	10.31 9.60 9.90	10.25 9.56 10.01	10.14 9.96 10.04	10.05 9.93 9.98	8.43 7.61 8.13	10.01 9.83 9.92	9.98 9.84 9.91	0.00%
RACINE*** MP 237.5	MAX MIN AVG	10.33 9.84 10.13	10.13 9.83 9.97	10.74 10.01 10.49	11.19 10.47 10.92	11.42 11.00 11.26	11.81 10.94 11.42	11.11 10.13 10.77	8.58 7.95 8.13	No Data Available	8.60 8.28 8.39	8.63 7.99 8.35	No Data Available	8.94 8.66 8.74	8.99 8.75 8.84	9.07 8.78 8.89	9.12 8.81 8.95	11.07 10.45 10.73	10.43 9.64 10.14	11.18 10.14 10.77	0.00%
KYGER MP 260.0	MAX MIN AVG	10.87 10.13 10.59	10.59 10.19 10.44	11.12 10.25 10.82	11.38 10.77 11.12	11.36 10.80 11.18	11.63 11.20 11.42	11.46 10.76 11.14	9.07 7.09 7.92	No Data Available	8.57 6.70 8.21	8.52 7.09 7.51	7.85 7.21 7.50	9.25 7.70 9.02	9.37 8.91 9.27	9.17 8.75 8.95	9.33 8.87 9.07	10.97 9.41 9.85	10.35 9.49 10.00	11.14 10.06 10.85	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX MIN AVG	7.78 5.95 7.06	6.41 5.95 6.14	8.52 6.34 7.91	8.71 7.85 8.48	9.46 8.50 9.01	8.52 7.87 8.26	7.94 7.06 7.31	6.19 5.04 5.80	6.46 5.16 5.75	7.20 5.62 6.33	8.52 6.17 7.72	8.45 7.66 8.22	8.23 7.99 8.07	8.21 7.70 7.99	7.90 7.30 7.70	8.57 7.66 8.29	11.54 10.10 10.87	8.71 8.42 8.56	8.66 7.20 7.77	0.00%
DOWNSTREAM	MAX MIN AVG	6.34 5.54 5.84	7.90 6.41 7.34	9.55 7.51 8.77	9.24 9.00 9.09	9.19 9.02 9.10	9.05 8.93 9.00	8.98 8.78 8.89	8.11 6.58 7.30	7.30 6.05 6.49	8.71 6.29 7.94	7.44 7.13 7.34	8.78 7.54 8.52	8.59 8.47 8.52	8.74 8.33 8.43	8.38 8.21 8.31	8.35 8.02 8.18	12.41 9.58 11.49	7.01 6.86 6.94	7.01 6.82 6.88	0.00%
MARKLAND*** MP 531.5 D.O. #1	MAX MIN AVG	10.66 9.91 10.38	10.27 9.91 10.07	10.01 9.70 9.89	9.89 9.65 9.81	10.42 9.79 10.09	10.42 8.98 9.79	9.79 8.98 9.39	8.66 8.14 8.40	8.18 7.56 7.82	7.61 7.27 7.48	7.61 6.72 7.16	8.21 4.70 6.90	* * *	8.52 8.09 8.32	8.50 8.11 8.31	8.38 7.68 7.97	10.22 9.31 9.79	8.90 8.71 8.82	9.05 8.81 8.95	0.00%
D.O. #2	MAX MIN AVG	10.39 9.84 10.12	10.01 9.62 9.81	9.60 9.31 9.49	9.55 9.34 9.46	9.98 9.48 9.77	10.06 8.86 9.56	9.58 8.86 9.16	8.69 8.21 8.41	8.26 7.70 7.94	7.85 7.56 7.73	8.09 7.75 7.90	8.45 6.29 7.62	* * *	8.76 8.23 8.48	8.69 8.45 8.58	8.59 8.09 8.30	10.37 9.41 9.94	8.93 8.78 8.86	9.34 8.78 9.14	0.00%
CANNELTON MP 720.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	8.25 7.79 7.98	7.85 7.45 7.62	7.68 7.31 7.55	7.68 7.17 7.35	7.73 7.44 7.56	8.01 7.51 7.79	8.37 7.84 8.03	8.17 7.99 8.06	9.89 9.47 9.69	8.12 7.65 7.86	8.01 7.59 7.80	0.00%
NEWBURGH MP 776.1	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	8.29 7.91 8.12	8.27 7.96 8.07	7.97 7.79 7.90	7.87 7.80 7.84	7.74 7.61 7.66	7.92 7.78 7.84	8.25 8.08 8.19	8.51 8.37 8.43	9.57 8.86 9.24	8.29 8.14 8.22	8.33 8.19 8.26	0.00%
JOHN T. MYERS MP 846.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	8.06 7.60 7.82	7.64 7.38 7.50	7.30 7.08 7.20	7.40 7.06 7.21	7.20 6.99 7.11	7.33 7.20 7.26	7.67 7.37 7.53	10.76 8.00 9.66	5.20 4.93 5.10	5.12 4.87 5.01	0.00%
SMITHLAND MP 919.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen June 2008

CALENDAR DAY JULIAN DAY		2-Jun 154	3-Jun 155	4-Jun 156	5-Jun 157	6-Jun 158	9-Jun 161	10-Jun 162	11-Jun 163	12-Jun 164	14-Jun 165	16-Jun 168	17-Jun 169	18-Jun 170	19-Jun 171	20-Jun 172	23-Jun 175	24-Jun 176	25-Jun 177	26-Jun 178	27-Jun 179	Monthly % Exceedance
MONTGOMERY	MAX	10.00	9.79	9.49	9.24	8.96	*	6.71	8.73	8.80	8.87	8.22	8.23	8.18	7.89	7.78	8.47	8.91	8.74	8.50	8.54	No
MP 31.7	MIN	9.43	8.87	8.59	8.78	8.49	*	5.15	8.32	8.23	8.12	7.56	7.29	7.41	7.53	6.62	7.37	7.33	7.71	7.65	7.63	Data
	AVG	9.59	9.32	9.17	9.03	8.75	*	5.93	8.55	8.53	8.46	7.89	7.72	7.74	7.73	7.31	8.13	8.23	8.23	8.00	8.09	Available
HANNIBAL***	MAX	9.54	9.63	9.39	9.08	7.94	8.75	8.87	10.71	8.69	9.05	9.09	9.11	8.51	8.34	8.07	9.17	9.65	9.30	9.72	8.78	
MP 126.4	MIN	8.81	8.22	8.73	7.61	7.43	7.47	7.17	7.61	6.99	6.96	8.46	8.43	6.41	7.98	7.70	7.73	8.66	8.45	8.58	8.25	
UPSTREAM	AVG	9.31	9.10	8.97	8.52	7.64	8.06	7.84	8.69	7.86	8.56	8.79	8.92	7.31	8.20	7.88	8.53	9.10	8.96	9.25	8.56	0.00%
RACINE***	MAX	9.84	9.56	9.18	8.49	6.76	6.72	6.93	6.99	7.18	7.32	6.56	6.37	6.41	6.35	5.89	6.45	6.79	7.33	7.39	7.26	
MP 237.5	MIN	8.92	8.98	8.28	4.90	***3.73***	6.46	6.64	6.75	6.87	6.97	6.15	5.99	6.16	5.84	5.48	5.89	6.35	6.71	6.68	6.24	
	AVG	9.29	9.31	8.81	7.36	6.16	6.57	6.77	6.86	7.05	7.09	6.40	6.14	6.31	6.08	5.75	6.23	6.62	6.97	6.99	6.86	0.00%
KYGER	MAX	10.76	9.62	10.04	9.23	8.67	6.73	6.75	7.30	7.32	7.33	6.84	6.84	6.83	6.85	6.84	6.46	6.69	7.16	8.23	8.61	
MP 260.0	MIN	9.36	9.25	9.30	8.05	6.63	6.24	6.44	6.91	6.99	7.02	6.39	6.59	6.26	6.49	6.27	5.82	6.11	6.54	6.93	7.56	
	AVG	10.28	9.44	9.61	8.79	7.32	6.49	6.63	7.20	7.17	7.18	6.68	6.72	6.55	6.67	6.59	6.32	6.44	6.93	7.79	8.09	0.00%
GREENUP***	MAX	8.88	8.33	7.73	6.67	*	*	5.26	5.21	5.23	5.62	6.12	5.59	5.93	6.26	6.72	7.80	6.84	6.94	6.89	7.32	
MP 341.0	MIN	7.73	7.20	6.62	4.66	*	*	4.87	4.92	4.85	4.92	5.18	5.18	5.57	5.83	6.12	6.14	6.02	6.00	6.10	6.10	
UPSTREAM	AVG	8.39	7.80	7.32	5.90	*	*	5.04	5.02	5.04	5.22	5.68	5.44	5.74	5.98	6.37	6.66	6.29	6.31	6.36	6.56	0.00%
DOWNSTREAM	MAX	10.44	9.96	9.48	8.69	7.63	6.12	5.86	5.76	6.14	6.67	6.91	6.24	6.12	6.46	6.38	7.94	7.54	7.42	7.06	7.44	
	MIN	5.11	9.24	8.64	7.49	6.26	4.80	5.64	5.64	5.54	5.95	6.43	5.78	5.57	5.93	5.93	5.74	6.55	6.31	6.07	6.07	
	AVG	9.84	9.72	9.06	7.97	7.05	5.90	5.74	5.71	5.83	6.11	6.69	5.98	5.83	6.24	6.18	6.98	6.91	6.74	6.35	6.66	0.00%
MARKLAND***	MAX	9.36	9.10	8.62	8.30	6.29	No	5.52	5.57	5.71	5.90	6.60	6.07	6.22	6.02	6.31	5.64	6.79	7.61	7.56	7.75	
MP 531.5	MIN	8.76	8.59	8.04	6.36	4.68	Data	5.38	5.45	5.28	5.66	5.95	5.78	5.86	5.74	5.78	5.02	6.36	6.72	6.55	6.55	
D.O. #1	AVG	9.08	8.83	8.45	7.74	5.34	Available	5.45	5.52	5.55	5.80	6.34	5.96	6.01	5.85	5.96	5.34	6.60	7.23	7.10	7.28	0.00%
D.O. #2	MAX	10.01	9.50	9.12	8.76	6.55	No	5.30	5.38	5.62	5.86	6.94	6.36	6.53	6.29	6.74	6.24	6.79	7.44	7.32	7.58	
	MIN	9.17	8.95	8.66	6.17	5.45	Data	5.18	5.26	5.30	5.59	6.24	6.05	6.00	6.02	6.17	5.90	6.31	6.58	6.43	6.60	
	AVG	9.65	9.17	8.94	8.17	5.96	Available	5.25	5.33	5.47	5.73	6.61	6.23	6.23	6.19	6.42	6.07	6.54	7.11	6.90	7.17	0.00%
CANNELTON	MAX	7.95	7.98	8.14	8.04	No	No	No	No	5.99	5.84	5.99	5.79	5.83	6.07	6.15	6.98	7.03	7.59	7.47	No	
MP 720.7	MIN	7.49	7.67	7.70	7.47	Data	Data	Data	Data	5.57	5.50	5.71	5.46	5.41	5.64	5.84	6.02	6.17	6.29	5.94	Data	
	AVG	7.73	7.80	7.88	7.74	Available	Available	Available	Available	5.83	5.68	5.88	5.68	5.69	5.85	5.99	6.31	6.61	6.70	6.45	Available	0.00%
NEWBURGH	MAX	8.43	8.48	8.44	8.45	8.45	5.78	6.05	6.22	5.84	6.23	6.17	No	6.53	6.37	6.62	7.18	7.03	8.58	8.13	7.29	
MP 776.1	MIN	8.16	8.18	8.22	8.27	8.09	5.72	5.91	6.06	5.75	6.08	5.92	Data	6.30	6.21	6.39	6.51	6.36	6.88	7.22	6.83	
	AVG	8.28	8.31	8.31	8.35	8.33	5.76	5.99	6.14	5.80	6.15	5.99	Available	6.43	6.27	6.46	6.79	6.65	7.52	7.46	6.97	0.00%
JOHN T. MYERS	MAX	5.03	5.04	5.03	5.16	5.27	4.60	3.69	5.36	5.45	5.47	5.77	5.75	5.77	5.66	5.90	6.05	6.37	6.71	6.65	6.87	
MP 846.0	MIN	4.83	4.75	4.74	4.95	5.09	4.23	***3.56***	5.27	5.28	5.36	5.53	5.47	5.54	5.47	5.57	5.72	5.84	5.74	6.12	6.26	
	AVG	***4.91***	***4.89***	***4.90***	5.06	5.16	***4.41***	***3.63***	5.31	5.37	5.41	5.67	5.63	5.67	5.58	5.74	5.87	5.95	6.16	6.37	6.50	40.00%
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen July 2008

CALENDAR DAY JULIAN DAY		1-Jul 183	2-Jul 184	3-Jul 185	7-Jul 189	8-Jul 190	9-Jul 191	10-Jul 192	11-Jul 193	14-Jul 196	15-Jul 197	16-Jul 198	17-Jul 199	18-Jul 200	21-Jul 203	22-Jul 204	23-Jul 205	24-Jul 206	25-Jul 207	28-Jul 210	29-Jul 211	30-Jul 212	31-Jul 213	Monthly % Exceedance
MONTGOMERY	MAX	7.91	7.90	No	7.99	8.02	8.11	7.98	8.15	8.15	8.74	9.31	8.62	8.95	7.73	7.69	7.50	7.97	7.82	7.82	7.80	8.20	8.38	
MP 31.7	MIN	7.54	7.55	Data	7.57	7.22	7.59	7.64	7.48	7.40	7.47	7.61	7.58	7.77	6.71	6.32	5.58	7.03	6.73	7.12	6.77	5.46	7.08	
	AVG	7.69	7.65	Available	7.79	7.84	7.87	7.81	7.80	7.80	8.09	8.44	8.15	8.19	7.20	6.99	6.78	7.45	7.43	7.63	7.34	7.66	7.74	0.00%
HANNIBAL***	MAX	8.67	8.16	No	10.56	9.14	9.71	9.63	8.93	9.51	9.06	9.03	12.26	9.51	10.11	9.80	8.61	8.46	8.88	9.83	8.75	8.90	8.57	
MP 126.4	MIN	7.79	7.67	Data	8.55	8.82	8.34	7.55	8.33	8.39	8.12	6.93	6.09	8.33	9.02	8.00	7.82	7.50	7.98	6.33	7.47	7.46	8.10	
UPSTREAM	AVG	8.24	7.90	Available	9.37	9.04	8.95	8.33	8.62	8.87	8.59	8.46	8.78	8.89	9.46	9.10	8.21	7.97	8.44	8.42	8.07	8.30	8.28	0.00%
RACINE***	MAX	6.07	6.31	No	6.66	6.77	6.84	6.94	6.82	6.80	6.83	7.22	7.26	7.41	6.91	6.75	6.78	6.24	6.00	5.47	5.77	5.90	5.89	
MP 237.5	MIN	5.79	5.89	Data	6.24	6.36	6.69	6.74	6.41	6.59	6.65	6.28	6.95	7.05	6.51	6.46	6.16	5.95	5.43	5.33	5.36	5.55	5.57	
	AVG	5.91	6.04	Available	6.46	6.53	6.75	6.84	6.64	6.70	6.76	6.95	7.07	7.25	6.75	6.60	6.44	6.07	5.75	5.40	5.61	5.67	5.72	0.00%
KYGER	MAX	5.75	8.49	No	6.90	6.97	6.99	7.04	7.16	6.72	6.84	7.02	7.45	7.30	7.96	8.03	7.58	7.53	7.04	6.47	6.50	6.70	6.64	
MP 260.0	MIN	5.03	5.53	Data	5.95	6.75	6.72	6.75	6.88	6.51	6.51	6.60	6.97	6.90	7.52	7.36	7.13	7.04	6.71	6.25	5.98	5.95	6.08	
	AVG	5.51	6.52	Available	6.44	6.90	6.87	6.95	7.02	6.60	6.70	6.86	7.15	7.05	7.74	7.62	7.36	7.30	6.86	6.35	6.27	6.39	6.42	0.00%
GREENUP***	MAX	6.46	5.90	No	No	5.04	5.11	5.45	5.40	5.76	5.59	5.26	5.74	6.50	6.55	6.79	6.84	6.48	7.18	7.32	5.76	6.10	6.91	
MP 341.0	MIN	5.83	5.28	Data	Data	4.80	4.87	5.06	5.06	4.18	5.30	4.99	5.02	5.35	5.52	5.90	5.90	6.02	6.02	5.74	5.50	5.21	5.21	
UPSTREAM	AVG	6.23	5.60	Available	Available	***4.91***	5.03	5.37	5.21	5.44	5.44	5.14	5.34	5.78	6.12	6.32	6.20	6.20	6.58	6.13	5.65	5.75	6.12	5.00%
DOWNSTREAM	MAX	6.72	6.89	No	No	6.05	6.00	6.19	6.07	9.91	6.17	6.00	6.02	7.25	7.18	7.90	7.58	7.51	7.90	6.70	6.31	6.70	7.25	
	MIN	4.15	4.30	Data	Data	5.81	5.81	5.88	5.50	5.62	5.88	5.69	5.59	5.59	6.41	6.74	6.86	6.86	6.89	***3.94***	5.64	5.62	5.66	
	AVG	5.24	6.43	Available	Available	5.94	5.87	6.05	5.72	6.24	6.00	5.85	5.72	6.48	6.84	7.14	7.09	7.12	7.44	6.15	5.93	5.95	6.75	0.00%
MARKLAND***	MAX	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	
MP 531.5	MIN																							
D.O. #1	AVG	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	0.00%
D.O. #2	MAX	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	QA	
	MIN																							
	AVG	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	Issues	0.00%
CANNELTON	MAX	No	No	No	No	No	No	5.15	5.14	5.18	5.23	5.25	5.26	5.48	5.46	5.40	5.67	5.20	5.02	4.38	5.76	5.70	5.91	
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	4.72	4.76	4.77	4.68	4.83	4.71	4.23	4.96	4.66	5.04	4.88	4.18	***3.86***	5.11	4.80	4.60	
	AVG	Available	Available	Available	Available	Available	Available	***4.91***	***4.94***	5.02	***4.96***	***4.98***	***4.95***	***4.84***	5.21	5.03	5.28	5.03	***4.66***	***4.10***	5.37	5.15	5.25	50.00%
NEWBURGH **	MAX	No	No	No	No	No	No	No	No	No	8.81	8.44	9.08	10.14	13.48	14.69	10.03	9.15	8.73	8.89	9.18	8.79	8.26	
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	8.03	7.63	7.65	7.68	8.56	8.55	8.66	8.51	7.69	7.16	7.36	7.43	7.37	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	8.44	7.92	8.14	8.56	10.24	10.61	9.30	8.82	8.35	7.88	7.98	8.07	7.67	0.00%
JOHN T. MYERS**	MAX	7.3	7.42	7.42	8	8.14	8	7.5	7.52	7.39	7.48	7.57	7.78	8.8	8.78	8.3	8.39	7.46	7.37	7.04	6.99	7.16	7	
MP 846.0	MIN	6.99	6.96	7.1	7.06	7.78	7.4	7.23	7.08	7.07	6.92	6.83	6.78	7.13	6.69	6.99	7.25	7	6.69	5.96	6.2	6.18	5.96	
	AVG	7.14	7.17	7.23	7.56	7.95	7.70	7.35	7.33	7.29	7.16	7.17	7.23	7.73	7.77	7.49	7.70	7.24	7.07	6.51	6.54	6.55	6.47	0.00%
SMITHLAND**	MAX	7.41	7.39	6.97	6.51	7.03	7.12	7	7.57	7.29	8.1	8.44	9.05	8.42	6.64	6.43	5.71	6.13	6.64	9.05	8.42	8.42	7.22	
MP 919.0	MIN	6.69	6.96	6.25	6.2	6.37	6.89	6.7	6.1	6.44	6.55	6.83	6.59	6.47	5.78	5.03	4.52	4.92	4.96	6.59	6.47	6.76	6.29	
	AVG	7.02	7.15	6.49	6.34	6.70	6.99	6.83	6.77	6.76	7.16	7.31	7.30	7.34	6.24	5.83	5.12	5.34	5.66	7.30	7.30	7.30	6.70	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen August 2008

CALENDAR DAY JULIAN DAY		4-Aug 217	5-Aug 218	6-Aug 219	7-Aug 220	8-Aug 221	11-Aug 224	12-Aug 225	13-Aug 226	14-Aug 227	15-Aug 228	18-Aug 231	19-Aug 232	20-Aug 233	21-Aug 234	22-Aug 235	25-Aug 238	26-Aug 239	27-Aug 240	29-Aug 242	Monthly % Exceedance
MONTGOMERY	MAX	8.17	8.94	8.55	8.62	8.08	No	7.45	8.32	No	8.30	8.78	8.67	8.49	8.04	10.05	7.44	7.18	No	6.41	
MP 31.7	MIN	6.46	8.04	7.75	7.30	7.04	Data	6.84	6.96	Data	7.47	7.27	7.14	6.13	6.53	8.09	7.05	6.65	Data	6.07	
	AVG	7.48	8.44	8.19	7.95	7.51	Available	7.17	7.50	Available	7.80	7.79	7.56	7.49	7.37	8.69	7.23	6.94	Available	6.19	0.00%
HANNIBAL***	MAX	9.18	9.00	8.69	8.45	8.85	8.70	9.24	8.72	8.73	7.86	9.81	9.65	8.97	9.15	9.11	8.87	8.82	7.80	8.15	
MP 126.4	MIN	8.48	8.28	8.24	8.10	8.18	7.70	8.09	7.77	7.67	7.52	8.36	8.07	8.07	7.53	7.56	8.06	7.61	6.90	7.52	
UPSTREAM	AVG	8.86	8.72	8.42	8.27	8.47	8.27	8.59	8.23	7.97	7.71	9.14	8.94	8.60	8.25	8.48	8.57	8.23	7.48	7.79	0.00%
RACINE***	MAX	5.58	5.74	5.72	5.53	5.65	6.05	6.10	5.94	5.93	5.89	5.30	5.66	7.10	7.21	7.10	6.47	6.60	5.93	7.64	
MP 237.5	MIN	5.21	5.43	5.30	5.26	5.32	5.74	5.63	5.53	5.53	5.40	4.94	5.02	5.27	6.30	5.92	5.61	5.60	5.16	4.83	
	AVG	5.41	5.57	5.53	5.39	5.45	5.92	5.83	5.75	5.69	5.60	5.15	5.41	6.73	6.79	6.39	6.16	5.99	5.58	6.30	0.00%
KYGER	MAX	6.37	6.52	6.80	6.46	7.99	8.33	8.32	8.38	8.06	7.24	7.03	6.81	7.04	7.63	7.91	7.62	7.73	8.88	7.28	
MP 260.0	MIN	5.93	6.04	6.11	6.30	6.32	6.93	7.55	7.45	7.24	6.92	6.63	6.23	6.28	6.90	6.93	7.11	7.26	7.34	6.81	
	AVG	6.21	6.28	6.58	6.37	6.75	7.51	7.96	7.81	7.69	7.07	6.84	6.48	6.80	7.17	7.43	7.35	7.50	8.64	7.04	0.00%
GREENUP***	MAX	5.90	5.42	4.49	4.92	5.35	4.92	7.70	8.47	7.99	7.25	6.43	6.89	3.70	3.36	3.22	7.63	4.44	4.68	4.61	
MP 341.0	MIN	4.56	4.32	3.86	3.89	4.13	4.13	4.13	6.82	6.60	6.12	5.74	3.65	3.38	3.10	2.88	2.23	4.06	4.39	4.37	
UPSTREAM	AVG	5.09	***4.65***	***4.22***	***4.27***	***4.93***	***4.44***	6.04	7.57	7.34	6.73	6.14	***4.83***	***3.56***	***3.22***	***3.09***	***4.45***	***4.30***	***4.52***	***4.47***	68.00%
DOWNSTREAM	MAX	7.27	6.58	6.82	7.01	7.15	5.16	8.90	9.82	9.98	8.71	8.33	7.80	6.77	6.60	6.17	5.83	5.62	6.07	5.74	
	MIN	5.50	5.54	5.26	5.98	5.64	0.17	1.66	7.82	8.06	7.49	7.58	6.79	6.46	5.90	5.50	4.94	5.30	5.38	5.52	
	AVG	6.21	6.07	6.22	6.42	6.30	2.30	7.01	8.96	8.77	8.07	7.92	7.31	6.61	6.35	5.90	5.46	5.45	5.65	5.63	0.00%
MARKLAND**	MAX	6.11	6.02	6.14	6.36	6.04	6.68	6.59	6.70	6.81	8.17	6.44	6.52	6.57	6.45	6.90	6.52	6.33	6.40	6.28	
MP 531.5	MIN	5.75	5.75	5.63	5.92	5.58	5.87	6.20	6.42	6.33	6.47	6.12	5.99	5.67	5.32	5.38	6.04	5.35	5.29	5.93	
D.O. #1	AVG	5.93	5.91	5.93	6.14	5.85	6.25	6.42	6.56	6.52	6.89	6.25	6.21	6.15	6.01	6.35	6.25	5.89	5.97	6.10	0.00%
D.O. #2	MAX	6.05	5.97	6.08	6.19	6.01	6.62	6.65	6.57	6.89	7.94	6.38	6.46	6.45	6.35	6.74	6.26	6.10	6.00	6.12	
	MIN	5.45	5.49	5.26	5.45	5.21	5.88	6.03	6.19	6.06	6.20	5.84	5.79	5.54	4.85	4.90	5.71	4.71	4.69	5.50	
	AVG	5.78	5.75	5.75	5.95	5.72	6.24	6.36	6.44	6.41	6.76	6.02	6.03	5.99	5.68	6.09	5.97	5.55	5.55	5.78	0.00%
CANNELTON	MAX	5.30	5.51	5.16	5.01	5.17	5.61	***3.90***	***4.03***	***3.75***	***3.70***	***3.53***	***3.57***	***3.55***	***3.56***	***3.34***	***3.80***	6.06	No	6.23	
MP 720.7	MIN	4.89	4.98	4.85	4.59	4.86	4.86	***3.50***	***4.03***	***3.30***	***3.55***	***3.34***	***3.33***	***3.12***	***3.21***	***3.09***	***3.23***	5.43	Data	5.85	
	AVG	5.03	5.22	4.97	4.82	5.00	5.09	***3.67***	***4.03***	***3.56***	***3.63***	***3.39***	***3.44***	***3.32***	***3.38***	***3.21***	***3.48***	5.71	Available	6.03	56.00%
NEWBURGH **	MAX	8.19	7.91	7.99	7.44	8.19	10.06	11.60	10.94	10.40	13.88	13.72	13.8	11.87	9.29	10.78	9.9	9.07	No	No	
MP 776.1	MIN	6.81	6.66	6.68	6.64	6.89	7.82	7.78	7.99	8.20	8.16	7.55	7.77	7.35	7.3	7.16	7.01	6.86	Data	Data	
	AVG	7.20	7.13	7.09	6.93	7.48	8.64	8.98	9.23	8.98	9.58	8.99	9.98	9.41	8.25	8.52	8.42	7.89	Available	Available	0.00%
JOHN T. MYERS**	MAX	7.65	9	7.51	6.93	7.6	8.82	8.23	7.9	7.83	7.95	11.17	12.23	8.19	7.29	7.24	6.72	6.46	No	No	
MP 846.0	MIN	6.14	6.65	6.1	6.05	5.79	6.26	6.58	6.37	6.62	6.64	6.92	7.28	6.7	6.39	6.41	5.79	5.82	Data	Data	
	AVG	6.96	7.47	6.79	6.40	6.52	7.17	7.19	6.82	7.29	7.08	8.18	8.86	7.33	6.90	6.78	6.26	6.10	Available	Available	0.00%
SMITHLAND**	MAX	6.13	6.64	6.66	7.42	8.04	7.66	7.12	7.33	7.28	6.5	6.97	7.51	6.11	5.21	5.5	***4.68***	***4.64***	***4.24***	No	
MP 919.0	MIN	4.92	4.96	5.17	5.04	5.78	5.6	6.06	4.98	5.34	5.03	5.42	5.17	4.34	4.28	4.21	***3.54***	***3.68***	***3.49***	Data	
	AVG	5.34	5.66	5.93	6.29	6.83	6.60	6.58	6.17	6.12	5.68	6.03	6.02	5.18	***4.81***	***4.86***	***4.09***	***4.28***	***4.00***	Available	28.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen September 2008

CALENDAR DAY JULIAN DAY		2-Sep 246	3-Sep 247	4-Sep 248	5-Sep 249	8-Sep 252	9-Sep 253	10-Sep 254	11-Sep 255	12-Sep 256	22-Sep 266	23-Sep 267	24-Sep 268	25-Sep 269	26-Sep 270	29-Sep 273	30-Sep 274	Monthly % Exceedance
MONTGOMERY	MAX	7.29	7.26	7.93	7.68	6.99	6.83	6.67	6.78	6.89	9.46	9.24	9.19	8.66	8.61	7.97	7.91	No
MP 31.7	MIN	6.79	6.71	6.85	6.75	6.13	6.37	6.25	6.35	6.45	8.37	7.77	7.57	5.88	7.71	4.88	7.62	Data
	AVG	6.96	7.03	7.29	7.15	6.50	6.61	6.46	6.56	6.66	8.70	8.44	8.36	8.21	8.10	7.30	7.78	Available
HANNIBAL***	MAX	8.78	8.58	8.72	8.39	8.51	8.76	8.72	9.74	9.87	9.83	9.47	8.69	9.36	9.54	9.29	9.47	
MP 126.4	MIN	8.03	7.80	8.28	7.17	7.88	7.83	8.06	8.79	8.21	8.37	8.06	7.92	8.58	9.18	8.96	8.70	
UPSTREAM	AVG	8.34	8.22	8.45	7.97	8.24	8.28	8.46	9.42	8.95	8.79	8.71	8.31	9.07	9.30	9.16	9.16	0.00%
RACINE***	MAX	7.62	8.69	8.96	7.32	5.14	7.31	No	No	No	7.46	7.00	6.92	8.45	8.33	8.00	7.79	
MP 237.5	MIN	6.99	6.82	7.41	5.89	4.18	4.32	Data	Data	Data	7.08	5.90	6.12	7.73	8.07	7.80	7.25	
	AVG	7.34	7.71	8.14	6.34	***4.70***	6.56	Available	Available	Available	7.27	6.40	6.55	8.19	8.19	7.91	7.58	8.00%
KYGER	MAX	8.23	9.65	8.38	8.39	8.31	9.51	8.85	9.63	8.60	6.45	6.73	6.13	6.08	9.45	7.43	7.48	
MP 260.0	MIN	6.91	7.60	7.55	7.58	7.51	7.47	8.18	7.80	7.80	5.94	5.71	5.51	5.62	5.65	7.00	7.05	
	AVG	7.60	8.53	7.88	8.02	7.86	8.52	8.52	8.68	8.28	6.14	6.18	5.88	5.88	8.47	7.28	7.26	0.00%
GREENUP***	MAX	7.22	8.42	7.87	9.17	6.70	5.93	*	5.30	5.59	6.70	6.60	7.01	6.74	6.34	8.14	6.00	
MP 341.0	MIN	6.02	6.67	6.53	6.02	5.52	4.49	*	4.90	5.28	6.26	6.22	6.31	6.10	5.93	5.83	5.35	
UPSTREAM	AVG	6.77	7.40	7.18	6.87	5.88	5.02	*	5.18	5.45	6.49	6.38	6.62	6.35	6.16	6.33	5.65	0.00%
DOWNSTREAM	MAX	6.74	5.93	5.64	*	7.85	9.82	7.85	11.52	11.02	*	*	*	*	*	*	*	
	MIN	5.95	5.57	5.04	*	*	7.32	7.37	7.56	7.56	*	*	*	*	*	*	*	
	AVG	6.36	5.77	5.42	*	6.25	7.67	7.47	7.85	7.79	*	*	*	*	*	*	*	0.00%
MARKLAND**	MAX	5.83	6.41	5.98	5.81	*	6.00	5.83	5.81	5.45	4.68	6.48	6.07	6.05	5.95	23.74	6.41	
MP 531.5	MIN	4.87	5.04	5.06	4.97	*	5.47	*	5.23	4.99	4.08	4.08	5.76	5.52	5.74	5.69	6.07	
D.O. #1	AVG	5.28	5.67	5.49	5.38	*	5.71	5.33	5.44	5.21	***4.38***	6.11	5.92	5.84	5.82	6.56	6.30	7.00%
D.O. #2	MAX	6.98	7.73	7.37	7.32	5.90	6.34	18.55	7.01	6.62	6.26	6.77	6.38	6.02	6.00	23.09	22.58	
	MIN	5.76	6.02	6.00	6.02	4.61	5.38	5.95	6.19	5.98	5.30	5.40	5.86	5.54	5.62	6.00	6.07	
	AVG	6.30	6.80	6.61	6.63	5.51	5.93	6.70	6.55	6.32	5.81	6.42	6.14	5.82	5.77	6.82	6.92	0.00%
CANNELTON	MAX	6.82	7.44	5.57	5.32	5.28	6.37	5.37	4.65	4.42	5.16	5.22	5.43	5.38	5.20	5.41	5.46	
MP 720.7	MIN	5.44	5.53	4.96	5.02	4.75	5.18	5.13	4.32	4.22	4.57	4.78	5.02	5.11	5.06	5.06	5.16	
	AVG	6.06	6.54	5.32	5.15	***4.94***	5.53	5.24	***4.44***	***4.31***	***4.79***	***4.89***	5.14	5.18	5.12	5.26	5.28	31.00%
NEWBURGH **	MAX	10.68	12.24	9.67	7.71	8.87	9.03	8.96	8.10	8.88	10.46	10.62	11.25	11.49	9.78	No	No	
MP 776.1	MIN	7.18	6.83	6.90	7.01	6.81	6.66	6.88	6.58	7.04	7.72	7.68	7.92	8.16	8.30	Data	Data	
	AVG	8.33	8.88	7.72	7.34	7.53	7.38	7.73	7.44	7.80	8.96	9.00	9.53	9.46	8.88	Available	Available	0.00%
JOHN T. MYERS**	MAX	9.22	8.42	8.5	8	7.26	6.75	7.07	7.15	7.91	10.45	10.12	12.3	9.85	11.12	9.74	No	
MP 846.0	MIN	7.78	7.47	7.68	6.57	6.47	6.12	6.14	6.48	6.46	7.49	7.6	7.91	8.21	8.38	8.54	Data	
	AVG	8.33	8.04	8.02	7.35	6.85	6.57	6.54	6.74	7.07	8.26	8.39	8.83	8.84	9.69	9.01	Available	0.00%
SMITHLAND**	MAX	4.53	4.93	4.82	4.52	4.98	4.90	5.29	5.00	4.59	6.91	7.45	7.95	7.52	7.14	8.71	8.17	
MP 919.0	MIN	***3.60***	***3.70***	***3.83***	***3.83***	***3.74***	***3.85***	4.13	4.07	***3.84***	5.33	6.06	6.16	5.86	6.13	6.51	7.22	
	AVG	***4.03***	***4.17***	***4.32***	***4.30***	***4.13***	***4.53***	***4.64***	***4.49***	***4.19***	5.91	6.48	6.84	6.58	6.62	7.35	7.50	56.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen October 2008

CALENDAR DAY JULIAN DAY		1-Oct 275	2-Oct 276	3-Oct 277	6-Oct 280	7-Oct 281	8-Oct 282	9-Oct 283	10-Oct 284	13-Oct 287	14-Oct 288	15-Oct 289	16-Oct 290	17-Oct 291	20-Oct 294	21-Oct 295	22-Oct 296	23-Oct 297	24-Oct 298	27-Oct 301	28-Oct 302	29-Oct 303	30-Oct 304	31-Oct 305	Monthly % Exceedance
MONTGOMERY	MAX	7.66	7.62	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 31.7	MIN	7.48	7.54	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	7.55	7.57	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
HANNIBAL***	MAX	8.76	8.88	9.05	9.14	9.39	9.65	9.36	9.53	9.84	10.11	9.80	9.68	9.38	10.04	9.77	9.75	9.74	9.75	9.69	9.87	12.45	10.26	10.25	
MP 126.4	MIN	8.42	8.31	8.54	8.73	9.14	9.27	9.05	9.23	9.48	9.57	9.53	9.21	9.20	9.47	9.50	9.50	9.32	9.17	9.32	9.66	9.68	10.05	9.62	
UPSTREAM	AVG	8.61	8.71	8.81	8.96	9.27	9.44	9.22	9.42	9.71	9.90	9.64	9.40	9.26	9.71	9.61	9.58	9.52	9.50	9.51	9.75	10.00	10.15	9.95	0.00%
RACINE***	MAX	7.73	8.14	8.63	8.75	8.84	8.37	10.38	9.38	8.96	9.60	9.17	8.96	8.79	8.74	8.66	9.57	9.68	9.64	9.71	9.36	9.56	9.41	9.47	
MP 237.5	MIN	7.15	7.45	8.15	8.18	8.33	7.86	9.24	9.00	8.56	8.71	8.80	8.50	8.57	8.52	8.24	8.27	9.53	9.43	9.26	9.13	9.24	9.17	9.25	
	AVG	7.51	7.88	8.32	8.44	8.60	8.08	9.73	9.13	8.78	9.19	8.97	8.77	8.69	8.60	8.47	9.34	9.60	9.56	9.53	9.28	9.36	9.31	9.37	0.00%
KYGER	MAX	7.59	7.70	8.03	8.81	8.50	9.25	8.37	8.02	8.42	8.22	8.35	70.38	7.97	8.47	8.24	8.10	8.54	8.57	8.76	8.14	8.43	8.48	8.90	
MP 260.0	MIN	7.20	7.47	7.29	7.80	7.87	8.34	7.88	7.77	7.44	7.45	7.00	68.85	7.26	7.38	7.28	7.47	7.45	7.57	6.33	6.89	8.09	8.15	8.24	
	AVG	7.44	7.57	7.59	8.25	8.28	8.71	8.21	7.90	7.61	7.72	7.68	69.53	7.51	7.66	7.58	7.72	7.72	7.99	7.70	7.43	8.23	8.29	8.58	0.00%
GREENUP***	MAX	7.68	5.90	6.07	6.14	6.89	6.91	6.58	6.38	6.74	6.67	6.77	5.90	5.59	5.95	7.15	7.27	7.34	7.61	7.46	7.73	7.94	8.40	8.40	
MP 341.0	MIN	5.52	5.02	5.69	5.66	5.74	6.10	5.98	6.05	6.19	6.07	5.76	5.57	5.42	5.74	5.50	6.96	7.15	7.25	7.22	7.42	7.63	7.92	8.04	
UPSTREAM	AVG	5.81	5.53	5.87	5.78	6.33	6.41	6.38	6.25	6.44	6.41	6.05	5.73	5.52	5.81	6.83	7.17	7.24	7.38	7.35	7.61	7.81	8.06	8.17	0.00%
DOWNSTREAM	MAX	*	*	*	7.44	8.06	8.21	7.18	7.70	7.68	7.27	6.50	6.46	6.29	6.05	7.56	8.02	8.38	8.74	8.52	8.40	8.81	8.86	8.42	
	MIN	*	*	*	6.07	6.43	7.18	6.72	6.84	6.67	6.46	5.95	5.88	6.12	5.78	6.00	7.46	7.94	8.09	8.16	8.06	8.30	7.94	7.61	
	AVG	*	*	*	6.60	7.26	7.40	6.95	7.16	6.89	6.81	6.28	6.29	6.18	5.93	7.19	7.86	8.10	8.39	8.32	8.28	8.64	8.37	8.09	0.00%
MARKLAND**	MAX	6.79	7.03	6.84	6.26	6.29	6.29	No	6.05	5.52	5.74	No	No	No	6.74	6.82	15.70	17.30	6.77	7.03	7.68	7.63	7.63	7.68	
MP 531.5	MIN	6.36	6.79	6.41	5.90	5.88	5.90	Data	5.86	4.63	5.16	Data	Data	Data	6.31	6.43	6.22	6.29	6.17	6.82	6.98	7.44	7.46	7.37	
D.O. #1	AVG	6.61	6.92	6.70	6.07	6.03	6.06	Available	5.97	5.19	5.45	Available	Available	Available	6.49	6.61	6.96	6.87	6.48	6.92	7.44	7.52	7.56	7.53	0.00%
D.O. #2	MAX	7.22	7.63	7.34	5.71	No	No	No	No	5.71	5.78	No	No	No	6.82	6.84	11.04	11.06	6.74	6.67	7.85	7.99	8.06	8.14	
	MIN	6.38	7.30	6.12	4.30	Data	Data	Data	Data	5.16	5.54	Data	Data	Data	6.48	6.58	6.31	6.36	6.17	6.53	6.67	7.80	7.87	7.80	
	AVG	6.91	7.50	6.69	5.15	Available	Available	Available	Available	5.44	5.68	Available	Available	Available	6.62	6.71	6.82	6.67	6.50	6.61	7.74	7.88	7.99	7.97	0.00%
CANNELTON	MAX	5.39	5.40	5.26	5.53	5.44	5.21	4.92	5.12	5.12	4.91	5.09	5.24	5.02	4.73	4.69	5.05	5.09	5.04	5.23	5.45	5.45	5.53	5.87	
MP 720.7	MIN	5.23	5.17	5.05	5.14	4.97	4.99	4.77	4.81	4.76	4.73	4.73	4.91	4.85	4.40	4.48	4.78	4.92	4.86	5.03	5.30	5.27	5.31	5.56	
	AVG	5.30	5.25	5.15	5.32	5.13	5.13	***4.85***	***4.93***	***4.95***	***4.82***	***4.91***	5.10	***4.94***	***4.52***	***4.61***	***4.96***	5.00	***4.96***	5.11	5.39	5.34	5.41	5.69	43.00%
NEWBURGH **	MAX	9.29	9.71	10.96	11.05	9.59	8.44	8.51	8.88	8.66	8.94	8.59	7.88	8.13	8.48	8.38	8.40	8.49	8.65	8.99	9.28	9.41	10.64	No	
MP 776.1	MIN	8.57	8.45	8.18	8.33	8.41	7.66	7.35	7.51	6.60	7.43	7.18	6.88	7.00	7.57	7.28	7.54	7.97	7.80	8.58	8.80	8.77	9.15	Data	
	AVG	8.95	8.86	9.27	9.42	8.83	8.01	7.92	8.15	7.93	8.10	7.92	7.50	7.73	7.92	7.92	8.09	8.22	8.34	8.80	9.02	9.14	9.59	Available	0.00%
JOHN T. MYERS**	MAX	8.61	8.65	8.80	8.51	7.89	7.88	8.28	8.42	8.67	8.61	8.87	8.26	8.56	8.89	8.56	9.23	8.78	9.01	9.41	9.16	9.28	No	No	
MP 846.0	MIN	8.07	7.95	8.00	7.35	7.30	7.42	7.30	7.31	7.68	7.74	7.63	7.39	7.52	7.58	7.46	8.08	8.34	8.14	8.82	8.60	8.50	Data	Data	
	AVG	8.37	8.19	8.22	7.77	7.63	7.64	7.63	7.84	8.16	8.17	8.22	7.81	7.90	8.03	7.96	8.66	8.62	8.54	9.10	8.87	8.83	Available	Available	0.00%
SMITHLAND**	MAX	7.70	8.10	8.05	7.32	7.78	7.55	7.52	7.01	6.43	6.32	5.80	6.42	6.67	6.96	6.99	6.91	6.99	7.02	7.66	7.75	7.70	No	No	
MP 919.0	MIN	7.10	6.98	6.49	6.59	6.98	6.83	6.82	6.02	5.59	5.24	5.07	6.02	5.93	5.96	6.18	6.23	6.62	6.39	7.00	7.16	7.24	Data	Data	
	AVG	7.46	7.32	6.89	6.96	7.54	7.31	7.17	6.60	5.95	5.63	5.36	6.24	6.26	6.32	6.60	6.60	6.81	6.69	7.31	7.47	7.44	Available	Available	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen May 2009

CALENDAR DAY JULIAN DAY		1-May 121	4-May 124	5-May 125	6-May 126	7-May 127	8-May 128	11-May 131	12-May 132	13-May 133	14-May 134	15-May 135	18-May 138	19-May 139	20-May 140	21-May 141	22-May 142	26-May 146	27-May 147	28-May 148	29-May 149	Monthly % Exceedance
MONTGOMERY	MAX	10.76	10.00	9.98	9.66	10.24	10.53	11.03	10.51	10.53	10.50	10.32	10.34	10.75	10.61	10.70	10.94	10.63	9.92	9.54	9.78	
MP 31.7	MIN	10.52	9.82	9.89	9.49	9.73	10.29	10.58	10.32	10.38	10.43	10.19	10.21	10.22	10.26	10.20	10.28	9.42	9.11	8.87	8.79	
	AVG	10.65	9.92	9.93	9.53	9.95	10.41	10.94	10.46	10.43	10.46	10.27	10.27	10.54	10.48	10.44	10.61	9.94	9.42	9.16	9.35	0.00%
HANNIBAL***	MAX	10.37	10.94	12.68	9.84	10.46	10.94	14.79	11.66	11.94	11.66	10.17	9.93	10.02	10.94	10.44	10.91	No	9.68	9.48	10.08	
MP 126.4	MIN	9.54	9.23	8.93	5.28	4.43	9.83	7.08	9.90	11.49	10.16	9.93	9.63	9.62	9.93	9.62	10.34	Data	9.21	8.90	8.85	
UPSTREAM	AVG	10.12	9.99	10.75	8.14	8.13	10.34	9.89	10.96	11.68	11.26	10.05	9.84	9.87	10.41	10.14	10.62	Available	9.43	9.17	9.28	0.00%
RACINE***	MAX	64.23	9.11	8.50	8.45	7.19	7.22	6.08	8.72	8.64	8.63	8.58	8.48	8.46	8.37	8.63	8.74	9.16	8.86	7.95	7.15	
MP 237.5	MIN	63.29	8.41	8.26	6.80	5.57	6.61	4.86	5.58	8.47	8.51	8.50	8.33	8.29	8.01	8.05	8.47	8.90	7.95	7.13	6.48	
	AVG	63.86	8.72	8.37	7.92	6.82	6.85	5.43	8.22	8.56	8.56	8.54	8.40	8.36	8.19	8.36	8.61	9.06	8.53	7.53	6.83	0.00%
KYGER	MAX	9.80	8.82	8.11	8.01	8.23	8.22	7.90	7.99	7.99	6.74	*	8.52	9.13	9.09	9.09	9.08	No	7.67	7.58	*	
MP 260.0	MIN	9.20	8.11	7.72	6.86	6.52	7.88	7.66	7.61	5.55	5.27	*	8.27	4.67	7.55	7.67	7.53	Data	7.51	7.49	*	
	AVG	9.52	8.43	7.97	7.79	7.92	7.99	7.76	7.80	6.89	6.17	*	8.39	7.66	8.26	8.08	7.89	Available	7.59	7.53	*	0.00%
GREENUP***	MAX	7.92	8.35	7.61	6.31	6.02	5.83	7.58	7.73	7.70	8.11	8.45	8.21	7.61	7.56	8.26	8.28	7.13	7.68	6.79	6.65	
MP 341.0	MIN	7.70	7.25	5.95	5.74	5.45	5.52	5.30	7.10	7.30	7.39	7.70	7.54	7.15	7.18	7.56	7.82	6.50	6.36	6.12	5.90	
UPSTREAM	AVG	7.78	7.75	6.90	5.98	5.77	5.67	6.70	7.35	7.51	7.74	8.19	7.86	7.31	7.33	7.77	8.15	6.77	6.85	6.60	6.35	0.00%
DOWNSTREAM	MAX	7.30	7.34	7.20	6.74	5.95	*	8.42	7.70	8.11	7.90	7.94	7.92	8.50	9.31	9.24	8.76	7.03	6.77	6.38	6.48	
	MIN	6.12	6.12	6.05	5.74	5.66	*	5.38	7.46	7.37	7.03	7.37	7.10	7.13	6.96	6.79	6.65	6.07	5.71	5.35	5.02	
	AVG	6.50	6.60	6.45	5.99	5.77	*	6.81	7.57	7.61	7.47	7.66	7.35	7.41	7.23	7.13	6.96	6.28	5.96	5.70	5.40	0.00%
MARKLAND**	MAX	9.19	8.66	No	8.54	8.47	7.90	7.39	7.70	*	*	*	*	8.45	8.47	8.33	8.28	8.18	8.71	8.09	7.99	
MP 531.5	MIN	8.95	8.33	Data	*	7.22	4.63	6.17	5.57	*	*	*	*	*	8.30	8.18	7.73	7.78	7.78	7.66	7.46	
D.O. #1	AVG	9.08	8.47	Available	5.09	7.96	5.86	6.80	7.01	*	*	*	*	7.65	8.39	8.24	8.09	7.99	8.26	7.83	7.72	0.00%
CANNELTON	MAX	No	No	No	8.89	8.55	8.63	7.73	7.97	8.16	8.33	8.26	No	No	7.37	7.37	7.44	No	7.46	7.42	7.38	
MP 720.7	MIN	Data	Data	Data	8.72	8.46	8.52	7.66	7.77	8.11	8.29	8.15	Data	Data	7.25	7.09	*	Data	7.18	7.23	7.12	
	AVG	Available	Available	Available	8.81	8.49	8.58	7.71	7.87	8.13	8.31	8.20	Available	Available	7.31	7.28	6.06	Available	7.32	7.30	7.30	0.00%
NEWBURGH	MAX	No	No	No	9.00	8.94	8.34	7.54	7.34	7.58	7.92	7.81	7.74	8.34	8.54	8.52	8.37	7.98	8.08	8.16	8.00	
MP 776.1	MIN	Data	Data	Data	8.88	8.71	8.20	7.33	7.28	7.38	7.80	7.58	7.59	8.13	8.46	8.42	8.20	7.92	7.89	7.92	7.75	
	AVG	Available	Available	Available	8.95	8.81	8.26	7.42	7.31	7.50	7.85	7.69	7.67	8.25	8.50	8.46	8.27	7.94	7.97	8.07	7.94	0.00%
JOHN T. MYERS	MAX	No	No	No	No	8.31	8.17	7.38	6.74	6.63	6.94	7.03	6.71	7.35	7.55	7.82	7.89	7.65	7.86	7.57	7.44	
MP 846.0	MIN	Data	Data	Data	Data	8.17	8.08	6.97	6.52	6.56	6.71	6.90	6.58	7.08	7.25	7.64	7.70	7.38	7.34	7.35	7.20	
	AVG	Available	Available	Available	Available	8.24	8.12	7.22	6.67	6.59	6.85	6.95	6.66	7.19	7.38	7.74	7.77	7.53	7.58	7.48	7.33	0.00%
SMITHLAND	MAX	No	No	No	No	7.07	7.18	7.04	7.02	6.72	6.99	7.06	6.80	6.42	6.19	6.14	6.34	6.07	6.03	6.07	6.13	
MP 919.0	MIN	Data	Data	Data	Data	6.95	7.12	6.99	6.87	6.66	6.90	6.98	6.60	6.25	6.01	6.02	6.19	5.88	5.92	5.99	5.96	
	AVG	Available	Available	Available	Available	7.02	7.14	7.01	6.94	6.69	6.94	7.02	6.71	6.34	6.09	6.07	6.26	6.00	5.96	6.02	6.06	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen June 2008

CALENDAR DAY JULIAN DAY		1-Jun 152	2-Jun 153	3-Jun 154	4-Jun 155	5-Jun 156	8-Jun 159	9-Jun 160	10-Jun 161	11-Jun 162	12-Jun 163	15-Jun 166	16-Jun 167	17-Jun 168	18-Jun 169	19-Jun 170	22-Jun 173	23-Jun 174	24-Jun 175	25-Jun 176	26-Jun 177	30-Jun 181	Monthly % Exceedance
MONTGOMERY	MAX	9.19	9.45	9.04	9.16	9.23	9.26	9.09	9.12	9.29	8.88	9.41	9.77	10.33	9.62	No	*	7.17	*	*	8.82	8.64	
MP 31.7	MIN	8.84	8.76	8.80	8.85	8.86	8.79	7.87	7.18	8.19	8.49	8.99	9.12	8.92	9.00	Data	*	4.00	*	*	8.34	8.27	
	AVG	8.99	9.05	8.92	9.00	9.04	9.12	8.65	8.46	8.83	8.63	9.19	9.39	9.64	9.29	Available	*	6.28	*	*	8.66	8.44	0.00%
HANNIBAL***	MAX	9.59	9.77	9.98	9.20	9.33	9.54	10.29	10.04	10.22	9.72	9.93	9.90	9.18	9.23	9.08	9.29	9.00	9.26	11.16	9.78	8.67	
MP 126.4	MIN	9.11	9.27	8.70	8.55	8.49	8.78	8.75	9.15	9.42	9.39	9.17	9.02	8.54	8.99	7.49	8.55	7.53	7.92	5.63	8.49	8.33	
UPSTREAM	AVG	9.41	9.53	9.22	8.77	9.01	9.21	9.41	9.61	10.02	9.58	9.47	9.37	8.89	9.10	8.40	8.97	8.01	8.77	8.15	9.00	8.49	0.00%
RACINE***	MAX	5.99	7.79	7.92	7.54	7.43	7.24	7.17	6.97	6.61	6.37	6.33	6.62	6.17	5.96	5.98	6.20	5.80	5.74	5.58	5.80	5.96	
MP 237.5	MIN	5.51	5.58	7.45	7.38	7.18	7.04	6.95	6.58	6.27	6.21	5.87	5.87	5.96	5.41	5.41	5.72	5.32	5.35	5.47	5.47	5.50	
	AVG	5.76	7.40	7.69	7.46	7.30	7.14	7.06	6.79	6.44	6.29	6.12	6.13	6.07	5.60	5.80	6.04	5.44	5.57	5.53	5.61	5.71	0.00%
KYGER	MAX	7.53	7.51	6.91	6.95	6.75	7.80	7.70	7.67	*	6.68	6.50	6.28	6.07	5.90	5.63	5.89	5.83	5.33	5.79	5.79	5.74	
MP 260.0	MIN	7.36	5.66	6.41	6.62	6.63	6.42	7.20	7.38	*	6.39	6.19	5.77	5.54	5.18	4.87	5.38	5.22	4.94	5.19	5.59	5.38	
	AVG	7.45	6.69	6.71	6.76	6.69	6.73	7.51	7.51	*	6.51	6.30	5.93	5.78	5.42	5.12	5.55	5.48	5.10	5.62	5.64	5.54	0.00%
GREENUP***	MAX	6.84	6.79	6.98	7.18	6.84	7.34	7.03	6.60	7.34	7.32	5.28	5.62	5.74	5.66	No	6.24	6.10	5.71	5.52	No	6.07	
MP 341.0	MIN	6.26	6.60	6.70	6.60	6.60	4.01	6.50	6.07	5.81	6.58	4.90	4.78	4.90	4.87	Data	5.74	5.33	5.09	5.26	Data	5.47	
UPSTREAM	AVG	6.58	6.69	6.87	6.81	6.70	6.66	6.65	6.35	6.81	6.86	5.01	5.16	5.30	5.38	Available	6.02	5.89	5.50	5.38	Available	5.75	0.00%
DOWNSTREAM	MAX	8.45	9.89	10.39	6.22	8.52	10.01	6.46	*	6.58	6.58	6.22	6.19	6.24	6.17	No	6.48	6.62	6.38	5.66	No	9.82	
	MIN	4.39	6.50	6.17	5.88	5.62	5.16	5.09	*	4.70	6.38	6.12	6.05	6.00	5.95	Data	6.12	6.34	5.62	4.73	Data	5.14	
	AVG	6.60	6.94	7.00	6.07	5.99	6.54	5.49	*	5.88	6.48	6.17	6.12	6.12	6.04	Available	6.33	6.48	5.90	5.08	Available	5.96	0.00%
MARKLAND**	MAX	7.49	7.38	7.36	7.12	6.66	7.05	7.15	7.03	6.90	6.80	6.48	6.66	6.51	6.50	6.43	6.50	7.04	6.77	6.91	6.91	5.57	
MP 531.5	MIN	7.17	7.25	7.10	6.47	6.27	6.72	6.96	6.81	6.78	6.41	6.25	6.27	6.32	6.33	5.98	6.35	6.42	6.55	6.64	6.29	4.85	
D.O. #1	AVG	7.28	7.30	7.22	6.96	6.47	6.90	7.05	6.90	6.84	6.60	6.39	6.38	6.42	6.43	6.21	6.41	6.73	6.69	6.73	6.56	5.19	0.00%
CANNELTON	MAX	7.37	7.12	7.14	7.02	6.92	6.91	6.78	6.51	6.46	6.53	6.18	6.25	6.29	*	No	*	*	*	*	*	*	
MP 720.7	MIN	7.01	6.82	6.94	6.91	6.76	6.59	6.60	6.32	6.34	6.34	6.01	6.14	6.15	*	Data	*	*	*	*	*	*	
	AVG	7.15	7.01	7.04	6.95	6.86	6.78	6.72	6.43	6.41	6.45	6.10	6.20	6.21	*	Available	*	*	*	*	*	*	0.00%
NEWBURGH**	MAX	8.20	8.27	8.14	8.21	8.02	7.97	7.91	7.60	7.47	7.35	7.12	7.14	7.21	7.14	7.12	7.06	6.70	6.90	7.21	7.22	7.32	
MP 776.1	MIN	8.00	8.11	8.00	8.00	7.76	7.83	7.75	7.48	7.28	7.07	6.96	6.98	7.08	7.00	6.84	6.49	6.64	6.38	7.06	6.89	7.05	
	AVG	8.09	8.18	8.06	8.09	7.92	7.89	7.86	7.55	7.36	7.21	7.04	7.04	7.15	7.07	7.02	6.77	6.67	6.57	7.12	7.11	7.18	0.00%
JOHN T. MYERS**	MAX	7.63	7.09	7.04	7.03	6.93	6.96	6.98	7.79	7.72	7.52	7.15	7.13	6.85	6.90	6.93	7.01	6.91	6.90	*	*	6.83	
MP 846.0	MIN	7.50	6.95	6.93	6.87	6.78	6.75	6.83	7.60	7.50	7.28	7.02	6.80	6.76	6.75	6.78	6.81	6.64	6.38	*	*	6.26	
	AVG	7.56	7.04	6.99	6.97	6.89	6.87	6.90	7.70	7.61	7.40	7.09	6.95	6.81	6.83	6.85	6.92	6.83	6.57	*	*	6.52	0.00%
SMITHLAND**	MAX	5.83	5.72	5.90	6.18	6.30	6.90	6.87	6.67	7.30	7.19	6.27	6.25	6.37	6.26	6.22	6.00	5.79	5.74	5.66	5.43	6.90	
MP 919.0	MIN	5.59	5.57	5.81	6.06	6.25	6.71	6.75	6.55	7.09	6.93	6.03	5.97	6.21	6.10	6.10	5.71	5.67	5.51	5.56	5.33	6.66	
	AVG	5.74	5.65	5.85	6.12	6.27	6.81	6.80	6.62	7.23	7.09	6.17	6.09	6.30	6.16	6.15	5.87	5.73	5.60	5.61	5.40	6.79	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen July 2009

CALENDAR DAY JULIAN DAY		1-Jul 182	2-Jul 183	6-Jul 187	7-Jul 188	8-Jul 189	9-Jul 190	10-Jul 191	13-Jul 194	14-Jul 195	15-Jul 196	16-Jul 197	17-Jul 198	21-Jul 202	22-Jul 203	23-Jul 204	24-Jul 205	28-Jul 209	29-Jul 210	30-Jul 211	31-Jul 212	Monthly % Exceedance
MONTGOMERY	MAX	9.20	8.68	8.90	8.82	8.98	9.02	9.67	9.33	9.47	9.83	8.79	8.42	7.05	7.34	7.46	7.78	8.27	8.57	8.33	8.36	
MP 31.7	MIN	8.09	8.04	8.51	8.19	8.43	8.42	8.73	8.56	8.36	8.57	8.24	7.82	6.69	6.95	7.09	7.34	7.73	8.00	7.84	6.89	
	AVG	8.58	8.47	8.70	8.60	8.66	8.74	9.20	8.89	8.90	9.02	8.59	8.01	6.86	7.14	7.36	7.62	8.05	8.30	8.15	7.99	0.00%
HANNIBAL***	MAX	8.72	13.74	8.12	7.74	8.88	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
MP 126.4	MIN	7.17	6.03	7.56	6.96	7.65	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
UPSTREAM	AVG	7.95	8.21	7.92	7.34	8.32	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
RACINE***	MAX	5.84	5.53	5.62	5.59	5.56	5.56	5.93	6.04	6.13	No	5.80	5.64	5.76	5.42	5.32	5.43	5.32	5.25	5.11	6.04	
MP 237.5	MIN	5.53	5.34	5.28	5.36	5.34	5.34	5.61	5.65	5.65	Data	5.31	5.30	5.38	5.03	4.74	4.76	4.65	4.97	4.61	4.77	
	AVG	5.64	5.46	5.53	5.49	5.44	5.42	5.77	5.80	5.85	Available	5.61	5.42	5.58	5.17	5.03	5.11	5.08	5.08	***4.92***	5.89	5.00%
KYGER	MAX	5.59	5.59	5.43	5.44	5.46	5.95	5.75	5.77	5.64	No	6.30	6.72	5.76	5.89	6.01	5.55	*	*	5.36	5.38	
MP 260.0	MIN	5.14	5.27	5.21	5.14	5.13	5.37	5.37	4.86	5.23	Data	5.76	6.18	5.18	5.61	5.51	4.70	*	*	4.82	4.87	
	AVG	5.36	5.42	5.33	5.32	5.30	5.64	5.60	5.29	5.45	Available	6.19	6.36	5.64	5.71	5.66	5.14	*	*	5.09	5.24	0.00%
GREENUP***	MAX	6.53	6.10	6.07	6.72	6.50	6.24	6.12	No	No	No	No	No	No	No	5.14	5.02	6.53	7.18	6.67	8.74	
MP 341.0	MIN	5.95	5.88	5.47	6.10	5.86	5.62	5.40	Data	Data	Data	Data	Data	Data	Data	4.97	4.82	5.28	5.86	5.74	5.81	
UPSTREAM	AVG	6.20	5.97	5.77	6.31	6.04	5.91	5.61	Available	Available	Available	Available	Available	Available	Available	5.04	***4.92***	5.48	6.17	6.02	6.40	8.00%
DOWNSTREAM	MAX	6.19	5.95	9.82	6.53	6.24	6.55	6.34	No	No	No	No	No	No	No	5.78	5.76	6.00	5.93	5.76	5.95	
	MIN	5.78	5.76	5.38	6.19	6.00	5.93	5.86	Data	Data	Data	Data	Data	Data	Data	5.47	5.45	5.33	5.33	5.38	5.57	
	AVG	5.93	5.87	5.99	6.35	6.12	6.10	6.07	Available	Available	Available	Available	Available	Available	Available	5.63	5.65	5.64	5.67	5.61	5.73	0.00%
MARKLAND**	MAX	5.81	6.14	6.25	6.18	6.21	6.70	6.23	6.40	6.02	6.06	6.09	5.86	5.79	5.80	5.62	5.67	6.64	6.36	6.21	6.19	
MP 531.5	MIN	5.38	5.72	5.71	5.94	5.88	5.61	5.59	5.42	5.47	5.44	5.63	5.30	5.30	5.11	5.02	5.48	5.62	5.99	5.99	5.58	
D.O. #1	AVG	5.55	5.90	5.96	6.06	6.04	5.98	5.92	5.91	5.70	5.71	5.94	5.62	5.51	5.40	5.28	5.59	6.09	6.15	6.12	5.94	0.00%
CANNELTON	MAX	5.76	6.10	6.59	6.65	6.54	6.41	7.79	6.49	*	*	7.05	7.47	7.62	7.88	7.08	6.96	6.60	11.16	8.06	8.03	
MP 720.7	MIN	5.57	5.70	6.33	6.37	5.99	6.05	6.09	5.92	*	*	6.67	6.58	6.87	6.80	6.83	6.61	6.35	8.39	7.75	7.52	
	AVG	5.64	5.92	6.43	6.51	6.29	6.20	6.62	6.22	*	*	6.87	7.14	7.08	7.26	6.95	6.78	6.46	9.78	7.93	7.73	0.00%
NEWBURGH**	MAX	8.37	8.93	8.36	7.98	8.00	8.26	10.08	8.57	9.32	8.12	7.58	7.35	8.30	7.34	7.36	7.82	7.85	7.53	7.41	7.13	
MP 776.1	MIN	7.39	7.82	7.30	7.18	7.21	7.32	7.44	7.35	7.26	7.10	6.72	6.89	6.57	7.01	6.62	7.17	6.71	6.81	7.05	6.85	
	AVG	7.84	8.30	7.77	7.49	7.57	7.74	8.11	7.86	8.01	7.58	7.11	7.10	7.41	7.19	7.00	7.39	7.20	7.08	7.21	6.92	0.00%
JOHN T. MYERS**	MAX	7.67	7.93	8.30	8.03	7.70	8.71	9.22	7.86	8.49	8.67	8.97	8.89	9.60	6.53	5.57	6.00	5.92	6.00	6.63	5.88	
MP 846.0	MIN	6.89	7.41	7.76	7.26	6.90	7.02	7.43	6.65	7.09	7.32	7.34	7.60	8.84	5.56	5.12	5.62	5.45	5.40	6.13	5.36	
	AVG	7.25	7.64	8.02	7.72	7.30	7.74	7.94	7.15	7.66	7.96	8.07	8.23	9.14	6.02	5.31	5.81	5.78	5.69	6.42	5.55	0.00%
SMITHLAND**	MAX	6.57	6.74	7.36	7.38	8.14	8.37	8.88	7.78	7.42	6.47	5.86	6.73	8.59	7.58	7.03	6.75	6.32	7.51	7.23	6.41	
MP 919.0	MIN	6.10	6.09	6.65	6.80	6.98	7.57	7.20	6.49	5.75	5.56	5.37	5.41	7.49	7.08	6.16	5.74	5.79	6.39	6.42	5.72	
	AVG	6.31	6.43	6.95	7.09	7.35	7.82	7.78	7.10	6.69	5.91	5.59	6.07	8.00	7.25	6.59	6.43	6.17	7.01	6.87	6.02	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen August 2009

CALENDAR DAY JULIAN DAY		3-Aug 215	4-Aug 216	5-Aug 217	6-Aug 218	7-Aug 219	10-Aug 222	11-Aug 223	12-Aug 224	13-Aug 225	14-Aug 226	17-Aug 229	18-Aug 230	19-Aug 231	20-Aug 232	21-Aug 233	24-Aug 236	25-Aug 237	26-Aug 238	27-Aug 239	28-Aug 240	31-Aug 243	Monthly % Exceedance
MONTGOMERY	MAX	7.95	8.31	8.24	8.26	8.31	8.61	8.60	8.75	8.58	8.24	8.40	8.38	8.24	8.37	8.40	7.60	7.70	7.85	8.43	9.02	7.52	
MP 31.7	MIN	7.77	7.97	8.11	8.14	8.02	8.19	8.27	8.18	7.94	8.09	7.98	7.81	5.42	5.17	7.43	7.35	7.34	7.57	7.76	7.66	7.01	
	AVG	7.87	8.09	8.18	8.19	8.17	8.37	8.46	8.50	8.22	8.18	8.20	8.19	7.56	7.50	7.86	7.50	7.54	7.73	8.13	8.21	7.31	0.00%
HANNIBAL***	MAX	No	No	No	No	No	No	9.87	9.06	10.76	13.86	*	*	8.55	8.31	8.39	9.17	9.65	8.58	8.82	8.66	8.52	
MP 126.4	MIN	Data	Data	Data	Data	Data	Data	7.71	8.28	5.00	4.43	*	*	7.94	7.67	7.55	8.01	8.12	8.30	8.42	8.07	7.80	
UPSTREAM	AVG	Available	Available	Available	Available	Available	Available	8.48	8.70	9.70	10.65	*	*	8.27	8.03	8.04	8.44	8.55	8.42	8.67	8.42	8.18	0.00%
RACINE***	MAX	5.79	5.54	5.35	5.27	5.21	*	*	*	*	*	*	*	*	*	*	8.38	8.38	8.22	6.27	6.18	5.67	
MP 237.5	MIN	5.54	5.16	5.16	5.05	4.95	*	*	*	*	*	*	*	*	*	*	8.10	7.94	6.23	6.13	5.93	5.48	
	AVG	5.67	5.37	5.25	5.17	5.08	*	*	*	*	*	*	*	*	*	*	8.23	8.11	6.96	6.18	6.07	5.58	0.00%
KYGER	MAX	5.32	5.27	*	*	*	*	*	*	*	*	*	*	*	*	*	6.80	6.85	6.89	No	6.75	6.59	
MP 260.0	MIN	5.06	4.94	*	*	*	*	*	*	*	*	*	*	*	*	*	6.46	6.55	6.53	Data	6.40	6.27	
	AVG	5.18	5.14	*	*	*	*	*	*	*	*	*	*	*	*	*	6.63	6.70	6.71	Available	6.53	6.43	0.00%
GREENUP***	MAX	7.85	No	No	6.36	No	No	6.62	9.12	7.32	7.56	8.14	No	No	No	No	No	No	5.54	5.28	5.98	*	
MP 341.0	MIN	4.80	Data	Data	4.97	Data	Data	4.82	5.42	5.18	5.26	5.06	Data	Data	Data	Data	Data	Data	4.68	4.49	4.27	*	
UPSTREAM	AVG	5.37	Available	Available	5.22	Available	Available	5.40	5.89	5.55	5.59	5.46	Available	Available	Available	Available	Available	Available	***4.86***	***4.64***	***4.48***	*	30.00%
DOWNSTREAM	MAX	*	No	No	*	No	No	*	5.47	5.09	*	8.74	No	No	No	No	No	No	6.12	5.78	6.02	*	
	MIN	*	Data	Data	*	Data	Data	*	4.03	4.44	*	6.07	Data	Data	Data	Data	Data	Data	5.45	5.33	5.06	*	
	AVG	*	Available	Available	*	Available	Available	*	***4.87***	***4.73***	*	6.72	Available	Available	Available	Available	Available	Available	5.80	5.52	5.53	*	33.00%
MARKLAND**	MAX	5.39	5.48	5.43	5.36	5.39	5.80	5.81	5.97	6.08	6.48	6.74	6.75	6.49	6.51	6.27	5.48	5.72	5.87	6.00	5.97	5.78	
MP 531.5	MIN	5.11	5.25	4.98	5.00	5.29	5.48	5.50	5.60	5.78	5.98	6.32	6.27	6.27	6.12	5.86	5.12	5.25	5.50	5.44	5.30	5.57	
D.O. #1	AVG	5.26	5.36	5.14	5.21	5.33	5.59	5.64	5.74	5.95	6.21	6.50	6.44	6.39	6.28	6.03	5.27	5.50	5.63	5.79	5.60	5.69	0.00%
CANNELTON	MAX	7.19	6.92	6.83	6.72	6.92	6.82	7.03	6.81	7.97	7.72	5.59	5.75	5.82	5.94	5.48	6.18	6.48	6.32	6.56	7.73	No	
MP 720.7	MIN	6.76	6.72	6.41	6.44	6.66	6.68	6.82	6.62	7.71	6.34	5.44	5.53	5.53	5.43	5.35	5.94	6.23	5.92	6.02	5.97	Data	
	AVG	6.99	6.81	6.61	6.58	6.76	6.75	6.96	6.71	7.83	7.51	5.53	5.65	5.69	5.68	5.41	6.03	6.32	6.12	6.30	6.39	Available	0.00%
NEWBURGH **	MAX	6.24	6.50	6.73	6.39	5.82	6.80	6.85	6.54	6.46	6.55	7.21	8.02	8.04	7.64	8.21	7.48	7.14	7.54	7.79	10.00	7.18	
MP 776.1	MIN	5.97	6.19	6.43	5.79	5.52	6.42	6.46	6.33	6.26	6.25	6.42	6.78	7.01	6.94	7.02	6.89	6.77	6.64	6.94	7.28	6.10	
	AVG	6.07	6.30	6.56	6.14	5.70	6.56	6.65	6.42	6.35	6.38	6.77	7.24	7.42	7.14	7.57	7.22	6.94	7.08	7.33	8.30	6.51	0.00%
JOHN T. MYERS**	MAX	5.46	*	6.24	6.45	6.35	6.13	6.32	6.46	6.60	6.55	6.81	7.16	7.36	7.44	6.63	7.58	8.39	8.39	7.88	7.66	6.38	
MP 846.0	MIN	4.96	*	6.14	6.26	5.87	5.83	6.00	6.16	6.41	6.44	6.44	6.49	6.58	6.65	6.06	6.91	7.66	7.26	6.61	6.12	5.69	
	AVG	5.21	*	6.18	6.36	6.10	5.97	6.18	6.31	6.49	6.50	6.56	6.76	6.89	6.90	6.46	7.19	7.99	7.92	7.28	6.59	6.07	0.00%
SMITHLAND**	MAX	6.99	6.21	5.79	5.76	6.16	5.63	5.64	5.81	5.64	5.69	6.18	6.27	6.15	6.16	5.84	*	6.45	6.70	7.09	7.16	5.70	
MP 919.0	MIN	6.20	5.60	5.46	5.55	5.68	5.25	4.99	4.96	5.11	5.13	5.67	4.85	4.74	4.90	4.94	*	4.97	5.44	5.06	5.27	5.19	
	AVG	6.71	5.82	5.66	5.66	5.91	5.47	5.43	5.45	5.38	5.37	5.93	5.85	5.68	5.52	5.39	*	5.65	5.89	5.82	6.21	5.39	0.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Daily Dissolved Oxygen Readings

Daily Dissolved Oxygen September 2009

CALENDAR DAY JULIAN DAY		1-Sep 244	2-Sep 245	3-Sep 246	4-Sep 247	8-Sep 251	9-Sep 252	10-Sep 253	11-Sep 254	14-Sep 257	15-Sep 258	16-Sep 259	17-Sep 260	18-Sep 261	21-Sep 264	22-Sep 265	23-Sep 266	24-Sep 267	25-Sep 268	28-Sep 271	29-Sep 272	30-Sep 273	Monthly % Exceedance
MONTGOMERY	MAX	7.73	8.61	9.17	9.14	9.20	9.19	8.57	8.15	8.08	8.06	8.19	8.25	8.06	8.68	9.11	8.10	7.77	7.88	7.85	7.89	8.06	
MP 31.7	MIN	7.43	8.33	8.38	8.64	8.20	8.32	7.96	7.59	7.68	7.44	7.77	7.70	7.61	7.81	7.64	7.62	7.52	7.41	7.44	7.56	7.11	
	AVG	7.57	8.48	8.68	8.94	8.76	8.63	8.17	7.82	7.83	7.81	7.98	8.00	7.79	8.13	7.96	7.85	7.65	7.67	7.66	7.70	7.74	0.00%
HANNIBAL***	MAX	8.48	8.07	8.27	8.99	8.58	8.79	8.58	8.79	*	*	*	*	*	*	*	8.60	8.84	8.81	8.42	8.34	8.31	
MP 126.4	MIN	7.91	6.80	7.22	8.13	8.30	8.42	8.28	8.40	*	*	*	*	*	*	*	7.43	8.36	8.34	7.25	8.15	8.09	
UPSTREAM	AVG	8.24	7.42	7.97	8.50	8.45	8.64	8.43	8.59	*	*	*	*	*	*	*	8.41	8.64	8.58	8.24	8.26	8.19	0.00%
RACINE***	MAX	5.98	5.81	5.92	5.96	6.07	5.77	5.61	5.36	6.83	6.88	7.49	7.40	7.12	6.52	6.39	6.28	5.96	6.14	6.42	6.57	6.79	
MP 237.5	MIN	5.44	5.63	5.65	5.76	5.75	5.56	5.26	5.12	6.26	6.47	6.65	6.82	6.56	6.15	6.26	5.92	5.69	5.74	6.16	6.25	6.56	
	AVG	5.76	5.73	5.75	5.84	5.91	5.68	5.42	5.28	6.57	6.73	7.00	7.16	6.77	6.33	6.33	6.11	5.80	5.89	6.28	6.45	6.71	0.00%
KYGER	MAX	6.36	6.23	6.32	6.09	*	*	*	*	6.67	7.18	8.33	8.32	8.35	8.35	7.31	7.02	6.48	6.20	6.10	6.29	6.51	
MP 260.0	MIN	6.15	5.95	6.02	5.68	*	*	*	*	6.40	6.46	7.00	7.38	7.51	7.30	6.58	6.26	6.13	5.95	5.31	5.74	5.95	
	AVG	6.23	6.09	6.12	5.85	*	*	*	*	6.52	6.84	7.52	7.82	7.82	7.86	6.99	6.61	6.30	6.05	5.68	5.99	6.09	0.00%
GREENUP***	MAX	5.64	5.52	5.59	6.17	9.17	5.59	24.60	6.10	6.10	6.50	5.98	5.66	5.64	5.57	5.54	5.76	5.57	5.16	4.82	5.66	6.00	
MP 341.0	MIN	5.35	5.09	4.97	4.99	4.56	4.97	5.52	6.10	6.10	5.33	5.28	5.28	5.06	5.30	5.16	5.18	4.97	4.87	4.68	4.39	5.76	
UPSTREAM	AVG	5.50	5.25	5.22	5.43	5.73	5.34	6.77	6.10	6.10	6.09	5.66	5.44	5.38	5.43	5.40	5.53	5.35	5.06	***4.74***	5.22	5.86	5.00%
DOWNSTREAM	MAX	10.49	7.68	7.37	7.75	7.66	5.86	6.70	6.10	6.10	*	*	*	*	*	*	*	6.36	6.24	5.71	6.34	6.94	
	MIN	6.29	6.55	6.94	7.06	5.40	5.26	5.23	6.10	6.10	*	*	*	*	*	*	*	6.00	5.88	5.45	5.54	5.62	
	AVG	7.02	6.92	7.10	7.31	5.96	5.36	5.89	6.10	6.10	*	*	*	*	*	*	*	6.16	6.07	5.59	5.91	6.65	0.00%
MARKLAND**	MAX	5.73	5.96	5.78	5.15	5.20	5.43	5.29	5.24	5.06	4.37	4.44	4.59	5.43	4.88	4.92	5.06	4.86	4.83	5.87	6.20	6.09	
MP 531.5	MIN	4.89	4.80	4.88	4.33	4.31	4.96	4.81	4.72	4.37	***3.43***	***3.62***	4.10	4.31	4.67	4.55	4.80	4.71	4.35	5.21	5.80	5.74	
D.O. #1	AVG	5.40	5.57	5.23	***4.67***	***4.92***	5.18	5.03	***4.97***	***4.65***	***3.88***	***3.88***	***4.28***	***4.93***	***4.77***	***4.72***	***4.96***	***4.78***	***4.53***	5.45	6.04	5.85	62.00%
CANNELTON	MAX	No	7.19	7.49	7.11	6.86	6.80	6.83	6.51	6.16	6.66	7.06	7.46	7.88	7.46	6.94	6.55	6.28	6.29	6.12	6.72	6.91	
MP 720.7	MIN	Data	7.01	7.09	6.79	6.58	6.44	6.24	6.13	5.91	6.41	6.82	7.13	7.39	6.95	6.64	6.23	6.13	6.10	5.77	6.36	6.54	
	AVG	Available	7.13	7.19	6.92	6.68	6.52	6.42	6.33	6.06	6.52	6.97	7.26	7.56	7.22	6.80	6.41	6.20	6.20	5.91	6.56	6.73	0.00%
NEWBURGH **	MAX	9.12	11.53	8.78	8.47	7.96	8.14	8.10	8.72	8.96	8.67	8.87	8.57	8.54	7.84	7.93	7.83	7.37	7.38	7.30	7.37	9.39	
MP 776.1	MIN	8.04	8.03	7.83	7.59	7.19	7.27	7.22	7.12	7.39	7.52	7.82	7.64	7.57	7.33	7.41	6.92	6.95	6.65	6.56	7.09	7.31	
	AVG	8.51	9.33	8.32	7.94	7.53	7.64	7.55	7.63	7.95	8.02	8.14	7.95	7.89	7.56	7.63	7.41	7.17	6.93	6.92	7.24	8.03	0.00%
JOHN T. MYERS**	MAX	7.91	9.24	8.50	7.93	7.71	8.57	7.59	7.65	7.69	7.58	7.64	7.64	7.65	7.43	7.38	7.07	7.03	6.88	7.15	7.26	8.69	
MP 846.0	MIN	7.33	7.54	7.39	7.12	6.96	7.47	6.82	6.41	6.61	6.57	6.76	6.88	6.81	6.95	7.02	6.83	6.76	6.49	6.67	7.06	7.10	
	AVG	7.67	8.13	7.97	7.54	7.35	7.90	7.21	6.86	7.08	7.09	7.12	7.16	7.21	7.23	7.26	6.99	6.89	6.73	6.87	7.16	7.19	0.00%
SMITHLAND**	MAX	5.12	5.45	5.92	6.02	4.89	4.77	5.03	5.52	5.02	7.96	7.84	7.77	7.81	7.22	7.21	7.27	7.20	7.05	6.70	6.12	5.76	
MP 919.0	MIN	4.65	4.90	4.86	5.17	4.39	***3.91***	***3.75***	***3.82***	***3.42***	7.84	7.68	7.53	7.42	7.14	7.12	7.07	7.02	6.88	6.14	5.77	5.34	
	AVG	***4.92***	5.19	5.46	5.46	***4.69***	***4.40***	***4.47***	***4.66***	***4.30***	7.92	7.78	7.62	7.59	7.17	7.17	7.13	7.09	6.96	6.40	5.89	5.53	29.00%

*Indicates problem with instrument
**indicates ORSANCO data
***Indicates hydroelectric dam

Appendix E: Temperature Data

2006 Temperature Data

Ohio River Station	# Periods	# Periods Exceeding Period Average	% Periods Exceeding Period Average	# Days Exceeds Max Criteria	% Days Exceed Max Criteria
MONTGOMERY MP 31.7	7	0	0.0%	0	0.0%
HANNIBAL MP 126.4	10	0	0.0%	0	0.0%
RACINE MP 237.5	10	0	0.0%	0	0.0%
KYGER MP 260.0	10	0	0.0%	0	0.0%
GREENUP MP 341.0	10	1	10.0%	0	0.0%
MARKLAND MP 531.5	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
CANNELTON MP 720.7	6	1	16.6%	0	0.0%
NEWBURGH MP 776.1	6	1	16.6%	2	4.0%
JOHN T. MYERS MP 846.0	6	1	16.6%	0	0.0%
SMITHLAND MP 919.0	7	1	14.2%	0	0.0%

2007 Temperature Data

Ohio River Station	# Periods	# Periods Exceeding Period Average	% Periods Exceeding Period Average	# Days Exceeds Max Criteria	% Days Exceed Max Criteria
MONTGOMERY MP 31.7	7	0	0.0%	0	0.0%
HANNIBAL MP 126.4	10	0	0.0%	0	0.0%
RACINE MP 237.5	10	0	0.0%	0	0.0%
KYGER MP 260.0	10	0	0.0%	0	0.0%
GREENUP MP 341.0	10	0	0.0%	0	0.0%
MARKLAND MP 531.5	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
CANNELTON MP 720.7	9	2	22.2%	0	0.0%
NEWBURGH MP 776.1	5	4	80.0%	2	4.5%
JOHN T. MYERS MP 846.0	9	3	33.3%	5	4.6%
SMITHLAND MP 919.0	9	2	22.2%	0	0.0%

Appendix E: Temperature Data

2008 Temperature Data

Ohio River Station	# Periods	# Periods Exceeding Period Average	% Periods Exceeding Period Average	# Days Exceeds Max Criteria	% Days Exceed Max Criteria
MONTGOMERY MP 31.7	8	0	0.0%	0	0.0%
HANNIBAL MP 126.4	10	0	0.0%	0	0.0%
RACINE MP 237.5	10	0	0.0%	0	0.0%
KYGER MP 260.0	10	0	0.0%	0	0.0%
GREENUP MP 341.0	10	0	0.0%	0	0.0%
MARKLAND MP 531.5	10	0	0.0%	0	0.0%
CANNELTON MP 720.7	10	0	0.0%	0	0.0%
NEWBURGH MP 776.1	10	1	10.0%	6	7.4%
JOHN T. MYERS MP 846.0	10	1	10.0%	0	0.0%
SMITHLAND MP 919.0	9	0	0.0%	0	0.0%

2009 Temperature Data

Ohio River Station	# Periods	# Periods Exceeding Period Average	% Periods Exceeding Period Average	# Days Exceeds Max Criteria	% Days Exceed Max Criteria
MONTGOMERY MP 31.7	10	0	0.0%	0	0.0%
HANNIBAL MP 126.4	10	0	0.0%	0	0.0%
RACINE MP 237.5	10	0	0.0%	0	0.0%
KYGER MP 260.0	10	1	10.0%	8	5.7%
GREENUP MP 341.0	10	0	0.0%	0	0.0%
MARKLAND MP 531.5	10	0	0.0%	0	0.0%
CANNELTON MP 720.7	10	0	0.0%	0	0.0%
NEWBURGH MP 776.1	10	0	0.0%	0	0.0%
JOHN T. MYERS MP 846.0	10	0	0.0%	0	0.0%
SMITHLAND MP 919.0	10	0	0.0%	0	0.0%

Appendix E: Temperature Data

2006-2009 Temperature Data

Ohio River Station	# Periods	# Periods Exceeding Period Average	% Periods Exceeding Period Average	# Days Exceeds Max Criteria	% Days Exceed Max Criteria
MONTGOMERY MP 31.7	32	0	0.0%	0	0.0%
HANNIBAL MP 126.4	40	0	0.0%	0	0.0%
RACINE MP 237.5	40	0	0.0%	0	0.0%
KYGER MP 260.0	40	1	2.5%	8	1.6%
GREENUP MP 341.0	40	1	2.5%	0	0.0%
MARKLAND MP 531.5	20	0	0.0%	0	0.0%
CANNELTON MP 720.7	35	3	8.5%	0	0.0%
NEWBURGH MP 776.1	31	6	18.8%	10	3.0%
JOHN T. MYERS MP 846.0	35	5	14.2%	5	1.3%
SMITHLAND MP 919.0	35	3	8.5%	0	0.0%

Appendix E: Daily Temperature Readings

Temperature Data May 2006

CALENDAR DAY JULIAN DAY		2-May 122	3-May 123	4-May 124	5-May 125	8-May 128	9-May 129	10-May 130	11-May 131	12-May 132	15-May 135	16-May 136	17-May 137	18-May 138	19-May 139	22-May 142	23-May 143	24-May 144	25-May 145	26-May 146	30-May 150	31-May 151	May 1-15 Period Avg	May 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY MP 31.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0	No Data Available
HANNIBAL*** MP 126.4 UPSTREAM	MAX MIN AVG	60.67 59.50 60.31	60.67 60.31 60.49	61.02 60.31 60.67	61.84 60.67 61.46	62.65 62.31 62.44	62.89 62.19 62.56	63.59 62.19 63.15	63.95 63.12 63.59	63.95 63.48 63.75	64.42 63.72 64.14	* * *	63.48 62.42 62.87	62.78 62.08 62.59	61.95 60.78 61.48	58.91 58.10 58.52	58.80 57.97 58.51	59.38 58.21 58.94	59.97 59.38 59.75	60.91 59.97 60.59	65.12 64.06 64.82	66.52 64.89 65.99	62.26	61.41	0	0.00%
RACINE*** MP 237.5	MAX MIN AVG	65.20 64.40 64.83	65.00 64.60 64.76	65.00 64.60 64.76	65.60 64.70 65.33	66.00 65.60 65.80	No Data Available	66.60 65.80 66.18	67.00 66.40 66.74	67.10 66.60 66.83	66.50 66.00 66.31	66.00 65.30 65.66	65.60 62.30 63.25	63.10 62.30 62.84	63.40 62.90 63.16	61.30 60.80 61.09	61.00 60.70 60.81	61.10 60.60 60.80	61.60 60.60 61.18	62.40 61.10 61.95	65.80 64.80 65.48	67.00 65.60 66.54	65.73	62.98	0	0.00%
KYGER MP 260.0	MAX MIN AVG	60.20 59.60 59.94	60.00 59.50 59.72	60.00 59.40 59.74	60.50 59.40 60.08	60.60 59.90 60.22	60.80 59.90 60.41	61.20 60.00 60.79	61.40 60.80 61.18	61.00 60.10 60.69	60.50 59.50 60.07	60.10 59.60 59.91	61.60 59.60 61.15	61.90 61.40 61.73	62.30 61.60 61.95	61.10 60.00 60.71	61.20 60.00 60.69	61.10 52.00 60.38	61.10 60.40 60.90	61.80 61.10 61.58	64.40 63.50 64.19	65.40 64.40 65.16	60.28	61.67	0	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX MIN AVG	66.40 64.60 65.61	66.60 64.70 65.48	66.40 64.80 65.70	67.00 65.60 66.47	66.20 65.60 65.80	66.80 65.40 65.94	67.30 65.50 66.38	66.80 66.10 66.55	67.00 66.60 66.71	66.10 65.50 65.72	65.60 64.40 64.76	65.80 63.70 64.24	64.70 63.70 64.19	65.00 63.70 64.38	65.30 64.20 64.85	65.20 63.80 64.57	66.10 63.80 64.97	65.50 63.80 65.01	66.70 65.20 65.98	69.50 68.30 68.84	70.70 68.60 69.95	66.04	65.61	0	0.00%
MARKLAND*** MP 531.5	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
CANNELTON MP 720.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
NEWBURGH MP 776.1	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
JOHN T. MYERS MP 846.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
SMITHLAND MP 919.0	MAX MIN AVG	69.39 66.29 67.76	70.23 66.00 68.21	68.76 67.10 68.06	69.62 67.50 68.73	64.71 62.74 63.95	69.13 65.01 67.21	66.94 66.33 66.69	69.08 66.69 68.08	66.02 62.91 64.35	63.03 60.82 62.04	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	66.51	No Data Available	0	0.00%

Period Average for May 1-15 is 68°F and the Max is 73°F
Period Average for May 16-31 is 75°F and the Max is 80°F

Appendix E: Daily Temperature Readings

Temperature Data June 2006

CALENDAR DAY JULIAN DAY		1-Jun 152	2-Jun 153	5-Jun 156	12-Jun 163	13-Jun 164	14-Jun 165	15-Jun 166	16-Jun 167	19-Jun 170	20-Jun 171	21-Jun 172	22-Jun 173	23-Jun 174	26-Jun 177	27-Jun 178	28-Jun 179	29-Jun 180	30-Jun 181	June 1-15 Period Avg	June 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	70.52	70.86	70.27	70.39	70.20	69.85	71.58	71.17	73.67	74.93	75.47	75.52	75.58	74.79	75.40	75.85	75.96	74.43			0	0.00%
MP 31.7	MIN	69.04	69.78	69.87	69.51	69.31	69.03	69.30	69.78	72.34	73.83	74.17	74.88	75.04	74.35	74.68	74.91	75.07	73.90				
	AVG	69.94	70.18	70.00	69.97	69.55	69.21	70.03	70.20	73.18	74.33	74.73	75.13	75.26	74.52	75.12	75.11	75.47	74.11	69.84	74.29		
HANNIBAL***	MAX	68.04	68.74	73.65	72.25	72.48	72.95	73.42	73.89	76.12	76.46	77.63	77.86	78.80	77.63	77.86	77.52	77.29	77.05			0	0.00%
MP 126.4	MIN	66.06	68.04	69.67	71.55	71.55	71.91	72.37	72.95	75.18	75.88	76.23	77.52	77.63	77.16	76.93	76.93	76.23	76.23				
UPSTREAM	AVG	67.28	68.50	70.25	71.90	72.10	72.57	73.12	73.59	75.79	76.16	77.24	77.71	78.30	77.34	77.37	77.15	76.80	76.69	70.82	76.74		
RACINE***	MAX	67.80	70.90	70.30	70.70	71.20	71.90	71.80	72.20	73.70	No	No	76.23	76.35	No	77.14	76.63	76.92	76.84			0	0.00%
MP 237.5	MIN	66.60	67.40	69.40	70.30	70.30	70.20	71.20	71.40	72.70	Data	Data	75.35	75.72	Data	76.73	76.31	76.23	75.92				
	AVG	67.49	68.63	70.04	70.55	70.79	71.08	71.52	71.81	73.23	Available	Available	75.66	76.00	Available	76.93	76.50	76.61	76.40	70.01	75.39		
KYGER	MAX	66.60	67.40	68.20	67.70	68.30	68.50	69.20	69.80	70.90	71.40	71.60	71.60	72.60	72.20	72.00	72.60	72.10	72.10			0	9.00%
MP 260.0	MIN	65.60	66.50	67.10	67.20	67.20	67.70	68.20	68.40	70.10	70.40	70.70	70.90	71.30	71.90	71.50	71.50	56.00	71.20				
	AVG	66.32	67.07	67.79	67.47	67.85	68.17	68.70	69.13	70.50	70.85	71.18	71.35	71.87	71.99	71.81	72.10	71.07	71.67	67.62	77.58		
GREENUP***	MAX	72.70	73.40	73.30	73.60	74.00	73.40	74.40	74.50	77.60	78.60	78.50	79.20	81.00	79.40	79.00	78.80	78.60	78.00			0	0.00%
MP 341.0	MIN	70.00	71.40	71.90	72.80	70.80	72.70	72.80	73.60	76.00	76.30	76.60	77.40	78.50	78.80	77.80	77.80	73.80	74.50				
UPSTREAM	AVG	71.57	72.42	72.63	73.23	73.24	72.98	73.71	74.01	76.86	76.95	77.75	78.57	79.46	79.10	78.48	78.31	77.68	76.25	72.83	77.58		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
SMITHLAND	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

Period Average for June 1-15 is 80°F and the Max is 87°F

Period Average for June 16-30 is 83°F and the Max is 87°F

Appendix E: Daily Temperature Readings

Temperature Data July 2006

CALENDAR DAY JULIAN DAY		3-Jul 184	5-Jul 186	6-Jul 187	7-Jul 188	10-Jul 191	11-Jul 192	12-Jul 193	13-Jul 194	14-Jul 195	17-Jul 198	18-Jul 199	19-Jul 200	20-Jul 201	21-Jul 202	24-Jul 205	25-Jul 206	26-Jul 207	27-Jul 208	31-Jul 212	July 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	73.13	74.35	74.62	74.28	74.26	74.77	75.13	74.03	75.70	77.88	78.57	80.17	78.87	79.86	77.38	78.35	80.24	80.98	79.86		0	0.00%
MP 31.7	MIN	72.68	73.72	73.90	73.72	73.71	73.60	73.83	73.29	73.78	77.00	77.43	78.21	78.28	79.12	76.46	77.92	79.72	80.31	79.02			
	AVG	72.81	73.97	74.32	73.90	73.86	74.04	74.18	73.61	74.25	77.50	77.78	78.62	78.64	79.39	77.16	78.23	79.96	80.59	79.29	76.43		
HANNIBAL***	MAX	76.23	76.59	76.35	75.76	76.23	76.82	77.40	77.76	77.76	46.78	80.44	81.73	82.78	83.01	84.07	83.71	84.07	46.83	83.14		0	0.00%
MP 126.4	MIN	75.88	76.12	75.06	74.82	75.76	75.76	76.82	77.16	77.29	46.18	78.57	80.44	81.14	82.44	82.90	82.90	82.90	44.91	81.97			
UPSTREAM	AVG	76.08	76.36	75.90	75.14	76.00	76.33	77.19	77.47	77.50	46.47	79.65	81.24	82.25	82.77	83.51	83.36	83.59	45.50	82.53	75.73		
RACINE***	MAX	77.30	77.92	77.53	76.25	75.04	75.86	75.94	76.33	76.61	No	77.85	79.22	80.42	81.32	81.13	81.75	81.93	81.60	81.60		0	0.00%
MP 237.5	MIN	76.51	77.20	76.43	75.72	74.21	74.60	75.51	75.94	76.10	Data	77.00	77.85	79.02	79.99	80.38	80.81	80.99	81.30	80.60			
	AVG	77.02	77.60	77.16	76.07	74.70	75.25	75.72	76.17	76.35	Available	77.37	78.71	79.93	80.82	80.79	81.29	81.47	81.45	81.11	78.27		
KYGER	MAX	72.70	73.00	72.50	71.90	70.60	71.20	71.40	71.80	72.00	73.00	73.60	73.80	74.40	75.50	75.20	80.80	80.90	81.10	81.00		0	0.00%
MP 260.0	MIN	72.00	47.30	47.30	70.90	70.00	70.20	70.80	71.40	71.50	72.20	72.40	57.10	68.30	74.50	74.60	74.80	79.90	80.50	80.00			
	AVG	72.36	70.92	70.00	71.46	70.26	70.85	71.19	71.56	71.71	72.58	73.09	72.91	74.00	75.23	74.97	79.49	80.52	80.85	80.51	73.92		
GREENUP***	MAX	76.70	79.30	79.00	77.90	78.10	79.10	78.00	79.00	78.40	79.30	79.10	80.20	80.50	81.20	81.50	82.00	82.70	83.20	83.90		0	0.00%
MP 341.0	MIN	75.00	77.80	77.20	76.90	77.20	77.30	77.30	77.80	77.90	78.20	78.20	78.50	78.80	79.30	79.90	79.90	81.10	81.80	82.70			
UPSTREAM	AVG	76.01	78.67	78.20	77.49	77.63	77.96	77.66	78.30	78.27	78.68	78.58	79.19	79.91	80.30	80.58	81.06	82.16	82.65	83.20	79.29		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	No	No	No	No	No	No	79.20	78.84	79.54	81.45	81.28	82.26	82.87	83.03	82.15	82.42	82.36	82.42	83.53		0	0.00%
MP 720.7	MIN	Data	Data	Data	Data	Data	Data	78.98	78.62	79.00	81.07	81.18	82.17	82.56	82.60	81.68	82.11	81.84	82.31	82.99			
	AVG	Available	Available	Available	Available	Available	Available	79.11	78.73	79.16	81.35	81.23	82.23	82.72	82.84	81.92	82.21	82.09	82.39	83.20	81.47		
NEWBURGH	MAX	No	No	No	No	No	80.83	80.38	79.63	81.81	81.48	82.60	82.26	83.43	83.80	82.87	84.00	84.07	84.22	86.81		0	0.00%
MP 776.1	MIN	Data	Data	Data	Data	Data	80.33	79.66	78.57	79.56	81.03	82.26	82.02	83.10	83.14	82.31	82.67	83.46	83.55	84.11			
	AVG	Available	Available	Available	Available	Available	80.61	79.96	78.95	79.98	81.21	82.42	82.12	83.24	83.53	82.51	83.28	83.67	83.74	85.03	82.16		
JOHN T. MYERS	MAX	No	No	No	No	No	No	80.60	80.42	80.78	No	No	83.44	84.24	83.70	82.87	83.08	83.05	83.75	84.47		0	0.00%
MP 846.0	MIN	Data	Data	Data	Data	Data	Data	80.33	80.26	80.62	Data	Data	82.87	83.84	83.44	82.62	82.53	82.85	83.66	83.95			
	AVG	Available	Available	Available	Available	Available	Available	80.46	80.35	80.72	Available	Available	83.20	84.12	83.53	82.76	82.80	82.91	83.70	84.17	82.45		
SMITHLAND	MAX	No	No	No	No	No	No	No	80.55	81.03	82.67	83.70	84.38	84.65	85.24	83.89	83.75	83.59	83.64	83.95		0	0.00%
MP 919.0	MIN	Data	Data	Data	Data	Data	Data	Data	80.28	80.71	82.47	83.21	83.64	84.07	85.06	83.19	82.94	83.32	83.28	83.57			
	AVG	Available	Available	Available	Available	Available	Available	Available	80.44	80.86	82.60	83.42	84.00	84.36	85.18	83.58	83.41	83.48	83.49	83.80	83.22		

Period Average for July 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data August 2006

CALENDAR DAY JULIAN DAY		1-Aug 213	2-Aug 214	3-Aug 215	4-Aug 216	7-Aug 219	8-Aug 220	9-Aug 221	10-Aug 222	14-Aug 226	15-Aug 227	16-Aug 228	17-Aug 229	21-Aug 233	22-Aug 234	23-Aug 235	24-Aug 236	25-Aug 237	28-Aug 240	29-Aug 241	31-Aug 242	31-Aug 243	Aug 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	79.18	79.77	79.14	79.63	79.05	79.47	81.82	80.94	80.22	79.86	80.83	81.30	80.64	81.28	80.53	80.04	79.14	79.30	78.78	78.21	77.65		0	0.00%
MP 31.7	MIN	78.73	78.60	78.64	79.12	78.39	78.51	79.93	80.01	79.59	79.50	79.50	79.57	79.57	79.61	79.23	79.39	78.60	78.62	78.30	77.79	77.04			
	AVG	78.91	79.42	78.90	79.48	78.57	79.17	80.82	80.46	79.96	79.71	80.10	80.42	80.14	80.07	79.88	79.73	78.83	78.92	78.52	77.98	77.43	79.40		
HANNIBAL***	MAX	84.78	85.01	85.59	84.54	46.08	84.31	84.65	84.54	84.42	84.31	84.65	84.42	84.54	84.18	84.18	84.07	84.18	84.07	84.78	85.12	84.31		0	0.00%
MP 126.4	MIN	82.90	84.54	84.54	83.95	44.80	83.61	83.61	83.61	83.71	83.61	83.84	83.71	83.61	83.37	83.37	83.48	83.37	83.71	83.71	83.61	83.61			
UPSTREAM	AVG	84.13	84.88	85.19	84.24	45.33	84.01	84.16	84.06	84.01	83.92	84.24	84.16	84.07	83.83	83.73	83.74	83.68	83.87	84.49	84.55	83.95	82.30		
RACINE***	MAX	82.36	83.54	83.92	83.92	No	No	84.74	84.62	83.70	84.23	83.25	83.42	No	No	81.93	81.93	81.81	82.03	82.03	82.03	81.72		0	0.00%
MP 237.5	MIN	81.11	82.32	83.39	83.39	Data	Data	84.31	84.11	83.21	83.25	82.70	82.60	Data	Data	81.70	81.70	81.40	81.68	81.79	81.70	81.50			
	AVG	81.87	83.08	83.68	83.68	Available	Available	84.53	84.34	83.41	83.54	82.96	82.98	Available	Available	81.82	81.78	81.61	81.88	81.93	81.85	81.63	82.74		
KYGER	MAX	81.50	82.10	82.80	83.20	83.30	83.60	83.40	85.30	83.00	82.20	82.20	82.60	82.30	81.80	81.50	82.00	81.80	81.50	82.00	81.40	80.50		0	0.00%
MP 260.0	MIN	80.30	80.90	82.00	82.40	82.40	82.40	82.70	82.70	81.60	81.60	81.70	81.60	81.10	80.80	80.80	80.60	80.90	81.00	81.20	80.30	80.00			
	AVG	80.92	81.64	82.47	82.76	82.78	83.23	83.10	83.43	82.19	81.93	82.00	82.12	81.96	81.36	81.09	81.22	81.37	81.27	81.54	80.91	80.32	81.89		
GREENUP***	MAX	88.20	85.70	85.80	86.30	86.90	86.60	86.50	86.80	85.60	85.20	84.40	83.80	83.20	84.10	83.40	84.20	84.60	84.10	83.60	84.00	*		0	0.00%
MP 341.0	MIN	83.00	84.10	84.50	84.60	84.80	85.60	85.30	85.30	84.00	84.00	83.30	82.80	82.10	82.40	82.20	82.20	82.40	82.70	82.90	82.90	*			
UPSTREAM	AVG	84.45	84.78	85.05	85.42	85.93	86.04	85.86	85.71	84.56	84.44	83.93	83.38	82.70	83.12	82.76	83.03	83.24	83.28	83.21	83.44	*	***84.22***		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	84.13	84.61	85.26	85.46	87.13	86.81	86.00	85.75	85.50	84.60	84.54	85.46	84.63	84.54	84.72	85.78	84.99	84.47	84.02	84.04	83.62		0	0.00%
MP 720.7	MIN	83.86	84.22	84.63	85.19	85.73	86.05	85.62	85.42	84.42	84.20	83.97	84.04	84.07	84.04	83.71	83.75	83.70	84.11	83.89	83.71	83.01			
	AVG	83.96	84.44	84.93	85.33	86.54	86.53	85.82	85.51	84.85	84.33	84.24	84.49	84.33	84.23	84.06	84.28	84.13	84.24	83.94	83.88	83.35	***84.64***		
NEWBURGH	MAX	88.95	86.88	86.63	88.34	88.70	89.55	88.30	88.48	88.97	87.44	86.86	86.72	86.79	87.33	87.26	89.29	88.20	88.00	88.27	86.11	85.28		**2**	9.00%
MP 776.1	MIN	85.62	85.75	86.00	86.52	86.00	87.80	87.08	86.76	85.66	85.37	84.85	85.37	85.12	85.69	85.14	85.15	85.26	86.50	86.07	85.77	84.13			
	AVG	86.50	86.26	86.35	87.04	87.86	88.84	87.72	87.44	86.64	86.30	85.57	86.25	85.68	86.63	86.06	86.38	86.49	87.27	86.79	85.93	84.82	***86.61***		
JOHN T. MYERS	MAX	84.88	85.64	86.25	No	87.37	88.32	86.76	87.42	86.76	85.51	85.55	85.64	84.88	85.30	85.01	86.20	85.57	85.55	84.96	84.09	83.55		0	0.00%
MP 846.0	MIN	84.56	85.21	85.77	Data	86.47	86.79	86.38	86.45	85.37	84.81	84.43	84.42	84.38	84.45	84.09	84.25	84.38	84.13	84.04	84.00	83.34			
	AVG	84.71	85.51	86.01	Available	86.77	87.25	86.53	86.81	85.85	85.06	85.05	84.78	84.59	84.71	84.48	84.83	84.77	84.52	84.42	84.05	83.47	***85.21***		
SMITHLAND	MAX	84.43	85.14	86.02	86.63	87.66	88.16	No	88.50	86.85	85.91	85.59	85.28	85.14	85.14	84.42	85.05	84.74	84.18	84.06	83.52	82.94		0	0.00%
MP 919.0	MIN	83.84	84.76	85.66	86.43	86.83	87.44	Data	87.44	86.22	85.32	84.94	84.34	84.47	84.20	83.77	83.79	83.75	83.41	83.55	82.85	82.74			
	AVG	84.15	84.94	85.89	86.53	87.14	87.78	Available	87.77	86.42	85.64	85.20	84.70	84.78	84.59	84.13	84.33	84.16	83.73	83.79	83.27	82.85	***85.09***		

Period Average for August 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data September 2006

CALENDAR DAY JULIAN DAY		1-Sep 244	5-Sep 248	6-Sep 249	7-Sep 250	8-Sep 251	11-Sep 254	12-Sep 255	13-Sep 256	14-Sep 257	15-Sep 258	18-Sep 261	19-Sep 262	20-Sep 263	21-Sep 264	22-Sep 265	25-Sep 268	26-Sep 269	27-Sep 270	28-Sep 271	29-Sep 272	Sept 1-15 Period Avg	Sept 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	76.93	68.81	68.11	66.67	66.45	68.05	68.88	68.41	67.73	68.40	65.77	66.31	66.85	66.94	66.13	67.14	67.33	67.62	67.62	66.90			0	0.00%
MP 31.7	MIN	75.90	68.00	67.15	66.06	65.98	67.53	68.18	68.11	67.30	67.80	65.16	65.84	66.40	66.11	65.59	66.83	66.94	67.15	66.96	65.62				
	AVG	76.41	68.36	67.68	66.23	66.22	67.70	68.35	68.21	67.61	68.10	65.36	66.08	66.71	66.60	65.84	67.06	67.07	67.31	67.28	66.34	68.49	66.57		
HANNIBAL***	MAX	83.95	75.88	75.06	74.82	73.31	72.25	72.25	71.44	71.20	70.03	69.67	70.61	71.08	70.14	69.80	68.50	68.40	68.63	68.74	68.50			0	0.00%
MP 126.4	MIN	82.44	75.06	74.71	73.18	72.48	71.31	71.31	70.84	69.91	69.80	69.44	69.57	70.14	69.10	68.97	67.80	67.69	68.04	68.16	67.80				
UPSTREAM	AVG	82.94	75.58	74.94	74.16	72.94	71.95	71.81	71.18	70.65	69.92	69.52	70.27	70.71	69.89	69.32	68.22	68.20	68.39	68.48	68.11	73.61	69.11		
RACINE***	MAX	81.60	77.75	77.61	77.61	77.33	No	76.63	76.12	75.61	72.36	72.23	72.46	72.11	71.50	71.21	69.95	70.03	70.16	69.85	69.32			0	0.00%
MP 237.5	MIN	80.01	76.92	77.00	77.00	76.02	Data	75.72	75.51	72.11	71.83	71.21	71.40	71.50	70.24	70.18	69.52	69.52	69.02	69.02	68.53				
	AVG	81.05	77.39	77.29	77.29	76.72	Available	76.16	75.90	73.86	72.19	71.81	71.97	71.80	71.08	70.76	69.78	69.75	69.66	69.54	68.99	76.43	70.51		
KYGER	MAX	80.00	76.80	76.30	76.90	76.90	76.40	76.40	76.10	75.40	73.00	72.20	72.80	72.70	71.90	71.60	71.30	70.80	70.80	71.20	72.40			0	0.00%
MP 260.0	MIN	79.00	76.00	76.10	76.20	76.30	75.60	75.50	75.40	73.00	72.00	71.60	72.10	71.80	71.00	70.90	70.30	70.10	70.10	70.30	70.00				
	AVG	79.57	76.56	76.20	76.63	76.61	76.08	75.99	75.86	74.63	72.48	71.99	72.53	72.37	71.48	71.34	70.89	70.42	70.47	70.83	70.83	76.06	71.32		
GREENUP***	MAX	82.70	77.80	77.60	78.40	77.90	79.60	78.60	78.10	77.80	76.00	74.30	73.90	73.60	72.80	72.70	69.70	70.20	69.80	70.60	69.80			0	0.00%
MP 341.0	MIN	75.60	76.80	77.20	76.70	76.70	77.90	77.80	77.80	76.00	75.10	73.20	73.10	72.80	71.90	71.90	68.80	68.90	69.20	69.70	69.10				
UPSTREAM	AVG	81.81	77.38	77.39	77.42	77.19	78.31	78.13	77.99	77.05	75.60	73.59	73.57	73.13	72.46	72.27	69.10	69.64	69.56	70.23	69.51	77.83	71.31		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	82.90	80.22	79.57	79.16	79.09	78.73	78.55	78.01	77.27	76.73	75.96	75.85	75.42	74.62	73.67	68.76	69.33	68.70	68.38	67.93			0	0.00%
MP 720.7	MIN	82.54	79.57	78.82	78.78	78.53	78.42	78.40	77.74	76.86	75.69	75.65	75.34	74.86	73.85	72.90	68.16	69.01	68.05	68.05	67.51				
	AVG	82.78	79.89	79.18	78.89	78.74	78.54	78.49	77.89	77.04	76.25	75.75	75.60	75.15	74.28	73.36	68.36	69.20	68.34	68.19	67.70	78.77	71.59		
NEWBURGH	MAX	84.07	82.45	80.74	80.69	80.96	80.80	79.75	78.35	76.66	76.89	77.16	76.46	75.34	76.62	No	70.74	70.74	No	No	No			0	0.00%
MP 776.1	MIN	83.39	81.37	80.49	80.19	80.80	80.73	79.41	77.90	76.21	76.86	76.80	76.19	74.88	74.34	Data	70.56	69.13	Data	Data	Data				
	AVG	83.72	81.94	80.63	80.42	80.90	80.77	79.60	78.13	76.40	76.87	76.94	76.27	75.14	74.84	Available	70.67	69.96	Available	Available	Available	79.94	73.97		
JOHN T. MYERS	MAX	83.17	80.19	79.38	79.32	79.90	80.76	79.90	78.58	77.63	76.41	77.40	76.41	75.29	74.53	73.53	71.35	70.54	69.37	69.48	68.77			0	0.00%
MP 846.0	MIN	83.05	79.77	79.14	79.12	79.70	80.10	79.43	78.04	76.51	75.52	77.07	75.45	74.86	73.74	73.18	70.66	69.64	68.65	69.40	67.86				
	AVG	83.12	79.99	79.26	79.25	79.77	80.39	79.69	78.40	77.14	75.93	77.20	75.92	75.14	74.08	73.42	70.94	70.20	68.93	69.45	68.33	79.29	72.36		
SMITHLAND	MAX	82.78	79.70	79.32	79.29	78.73	79.25	79.25	79.14	78.73	77.61	76.30	76.12	75.92	74.70	73.89	70.56	70.57	69.93	69.24	68.76			0	0.00%
MP 919.0	MIN	81.88	79.05	78.57	78.42	78.24	79.12	79.00	78.71	78.08	76.77	76.21	75.78	74.80	73.99	73.02	70.39	69.96	69.30	68.68	68.38				
	AVG	82.39	79.41	78.99	78.76	78.49	79.18	79.14	78.99	78.42	77.17	76.26	76.00	75.39	74.44	73.46	70.49	70.22	69.67	68.90	68.58	79.09	72.34		

Period Average for September 1-15 is 84°F and the Max is 87°F
Period Average for September 16-30 is 82°F and the Max is 86°F

Appendix E: Daily Temperature Readings

Temperature Data October 2006

CALENDAR DAY JULIAN DAY		2-Oct 275	3-Oct 276	4-Oct 277	5-Oct 278	6-Oct 279	9-Oct 282	10-Oct 283	11-Oct 284	12-Oct 285	13-Oct 286	16-Oct 289	17-Oct 290	18-Oct 291	19-Oct 292	20-Oct 293	23-Oct 296	24-Oct 297	25-Oct 298	26-Oct 299	27-Oct 300	30-Oct 303	31-Oct 304	Oct 1-15 Period Avg	Oct 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	62.29	62.64	62.65	62.80	62.04	62.73	63.18	63.07	63.34	No	No	No	No	No	No	No	No	No	No	No	No	No		No	0	0.00%
MP 31.7	MIN	61.66	62.29	62.35	62.56	61.29	61.84	61.90	62.80	62.94	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data		Data		
	AVG	61.85	62.50	62.55	62.71	61.76	62.33	62.77	62.88	63.10	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	62.49	Available		
HANNIBAL***	MAX	66.63	66.87	66.76	66.29	64.99	63.48	63.48	63.82	63.72	63.72	59.85	59.50	59.04	58.44	56.46	52.59	52.36	51.55	50.61	49.68	48.15	46.98			0	0.00%
MP 126.4	MIN	65.93	66.40	65.70	64.99	63.82	62.42	62.65	62.78	63.48	61.48	59.04	58.68	58.44	56.70	54.00	52.12	51.55	50.49	49.44	49.32	46.63	46.27				
UPSTREAM	AVG	66.46	66.69	66.34	65.78	64.54	62.92	63.15	63.47	63.62	62.70	59.43	59.17	58.77	57.81	55.33	52.40	51.95	50.97	50.14	49.47	47.51	46.63	64.57	53.30		
RACINE***	MAX	No	No	No	No	No	No	No	No	No	No	62.86	62.33	No	62.13	62.05	59.46	No	57.14	56.96	56.63	No	55.76	No		0	0.00%
MP 237.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	62.13	62.03	Data	61.62	62.11	58.42	Data	56.75	56.43	56.26	Data	54.94	Data			
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	62.53	62.20	Available	61.89	62.27	58.90	Available	56.97	56.78	56.46	Available	55.37	Available	59.26		
KYGER	MAX	69.20	68.80	68.90	69.60	69.10	67.80	67.80	68.30	68.00	67.10	64.00	63.70	63.40	62.90	62.40	59.60	58.40	57.50	59.30	59.30	57.60	56.40			0	0.00%
MP 260.0	MIN	68.40	68.30	68.30	69.00	68.00	66.80	67.20	67.70	67.20	65.40	63.50	63.20	62.80	62.00	62.20	58.20	57.40	56.90	56.90	57.20	55.70	55.10				
	AVG	68.85	68.55	68.71	69.29	68.50	67.38	67.56	68.07	67.69	66.25	63.75	63.49	63.03	62.50	62.32	58.99	57.90	57.27	57.68	57.45	56.15	55.85	68.08	59.70		
GREENUP***	MAX	68.90	69.10	69.50	70.60	69.10	68.20	68.30	68.30	68.40	67.20	63.40	62.50	62.50	62.40	61.90	59.40	57.20	56.30	55.90	55.30	55.70	53.50			0	0.00%
MP 341.0	MIN	65.60	68.30	68.60	69.10	68.20	67.10	67.10	67.10	66.00	65.20	62.60	62.30	61.90	61.90	61.00	57.40	56.30	55.10	55.00	55.00	53.30	52.70				
UPSTREAM	AVG	68.30	68.86	69.21	69.70	68.81	67.59	67.55	67.85	67.41	66.05	63.04	62.38	62.24	62.16	61.50	58.46	56.80	55.28	55.44	55.22	53.98	53.07	68.13	58.30		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	67.17	66.90	67.15	67.66	67.28	66.58	66.94	67.46	67.19	66.06	64.06	62.64	61.81	61.43	61.32	58.64	57.61	56.95	56.16	55.83	54.19	No			0	0.00%
MP 720.7	MIN	66.49	66.38	66.87	67.41	67.06	66.45	66.60	67.10	66.58	65.62	63.66	62.11	61.27	61.05	60.87	58.10	57.20	56.34	55.92	55.53	53.78	Data				
	AVG	66.92	66.64	67.06	67.55	67.19	66.52	66.76	67.30	66.96	65.84	63.87	62.30	61.49	61.21	61.10	58.37	57.40	56.65	56.06	55.66	54.01	Available	66.87	58.92		
NEWBURGH	MAX	68.11	69.04	69.01	69.33	68.50	68.68	68.52	68.31	67.77	66.65	64.56	63.82	63.19	62.91	61.11	58.95	58.55	No	No	No	No	No			0	0.00%
MP 776.1	MIN	67.87	68.56	68.49	68.76	68.32	67.93	67.78	68.07	66.79	65.62	64.26	63.34	62.74	62.33	60.82	58.48	57.94	Data	Data	Data	Data	Data				
	AVG	67.98	68.89	68.67	68.97	68.43	68.37	68.20	68.20	67.40	66.07	64.43	63.53	62.98	62.70	60.95	58.63	58.26	Available	Available	Available	Available	Available	68.12	60.70		
JOHN T. MYERS	MAX	67.17	67.66	68.31	69.19	68.76	67.26	68.40	68.68	68.09	66.09	63.01	62.02	62.80	63.36	62.47	60.24	58.44	No	No	No	No	No			0	0.00%
MP 846.0	MIN	67.01	67.55	68.20	69.01	68.04	66.96	68.00	68.27	66.81	65.37	62.83	61.83	62.55	63.14	61.70	59.68	57.69	Data	Data	Data	Data	Data				
	AVG	67.09	67.60	68.25	69.09	68.45	67.08	68.20	68.49	67.54	65.68	62.93	61.92	62.73	63.28	62.07	59.97	57.96	Available	Available	Available	Available	Available	66.84	61.32		
SMITHLAND	MAX	67.05	67.28	67.87	68.67	68.56	67.51	67.60	67.55	67.69	67.19	63.09	61.93	61.56	61.72	61.74	59.41	58.86	57.47	56.77	56.14	54.64	54.68			0	0.00%
MP 919.0	MIN	66.61	67.01	67.77	68.58	68.38	67.03	67.17	67.41	67.12	66.42	62.51	61.72	61.27	61.54	61.38	59.23	58.30	56.88	56.48	55.98	54.52	54.63				
	AVG	66.83	67.17	67.82	68.62	68.48	67.28	67.39	67.47	67.38	66.85	62.80	61.79	61.41	61.61	61.61	59.36	58.59	57.08	56.63	56.03	54.57	54.65	67.53	58.84		

Period Average for October 1-15 is 77°F and the Max is 82°F
Period Average for October 16-31 is 72°F and the Max is 77°F

Appendix E: Daily Temperature Readings

Temperature Data May 2007

CALENDAR DAY JULIAN DAY		1-May 121	2-May 122	3-May 123	7-May 127	8-May 128	9-May 129	10-May 130	11-May 131	14-May 134	15-May 135	16-May 136	17-May 137	18-May 138	21-May 141	22-May 142	23-May 143	24-May 144	25-May 145	29-May 149	30-May 150	31-May 151	May 1-15 Period Avg	May 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY MP 31.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
HANNIBAL*** MP 126.4 UPSTREAM	MAX MIN AVG	55.99 54.46 55.49	57.74 55.87 57.16	58.57 57.51 58.05	60.31 59.74 60.09	60.55 59.97 60.33	61.48 60.55 61.18	63.12 61.61 62.77	63.95 63.01 63.53	66.16 64.53 65.63	66.29 65.82 66.06	67.46 66.06 67.00	67.93 66.87 67.38	67.69 66.87 67.18	66.16 64.99 65.65	67.23 66.16 66.90	67.80 66.87 67.45	69.21 67.46 68.73	63.12 61.61 62.77	72.72 71.78 72.49	74.35 72.84 73.84	74.95 74.12 74.65	61.03	68.55	0	0.00%
RACINE*** MP 237.5	MAX MIN AVG	61.28 59.85 60.49	61.74 61.23 61.51	62.15 61.44 61.80	No Data Available	65.55 64.80 65.17	65.86 64.96 65.44	66.63 65.33 66.27	66.86 65.94 66.55	68.73 67.83 68.31	69.32 68.42 68.75	69.73 68.65 69.34	69.85 69.42 69.66	70.03 69.12 69.73	10.24 9.78 10.04	69.28 68.73 69.04	70.24 69.10 69.46	70.87 69.83 70.43	66.63 65.33 66.27	73.66 73.41 73.54	74.72 74.01 74.36	75.21 74.41 74.87	64.92	65.16	0	0.00%
KYGER MP 260.0	MAX MIN AVG	58.90 57.60 58.50	60.00 58.40 59.58	59.80 59.60 59.68	No Data Available	62.40 61.70 62.23	72.00 62.20 67.85	63.20 62.50 63.01	65.40 63.20 64.66	67.10 66.00 66.60	67.60 66.20 66.99	68.60 57.10 67.67	68.00 67.80 67.94	68.00 67.20 67.65	67.80 67.10 67.46	68.20 67.20 67.78	68.60 67.70 68.10	69.10 55.70 68.08	63.20 62.50 63.01	72.50 71.40 71.93	72.70 71.50 72.15	73.70 72.40 73.10	63.23	68.62	0	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX MIN AVG	60.80 59.30 60.44	62.40 60.80 61.97	62.90 62.00 62.65	64.30 63.10 63.83	64.30 63.50 64.05	64.80 63.80 64.45	65.90 64.30 65.37	67.40 65.50 66.47	68.50 67.60 68.03	69.60 67.70 68.84	70.40 68.90 69.81	69.60 68.30 69.05	69.10 68.20 68.61	70.00 67.90 69.10	71.60 68.90 70.04	72.40 69.70 71.05	72.20 70.20 71.32	65.90 64.30 65.37	75.80 73.80 74.85	76.00 74.30 75.21	76.80 74.80 75.72	64.61	70.92	0	0.00%
MARKLAND*** MP 531.5	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
CANNELTON MP 720.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	71.35 71.20 71.28	No Data Available	74.84 73.96 74.34	75.31 74.52 74.81	76.64 75.42 75.93	No Data Available	74.09	0	No Data Available
NEWBURGH MP 776.1	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	74.08 73.11 73.46	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	73.46	0	No Data Available
JOHN T. MYERS MP 846.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	72.79 72.59 72.71	No Data Available	76.44 75.25 75.85	76.59 76.15 76.33	77.45 76.14 76.62	No Data Available	***75.38***	0	No Data Available
SMITHLAND MP 919.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	76.51 74.84 75.85	76.41 75.96 76.16	76.62 76.46 76.55	No Data Available	***76.19***	0	0.00%

Period Average for May 1-15 is 68°F and the Max is 73°F
Period Average for May 16-31 is 75°F and the Max is 80°F

Appendix E: Daily Temperature Readings

Temperature Data June 2007

CALENDAR DAY JULIAN DAY		1-Jun 152	4-Jun 155	5-Jun 156	6-Jun 157	7-Jun 158	8-Jun 159	11-Jun 162	12-Jun 163	13-Jun 164	14-Jun 165	15-Jun 166	18-Jun 169	19-Jun 170	20-Jun 171	21-Jun 172	22-Jun 173	25-Jun 176	26-Jun 177	27-Jun 178	28-Jun 179	29-Jun 180	June 1-15 Period Avg	June 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	No	No	No	No	No	76.33	78.13	78.60	78.98	80.19	77.86	79.72	80.83	79.68	79.70	79.27	77.77	79.11	80.13	80.15	80.20			0	0.00%
MP 31.7	MIN	Data	Data	Data	Data	Data	74.86	76.64	77.36	77.02	77.23	77.16	78.37	79.00	78.98	78.51	78.71	76.93	77.56	78.82	78.82	78.89				
	AVG	Available	Available	Available	Available	Available	75.34	77.69	77.96	77.90	78.45	77.56	78.88	79.88	79.34	79.05	78.92	77.53	78.40	79.41	79.59	79.67	77.48	79.07		
HANNIBAL***	MAX	75.76	77.52	78.10	77.86	77.52	77.63	78.93	79.16	79.39	79.74	80.20	80.67	80.80	81.37	82.54	82.31	81.37	81.84	82.78	82.90	83.14			0	0.00%
MP 126.4	MIN	74.59	76.93	77.05	77.05	76.46	76.69	77.99	78.10	78.33	78.93	79.16	79.86	79.97	80.67	81.27	81.27	81.03	81.03	81.84	82.31	82.31				
UPSTREAM	AVG	75.44	77.17	77.65	77.48	77.01	77.21	78.51	78.71	79.01	79.47	79.79	80.24	80.53	81.10	82.09	81.83	81.24	81.62	82.47	82.62	82.84	77.95	81.66		
RACINE***	MAX	76.02	77.53	77.73	77.24	77.61	77.71	78.43	78.04	No	79.00	79.40	80.10	80.52	80.83	81.30	81.22	80.40	80.71	80.83	81.32	81.52			0	0.00%
MP 237.5	MIN	75.11	77.28	76.88	76.67	76.80	76.90	78.00	77.81	Data	78.18	78.69	79.57	79.81	80.28	80.56	80.67	80.28	80.28	80.46	80.79	81.20				
	AVG	75.55	77.45	77.34	77.02	77.03	77.34	78.13	77.92	Available	78.60	78.97	79.79	80.17	80.55	80.93	80.84	80.37	80.50	80.63	81.04	81.37	77.54	80.47		
KYGER	MAX	73.90	74.40	74.40	74.00	74.40	74.30	75.70	75.20	75.50	76.60	76.10	77.50	77.20	78.10	77.60	79.60	76.80	76.30	77.40	78.40	78.10			0	9.00%
MP 260.0	MIN	58.90	73.70	58.70	73.40	73.20	73.40	72.10	74.40	74.40	75.00	58.10	76.40	56.50	76.70	73.00	73.10	75.50	75.50	76.10	77.30	77.50				
	AVG	72.85	74.13	73.38	73.78	73.85	73.82	74.60	74.73	75.07	75.83	74.61	76.89	75.85	77.68	76.71	76.78	76.21	75.98	76.98	77.69	77.88	74.24	76.66		
GREENUP***	MAX	76.70	76.80	77.00	76.80	76.70	78.00	79.80	78.50	78.80	No	No	No	82.30	82.00	81.10	82.40	No	80.90	81.40	83.40	81.40			0	0.00%
MP 341.0	MIN	75.20	70.00	75.50	75.50	75.50	75.80	77.00	77.90	77.90	Data	Data	Data	79.60	80.00	79.90	80.00	Data	76.60	79.20	79.70	79.90				
UPSTREAM	AVG	75.98	76.05	76.15	76.18	76.17	77.10	78.58	78.21	78.40	Available	Available	Available	80.94	80.79	80.46	81.28	Available	79.09	80.36	81.04	80.61	76.98	80.57		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	75.49	77.23	76.60	77.47	77.45	77.81	78.75	79.00	79.18	79.50	81.00	82.09	81.07	80.17	80.65	82.13	80.78	81.63	82.31	82.22	83.07			0	0.00%
MP 720.7	MIN	75.27	76.68	76.35	76.68	77.13	77.74	78.55	78.15	78.49	78.69	79.16	80.55	80.64	79.75	79.95	80.40	80.53	80.92	81.09	81.66	81.73				
	AVG	75.39	76.92	76.46	76.98	77.23	77.78	78.68	78.50	78.81	78.99	79.83	81.28	80.90	79.95	80.20	81.33	80.66	81.23	81.69	81.97	82.41	77.78	81.16		
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	76.59	77.97	77.94	77.94	78.04	78.42	79.18	78.84	79.43	81.18	81.52	83.43	82.94	81.68	82.85	83.30	82.13	82.74	82.72	82.42	83.19			0	0.00%
MP 846.0	MIN	76.15	77.52	77.40	77.29	77.43	78.01	78.26	77.97	78.57	79.36	79.83	81.16	81.32	81.36	80.96	81.77	81.72	81.72	81.36	82.00	82.09				
	AVG	76.40	77.67	77.67	77.57	77.64	78.16	78.64	78.39	78.90	80.14	80.35	82.03	81.81	81.54	81.63	82.22	81.96	82.18	81.76	82.17	82.46	78.32	81.98		
SMITHLAND	MAX	76.50	78.12	No	77.81	78.22	78.31	78.62	78.24	78.98	79.25	80.20	81.59	80.44	81.90	81.82	83.39	81.97	82.26	82.47	83.08	83.55			0	0.00%
MP 919.0	MIN	76.35	77.85	Data	77.34	77.61	77.97	77.86	77.56	77.88	78.30	79.07	80.44	80.20	80.56	81.18	81.79	81.79	81.84	81.91	82.18	82.29				
	AVG	76.41	77.99	Available	77.50	77.89	78.19	78.17	77.90	78.43	78.85	79.65	80.91	80.32	81.14	81.47	82.53	81.86	82.04	82.11	82.42	82.87	78.10	81.77		

Period Average for June 1-15 is 80°F and the Max is 85°F
Period Average for June 16-30 is 83°F and the Max is 87°F

Appendix E: Daily Temperature Readings

Temperature Data July 2007

CALENDAR DAY JULIAN DAY		2-Jul 183	3-Jul 184	5-Jul 186	6-Jul 187	9-Jul 190	10-Jul 191	11-Jul 192	12-Jul 193	13-Jul 194	16-Jul 197	17-Jul 198	18-Jul 199	19-Jul 200	20-Jul 201	23-Jul 204	24-Jul 205	25-Jul 206	26-Jul 207	31-Jul 212	July 1-31 Period Avg 84°F	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	80.42	79.79	77.85	77.72	79.77	No	81.73	81.70	80.58	81.07	80.69	80.47	80.53	79.86	79.00	78.80	78.73	78.67	80.44		0	0.00%
MP 31.7	MIN	79.50	77.79	77.47	77.04	78.96	Data	81.00	81.01	79.77	79.95	80.33	80.02	79.74	79.56	78.24	78.24	78.10	78.03	78.57			
	AVG	79.85	78.73	77.64	77.25	79.39	Available	81.40	81.36	80.13	80.50	80.51	80.25	80.20	79.68	78.63	78.61	78.46	78.31	79.37	79.46		
HANNIBAL***	MAX	83.37	82.54	81.61	80.91	81.61	83.01	83.48	83.61	83.71	83.48	83.37	83.37	82.78	82.44	82.44	81.50	81.27	81.50	83.37		0	0.00%
MP 126.4	MIN	81.97	81.50	80.91	80.67	80.80	81.14	83.01	82.78	82.78	82.44	82.54	82.54	82.20	81.84	81.27	80.91	80.80	80.91	82.44			
UPSTREAM	AVG	82.72	82.04	81.30	80.82	81.19	82.26	83.28	83.28	83.23	82.86	82.90	82.84	82.47	82.21	81.85	81.18	81.03	81.21	82.90	82.19		
RACINE***	MAX	81.11	81.46	81.42	81.01	82.01	No	No	No	No	No	No	No	No	82.60	81.42	81.20	80.99	81.01	81.91		0	0.00%
MP 237.5	MIN	80.38	80.38	80.81	80.79	81.28	Data	Data	Data	Data	Data	Data	Data	Data	81.68	80.77	80.81	80.56	80.48	81.11			
	AVG	80.89	80.84	81.06	80.88	81.65	Available	Available	Available	Available	Available	Available	Available	Available	82.21	81.11	81.00	80.83	80.78	81.55	81.16		
KYGER	MAX	78.10	78.00	78.10	77.50	78.10	78.10	78.80	78.70	78.40	78.20	77.80	78.50	79.80	78.10	77.50	77.00	76.60	77.20	77.80		0	0.00%
MP 260.0	MIN	76.60	75.80	76.90	75.80	77.20	77.30	78.10	77.50	77.30	77.20	77.20	77.50	77.60	77.40	76.70	76.20	75.70	75.20	76.40			
	AVG	77.61	76.61	77.64	76.67	77.64	77.79	78.35	78.25	77.81	77.60	77.50	78.05	78.14	77.83	77.10	76.67	76.13	76.36	77.29	77.42		
GREENUP***	MAX	79.90	80.80	81.60	81.80	No	84.50	83.90	83.40	82.90	83.20	82.10	81.80	82.30	81.70	81.40	81.00	82.10	81.60	82.60		0	0.00%
MP 341.0	MIN	78.60	79.30	81.00	80.90	Data	81.80	82.80	81.70	82.30	82.00	80.60	80.80	80.80	80.60	80.20	80.20	79.80	79.80	80.20			
UPSTREAM	AVG	79.46	80.34	81.21	81.31	Available	83.09	83.28	82.80	82.67	82.40	81.29	81.31	81.42	81.13	80.70	80.53	80.59	80.67	81.39	81.42		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	82.36	82.63	82.29	No	No	No	No	83.50	83.61	84.27	84.97	84.85	84.74	84.40	83.86	84.33	83.80	84.06	83.14		0	0.00%
MP 720.7	MIN	82.04	81.77	82.04	Data	Data	Data	Data	83.10	83.32	83.73	83.88	84.06	84.34	83.93	82.98	82.80	82.98	83.21	82.58			
	AVG	82.25	82.19	82.14	Available	Available	Available	Available	83.27	83.47	83.99	84.39	84.48	84.51	84.24	83.36	83.17	83.17	83.70	82.70	83.40		
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
JOHN T. MYERS	MAX	82.49	82.42	82.81	82.47	85.71	85.50	85.51	85.05	84.87	84.87	88.00	86.00	86.32	85.64	84.65	84.34	84.16	84.56	84.36		0	0.00%
MP 846.0	MIN	81.79	81.79	82.15	81.91	83.66	84.70	84.79	84.58	84.06	84.29	84.76	84.67	84.70	84.90	83.44	83.46	83.32	83.57	83.61			
	AVG	82.14	82.06	82.49	82.18	84.14	84.95	85.13	84.90	84.50	84.56	85.60	85.11	85.24	85.19	83.94	83.87	83.69	83.97	83.93	***84.09***		
SMITHLAND	MAX	82.02	82.51	82.65	81.90	81.54	82.56	82.96	83.80	83.98	85.01	84.79	85.71	85.19	85.39	84.09	84.51	84.04	84.09	84.29		0	0.00%
MP 919.0	MIN	81.50	81.72	82.15	81.79	80.80	81.52	82.67	83.12	83.48	84.15	84.31	84.61	84.74	84.47	83.44	83.17	82.90	83.17	83.46			
	AVG	81.74	82.11	82.40	81.82	81.13	82.04	82.78	83.41	83.65	84.52	84.54	85.03	84.93	84.92	83.78	83.73	83.40	83.57	83.87	83.33		

Period Average for July 1-31 is 84°F and Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data August 2007

CALENDAR DAY JULIAN DAY		1-Aug 213	2-Aug 214	3-Aug 215	6-Aug 218	7-Aug 219	8-Aug 220	9-Aug 221	10-Aug 222	13-Aug 225	14-Aug 226	15-Aug 227	16-Aug 228	21-Aug 229	20-Aug 232	21-Aug 233	22-Aug 234	23-Aug 235	24-Aug 236	27-Aug 239	28-Aug 240	29-Aug 241	30-Aug 242	31-Aug 243	Aug 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	80.02	81.37	No	82.92	82.22	81.72	81.54	81.43	80.49	80.74	80.22	80.17	No	No	78.40	75.54	74.88	74.88	77.13	76.93	77.05	76.42	76.30		0	0.00%
MP 31.7	MIN	78.48	79.50	Data	82.02	81.12	80.98	80.24	80.83	79.95	79.86	79.81	79.75	Data	Data	74.32	74.68	74.12	74.39	75.83	76.03	75.58	75.78	75.81			
	AVG	78.94	80.21	Available	82.42	81.41	81.37	81.01	81.19	80.13	80.17	80.03	79.90	Available	Available	77.22	75.16	74.48	74.68	76.42	76.30	75.95	75.95	76.04	78.45		
HANNIBAL***	MAX	83.14	83.37	84.07	84.78	86.05	86.05	86.18	87.22	86.18	84.88	84.54	84.18	84.07	83.61	83.61	83.37	81.37	77.99	79.50	79.63	79.63	80.33	80.91		0	0.00%
MP 126.4	MIN	82.31	82.31	83.25	84.07	83.95	85.48	85.48	85.59	84.65	84.07	83.61	83.61	83.25	83.01	82.20	79.74	78.10	76.35	78.69	78.57	79.03	79.63	80.20			
UPSTREAM	AVG	82.69	82.98	83.74	84.33	85.33	85.75	85.72	86.71	85.67	84.50	84.07	83.89	83.72	83.33	82.89	81.75	79.61	76.98	79.12	79.25	79.48	80.13	80.57	82.70		
RACINE***	MAX	82.19	82.32	82.42	83.13	83.90	84.49	84.60	85.61	86.19	86.21	86.00	85.66	85.61	84.84	85.21	84.52	83.39	83.50	82.52	81.32	80.42	80.91	80.91		0	0.00%
MP 237.5	MIN	81.68	81.99	82.07	82.89	82.91	83.58	83.70	84.47	85.80	85.78	85.49	85.41	85.17	84.58	84.27	83.54	82.48	82.50	80.89	80.20	80.07	80.05	80.48			
	AVG	81.95	82.12	82.23	83.03	83.58	83.77	84.16	85.18	85.99	85.98	85.83	85.55	85.37	84.73	84.77	84.16	82.90	83.07	81.92	80.86	80.27	80.49	80.73	83.42		
KYGER	MAX	78.70	78.40	79.20	79.20	80.20	80.20	81.20	82.10	81.20	81.20	80.50	80.60	80.90	80.00	80.00	80.60	80.80	78.80	78.50	77.60	77.20	77.20	76.80		0	0.00%
MP 260.0	MIN	77.20	77.40	77.90	78.60	78.60	78.60	79.20	79.90	80.00	79.70	79.70	79.60	80.00	78.80	78.80	78.50	78.20	77.90	77.30	76.60	76.10	76.20	76.00			
	AVG	77.85	77.99	78.67	78.78	79.36	79.59	80.30	81.04	80.78	80.61	80.11	80.30	80.41	79.46	79.35	79.44	79.28	78.38	78.08	77.17	76.74	76.75	76.45	78.99		
GREENUP***	MAX	82.30	89.20	84.60	83.80	85.00	85.80	85.80	86.40	86.50	86.40	85.80	85.70	85.40	84.10	84.60	84.50	85.60	86.30	83.90	84.20	84.50	84.70	61.40		0	0.00%
MP 341.0	MIN	80.40	81.10	82.40	83.40	83.40	84.00	84.20	84.40	84.60	84.80	84.20	84.10	84.20	83.00	83.20	83.50	83.60	84.50	79.10	82.80	79.00	82.90	59.00			
UPSTREAM	AVG	81.38	83.55	83.36	83.60	84.02	84.95	84.98	85.53	85.48	85.61	84.93	84.88	84.75	83.56	83.75	83.88	84.87	85.07	83.13	83.57	83.05	83.74	59.28	83.08		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	83.14	84.67	No	85.62	86.52	86.63	87.12	87.15	88.09	88.09	88.32	88.30	No	No	86.54	86.58	86.38	86.27	85.68	86.09	85.82	85.59	85.30		0	0.00%
MP 720.7	MIN	82.58	82.92	Data	84.65	85.19	85.15	86.05	85.80	87.19	87.21	87.01	87.28	Data	Data	86.22	86.00	85.71	85.82	85.26	85.14	85.48	85.14	84.74			
	AVG	82.70	83.51	Available	85.14	85.81	85.60	86.48	86.43	87.58	87.52	87.54	87.66	Available	Available	86.40	86.33	86.03	86.09	85.45	85.43	85.66	85.42	84.95	***85.89***		
NEWBURGH	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	86.67		0	0.00%
MP 776.1	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	85.71			
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	86.23	***86.23***		
JOHN T. MYERS	MAX	84.36	86.00	No	86.99	87.12	87.57	88.38	89.47	89.22	89.13	89.78	91.38	No	No	86.70	86.67	86.36	86.36	86.20	86.11	86.23	85.98	85.77		**5**	25.00%
MP 846.0	MIN	83.61	84.49	Data	85.73	86.20	86.61	87.40	87.69	88.52	88.03	88.12	87.89	Data	Data	86.18	85.75	85.73	86.22	85.73	85.44	85.64	85.68	84.90			
	AVG	83.86	85.00	Available	86.00	86.51	86.94	87.73	88.17	88.70	88.47	88.68	88.59	Available	Available	86.48	86.17	86.02	86.30	85.97	85.72	85.90	85.81	85.38	***86.62***		
SMITHLAND	MAX	84.29	84.94	No	85.51	86.47	86.27	86.52	86.99	88.38	87.94	88.39	88.47	No	No	86.88	86.88	86.58	86.20	85.37	85.60	85.33	85.51	85.80		0	0.00%
MP 919.0	MIN	83.46	83.55	Data	84.83	84.99	84.96	86.04	86.14	87.46	87.39	87.58	87.91	Data	Data	86.61	86.45	86.18	85.73	84.56	84.96	84.79	84.99	84.76			
	AVG	83.87	84.15	Available	85.18	85.81	85.74	86.25	86.51	87.79	87.63	87.94	88.20	Available	Available	86.76	86.62	86.41	86.01	85.04	85.28	85.13	85.29	85.31	***86.05***		

Period Average for August 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data September 2007

CALENDAR DAY JULIAN DAY		4-Sep 247	5-Sep 248	6-Sep 249	7-Sep 250	10-Sep 253	11-Sep 254	12-Sep 255	13-Sep 256	14-Sep 257	17-Sep 260	18-Sep 261	19-Sep 262	20-Sep 263	21-Sep 264	24-Sep 267	25-Sep 268	26-Sep 269	27-Sep 270	28-Sep 271	Sept 1-15 Period Avg	Sept 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	77.34	77.63	78.01	78.93	79.09	79.38	78.40	77.61	77.22	74.66	73.78	73.35	72.72	73.04	74.23	74.25	74.88	75.52	No			0	0.00%
MP 31.7	MIN	76.10	76.66	77.43	77.63	78.64	78.78	77.58	77.18	76.46	73.69	73.17	72.57	72.41	72.28	73.65	73.42	74.14	74.52	Data				
	AVG	76.85	77.09	77.71	78.31	78.88	78.99	78.09	77.35	76.79	74.19	73.51	72.86	72.56	72.67	73.89	73.88	74.40	74.92	Available	77.78	73.65		
HANNIBAL***	MAX	80.67	80.80	80.91	81.03	81.50	81.84	82.08	81.84	81.50	78.33	77.63	77.76	77.40	77.29	77.29	77.16	77.29	77.52	77.76			0	0.00%
MP 126.4	MIN	79.86	79.86	80.10	80.20	81.14	81.27	81.27	81.14	80.44	76.69	76.69	76.35	76.69	76.69	76.12	76.12	76.46	76.82	77.05				
UPSTREAM	AVG	80.28	80.35	80.57	80.76	81.35	81.68	81.72	81.55	81.03	77.70	77.24	77.32	77.10	76.93	76.75	76.65	76.98	77.15	77.29	81.03	77.11		
RACINE***	MAX	81.11	81.11	81.30	81.50	81.70	81.58	81.52	81.11	80.69	78.61	77.90	77.51	77.22	77.47	77.51	78.02	78.51	78.18	78.10			0	0.00%
MP 237.5	MIN	80.67	80.95	80.97	81.17	81.48	81.38	80.58	79.97	79.97	77.59	77.43	77.18	76.98	76.82	77.10	77.41	77.88	78.00	77.59				
	AVG	80.88	81.00	81.16	81.36	81.58	81.47	81.19	80.55	80.25	78.30	77.68	77.40	77.15	77.12	77.31	77.70	78.22	78.05	77.88	81.05	77.68		
KYGER	MAX	77.40	77.40	77.40	77.90	78.00	77.90	77.40	77.00	76.60	74.80	74.00	74.30	74.50	75.00	76.30	75.70	75.80	76.40	75.70			0	0.00%
MP 260.0	MIN	76.10	76.10	76.70	76.80	77.40	77.30	76.30	76.20	75.70	73.40	73.30	73.20	73.30	73.70	74.60	74.30	74.20	75.60	74.00				
	AVG	76.71	76.87	77.04	77.42	77.74	77.55	77.05	76.63	76.25	74.23	73.68	73.75	73.96	74.31	75.57	75.03	75.30	75.93	75.26	77.03	74.70		
GREENUP***	MAX	82.60	82.70	83.30	79.40	81.50	81.50	79.70	81.50	81.00	78.50	78.60	79.40	78.60	79.30	79.00	80.50	79.90	79.80	78.10			0	0.00%
MP 341.0	MIN	80.60	81.20	76.40	76.20	81.00	81.10	58.80	79.70	79.40	77.30	76.80	76.90	76.90	77.40	77.60	77.90	78.20	78.10	77.90				
UPSTREAM	AVG	81.86	82.01	80.12	76.98	81.17	81.35	59.69	80.50	80.13	77.81	77.64	77.86	77.87	78.25	78.45	79.14	78.99	78.88	78.00	78.20	78.29		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	85.06	85.10	84.58	83.88	83.75	83.88	82.69	82.44	82.33	80.65	80.24	80.46	80.10	81.37	81.64	80.85	80.13	79.74	79.34			0	0.00%
MP 720.7	MIN	83.89	83.97	84.09	83.53	82.99	83.01	82.42	82.04	81.91	79.59	79.27	79.61	79.65	79.48	79.52	79.95	79.90	79.29	78.93				
	AVG	84.31	84.48	84.27	83.76	83.25	83.32	82.55	82.20	82.05	79.91	79.68	79.95	79.82	80.29	80.21	80.25	79.99	79.50	79.10	83.35	79.87		
NEWBURGH	MAX	86.72	86.45	87.15	85.12	84.85	86.83	83.73	82.90	83.50	80.74	80.40	81.09	82.36	82.63	81.86	83.26	82.35	82.11	80.71			**1**	5.00%
MP 776.1	MIN	84.78	85.44	86.11	84.78	83.12	84.20	81.93	81.32	81.66	78.73	79.16	79.11	79.48	80.96	80.64	82.15	81.70	80.67	80.22				
	AVG	85.71	85.85	86.60	85.00	84.07	85.18	82.78	81.95	82.35	79.39	79.69	80.06	80.33	81.81	81.14	82.71	82.04	81.52	80.43	***84.39***	80.91		
JOHN T. MYERS	MAX	84.54	85.42	84.06	83.25	82.58	85.42	82.24	82.20	81.63	78.48	79.02	79.23	79.16	79.20	79.79	79.66	79.14	79.05	79.09			0	0.00%
MP 846.0	MIN	83.89	83.89	83.61	82.90	82.17	82.54	81.55	80.89	80.53	77.81	77.86	78.01	78.08	78.21	79.05	79.05	78.94	78.71	78.69				
	AVG	84.21	84.32	83.85	83.10	82.42	83.55	81.90	81.35	81.00	78.10	78.29	78.36	78.49	78.57	79.36	79.31	79.05	78.89	78.97	82.85	78.74		
SMITHLAND	MAX	84.04	84.11	83.28	82.63	81.52	81.64	81.25	81.36	80.46	78.57	78.03	77.95	78.22	78.28	78.10	78.33	78.62	77.85	77.83			0	0.00%
MP 919.0	MIN	83.52	83.41	82.89	82.17	81.27	81.16	80.53	80.47	80.13	77.76	77.45	77.58	77.59	77.56	77.79	77.90	77.90	77.45	77.41				
	AVG	83.81	83.67	83.07	82.37	81.41	81.41	80.93	80.82	80.28	78.01	77.72	77.78	77.88	77.83	77.94	78.13	78.20	77.63	77.58	81.97	77.87		

Period Average for September 1-15 is 84°F and the Max is 87°F
Perios Average for September 16-30 is 82°F and the Max is 86°F

Appendix E: Daily Temperature Readings

Temperature Data October 2007

CALENDAR DAY JULIAN DAY		1-Oct 274	2-Oct 275	3-Oct 276	4-Oct 277	5-Oct 278	8-Oct 281	9-Oct 282	10-Oct 283	11-Oct 284	12-Oct 285	15-Oct 288	16-Oct 289	17-Oct 290	18-Oct 291	19-Oct 292	22-Oct 295	23-Oct 296	24-Oct 297	25-Oct 298	26-Oct 299	29-Oct 302	30-Oct 303	31-Oct 304	Oct 1-15 Period Avg	Oct 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	73.24	73.06	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		No	0	0.00%
MP 31.7	MIN	72.72	72.45	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data		Data		
	AVG	72.96	72.72	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	72.84	Available		
HANNIBAL***	MAX	77.16	76.69	76.93	76.69	76.93	77.63	77.76	77.76	77.52	76.46	73.31	73.08	72.48	72.14	72.61	71.31	70.74	70.14	70.14	69.67	67.23	66.29	65.46			0	0.00%
MP 126.4	MIN	76.12	76.12	75.88	75.88	75.88	77.05	77.29	77.16	76.46	74.71	72.61	72.25	71.91	71.91	71.91	70.50	70.14	69.80	69.57	68.16	65.93	65.23	63.36				
UPSTREAM	AVG	76.68	76.40	76.36	76.26	76.54	77.44	77.58	77.45	77.08	75.76	73.03	72.69	72.19	72.00	72.34	70.95	70.47	70.03	69.85	69.18	66.63	65.79	64.58	76.42	69.73		
RACINE***	MAX	76.49	76.51	76.41	76.41	76.59	77.18	76.98	76.90	76.80	70.91	71.42	72.52	72.11	71.93	71.93	71.42	71.13	70.93	69.93	68.81	67.73	67.20	66.53			0	0.00%
MP 237.5	MIN	76.08	76.06	75.90	75.80	75.90	76.39	76.51	76.20	70.12	68.91	68.34	68.91	71.60	71.60	71.60	70.83	70.83	70.01	68.49	68.49	66.53	66.04	65.72				
	AVG	76.26	76.23	76.13	76.04	76.28	76.78	76.76	76.63	73.87	70.15	69.86	71.60	71.86	71.71	71.74	71.20	70.98	70.61	69.14	68.62	67.19	66.79	66.00	75.00	69.79		
KYGER	MAX	73.40	No	73.20	73.70	73.40	74.90	74.90	75.20	73.60	69.00	69.40	69.50	69.10	69.70	70.20	68.90	68.20	68.20	67.70	66.60	65.30	64.70	64.70			0	0.00%
MP 260.0	MIN	72.20	Data	72.10	72.40	72.40	73.30	73.30	72.80	68.50	66.40	68.40	68.40	68.80	68.90	69.50	67.40	67.40	67.70	66.50	64.80	63.20	63.00	62.80				
	AVG	72.83	Available	72.73	73.10	73.07	74.08	74.19	74.18	71.50	67.92	68.86	68.98	69.02	69.52	69.85	68.27	67.93	67.90	67.36	65.95	64.40	63.96	63.71	72.25	67.24		
GREENUP***	MAX	78.10	77.60	77.80	77.50	77.20	78.80	79.70	78.40	76.70	75.60	73.30	73.80	72.70	73.30	72.40	71.50	70.80	70.90	70.00	69.60	77.80	67.00	66.70			0	0.00%
MP 341.0	MIN	76.40	76.70	76.20	76.20	76.20	77.20	77.40	76.70	75.10	74.20	72.10	72.10	71.90	72.40	71.80	70.10	69.70	70.20	68.60	68.20	65.60	65.40	64.40				
UPSTREAM	AVG	77.14	77.12	76.90	77.00	76.79	77.85	78.20	77.67	76.15	75.16	72.69	73.10	72.30	72.70	72.15	70.88	70.33	70.52	69.34	68.90	67.31	66.22	65.45	76.61	69.93		
MARKLAND***	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MP 531.5	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
CANNELTON	MAX	78.08	77.58	77.40	76.86	77.56	79.81	77.70	77.45	No	76.89	No	74.68	74.25	No	74.03	72.50	71.74	70.52	68.81	No	63.68	63.28	No			0	0.00%
MP 720.7	MIN	77.74	77.38	77.11	76.60	76.77	77.45	77.40	77.14	Data	75.47	Data	74.43	74.05	Data	73.11	71.80	71.51	69.46	67.55	Data	63.07	62.78	Data				
	AVG	77.96	77.47	77.24	76.71	77.13	78.28	77.57	77.29	Available	75.88	Available	74.61	74.15	Available	73.35	72.03	71.66	70.01	68.37	Available	63.41	62.98	Available	***77.28***	70.06		
NEWBURGH	MAX	80.31	79.41	79.56	78.49	79.65	80.98	82.18	79.18	77.59	75.96	74.62	75.33	75.13	75.24	75.09	72.84	72.14	70.05	No	69.24	No	63.88	64.29			**1**	5.00%
MP 776.1	MIN	78.87	78.85	78.24	78.04	78.87	79.20	79.75	77.86	76.68	75.49	74.16	74.77	74.14	74.03	74.08	71.87	71.22	69.06	Data	67.32	Data	63.19	63.57				
	AVG	79.51	79.09	78.94	78.24	79.17	79.77	80.68	78.53	77.15	75.75	74.35	75.18	74.67	74.81	74.53	72.49	71.88	69.56	Available	67.87	Available	63.51	63.78	***78.29***	70.83		
JOHN T. MYERS	MAX	78.33	77.76	77.45	77.94	77.45	79.02	79.07	77.99	77.07	75.63	73.74	72.93	72.75	72.50	73.08	70.90	69.76	68.63	67.21	66.63	64.76	63.90	62.82			0	0.00%
MP 846.0	MIN	77.34	77.05	76.77	76.78	76.77	77.86	77.85	77.45	76.17	75.13	72.81	72.70	72.48	72.16	72.34	70.14	69.39	68.02	66.94	66.54	64.24	63.27	62.26				
	AVG	77.85	77.39	77.11	77.13	77.07	78.28	78.30	77.78	76.57	75.41	73.17	72.81	72.59	72.36	72.64	70.49	69.61	68.24	67.08	66.58	64.57	63.57	62.52	76.92	68.59		
SMITHLAND	MAX	77.07	76.73	76.46	76.53	76.53	77.41	79.39	77.27	76.05	74.86	73.49	73.26	73.26	73.35	73.49	70.23	69.64	67.93	66.47	64.69	64.13	63.66	63.16			0	0.00%
MP 919.0	MIN	76.57	76.48	76.06	76.05	76.15	76.87	76.93	76.42	74.93	74.19	73.26	73.13	72.99	73.26	73.13	69.84	69.06	67.51	64.62	64.40	63.52	63.10	62.67				
	AVG	76.82	76.63	76.28	76.16	76.29	77.12	77.56	76.82	75.49	74.53	73.36	73.19	73.10	73.30	73.31	70.00	69.38	67.75	65.56	64.59	63.87	63.47	62.95	76.10	68.37		

Period Average for October 1-15 is 77°F and the Max is 82°F
Period Average for October 16-31 is 72°F and the Max is 77°F

Appendix E: Daily Temperature Readings

Temperature Data May 2008

CALENDAR DAY JULIAN DAY		1-May 122	2-May 123	5-May 126	6-May 127	7-May 128	8-May 129	9-May 130	11-May 134	14-May 134	15-May 135	16-May 136	17-May 137	19-May 140	20-May 141	21-May 142	22-May 143	24-May 144	29-May 150	30-May 151	May 1-15 Period Avg	May 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY MP 31.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
HANNIBAL*** MP 126.4 UPSTREAM	MAX MIN AVG	60.67 60.31 60.56	61.72 60.55 61.33	62.08 61.25 61.63	61.72 61.38 61.54	61.84 61.38 61.65	62.19 61.72 61.87	62.78 61.84 62.51	63.95 63.01 63.53	60.08 58.91 59.50	59.50 58.91 59.26	59.04 58.10 58.42	58.21 57.97 58.07	57.16 56.34 56.88	56.34 55.29 55.79	55.63 55.29 55.47	55.53 55.29 55.40	56.10 55.29 55.84	60.67 59.14 60.07	61.02 59.97 60.60	61.34	57.39	0	0.00%
RACINE*** MP 237.5	MAX MIN AVG	63.31 62.82 63.14	63.43 62.82 63.15	64.53 63.90 64.32	65.41 64.51 65.08	65.84 65.31 65.64	66.45 65.72 66.20	66.45 66.12 66.29	66.86 65.94 66.55	64.72 62.82 63.91	No Data Available	62.23 61.70 61.97	62.11 61.64 61.91	65.43 63.13 64.80	63.03 60.52 61.33	60.83 59.91 60.49	60.07 59.03 59.71	59.95 59.03 59.60	64.62 63.33 64.10	65.12 64.11 64.67	64.92	62.06	0	0.00%
KYGER MP 260.0	MAX MIN AVG	63.56 61.58 63.06	63.84 62.58 63.34	65.25 64.05 64.67	66.10 63.98 65.54	66.98 64.17 66.13	67.57 65.15 66.98	67.16 66.51 66.85	65.40 63.20 64.66	65.94 64.43 65.35	No Data Available	66.22 63.07 63.53	65.65 63.25 64.90	65.02 63.37 64.36	63.45 60.38 61.40	62.05 60.44 60.82	62.46 60.58 61.59	62.66 60.73 61.63	65.78 64.53 65.08	66.86 64.27 65.88	65.17	63.24	0	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX MIN AVG	64.30 62.00 63.19	65.60 64.10 65.18	65.20 63.70 64.33	65.00 63.50 64.66	65.40 64.20 65.03	66.50 65.30 66.15	66.80 66.40 66.70	67.40 65.50 66.47	65.30 64.20 64.80	64.40 63.70 64.12	63.60 62.00 62.92	62.60 60.80 61.48	61.30 60.70 61.05	61.20 60.70 61.04	61.70 61.00 61.46	61.70 60.50 61.28	61.00 60.00 60.67	64.90 63.70 64.55	66.10 64.40 65.40	65.06	62.21	0	0.00%
MARKLAND*** MP 531.5	MAX MIN AVG	62.90 62.50 62.70	63.00 62.60 62.86	64.00 63.00 63.61	64.20 63.60 64.05	65.30 64.00 64.93	66.20 65.30 65.84	68.90 65.90 66.26	69.10 67.40 68.38	64.70 64.10 64.39	64.80 64.00 64.55	64.80 64.10 64.58	64.10 62.80 63.58	67.60 61.10 63.79	* * *	61.90 61.10 61.51	61.90 61.10 61.55	62.90 61.20 62.50	64.10 63.50 63.78	64.70 63.70 64.30	64.76	63.20	0	0.00%
CANNELTON MP 720.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	64.40 64.00 64.23	64.08 63.88 63.99	63.39 63.16 63.32	62.28 61.57 61.94	61.23 60.96 61.07	61.03 60.53 60.82	60.87 60.66 60.77	61.27 61.14 61.23	64.53 63.93 64.24	65.17 64.94 65.08	64.23	62.50	0	0.00%
NEWBURGH MP 776.1	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	64.54 63.88 64.31	63.73 63.39 63.59	63.32 63.03 63.23	63.03 62.11 62.57	61.79 61.07 61.53	61.05 60.53 60.79	61.07 60.60 60.90	60.60 60.44 60.48	64.96 64.04 64.59	65.98 65.57 65.77	63.23	62.61	0	0.00%
JOHN T. MYERS MP 846.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	64.94 64.78 64.86	64.15 63.64 63.94	64.38 63.86 64.19	63.61 62.98 63.36	62.83 62.35 62.63	62.33 61.97 62.19	61.97 61.79 61.89	65.12 65.05 65.10	66.25 66.11 66.19	No Data Available	63.82	0	0.00%
SMITHLAND MP 919.0	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	63.23 62.91 63.05	63.30 62.98 63.17	63.84 63.57 63.74	64.13 63.70 64.00	64.11 63.30 63.75	63.73 63.14 63.44	63.28 62.98 63.10	67.03 66.90 66.97	67.86 67.46 67.66	No Data Available	64.32	0	0.00%

Period Average for May 1-15 is 68°F and the Max is 73°F
Period Average for May 16-31 is 75°F and the Max is 80°F

Appendix E: Daily Temperature Readings

Temperature Data June 2008

CALENDAR DAY JULIAN DAY		2-Jun 154	3-Jun 155	4-Jun 156	5-Jun 157	6-Jun 158	9-Jun 161	10-Jun 162	11-Jun 163	12-Jun 164	13-Jun 165	16-Jun 168	17-Jun 169	18-Jun 170	19-Jun 171	20-Jun 172	23-Jun 175	24-Jun 176	25-Jun 177	26-Jun 178	27-Jun 179	June 1-15 Period Avg	June 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	66.49	67.23	66.76	67.17	67.48	70.29	71.98	72.84	75.25	75.81	77.04	77.61	76.93	75.16	74.25	74.44	74.53	74.97	75.47	76.06			0	
MP 31.7	MIN	65.95	66.63	66.15	66.52	67.03	69.69	70.90	72.45	74.10	75.04	76.32	76.75	75.33	74.57	73.90	73.56	73.78	74.19	74.53	75.07				
	AVG	66.12	66.98	66.44	66.85	67.29	69.99	71.69	72.63	74.46	75.44	76.80	77.26	76.15	74.95	74.03	73.99	73.94	74.65	74.86	75.55	69.79	75.22		
HANNIBAL***	MAX	65.12	65.93	66.76	67.33	68.63	71.67	72.37	72.84	74.01	74.59	77.40	77.16	76.93	77.63	76.46	77.76	77.76	77.29	77.52	77.86			0	0.00%
MP 126.4	MIN	63.48	64.76	65.82	65.46	65.70	70.38	71.44	72.14	72.14	73.54	76.12	76.46	76.46	76.23	75.99	77.05	76.93	76.82	76.82	76.82				
UPSTREAM	AVG	64.35	65.56	66.53	66.50	67.75	71.35	72.10	72.40	73.36	74.22	77.08	76.90	76.68	76.92	76.28	77.36	77.38	77.12	77.16	77.42	69.41	77.03		
RACINE***	MAX	68.02	68.95	69.24	69.42	70.40	73.41	74.47	75.33	76.10	76.90	79.00	78.91	78.61	78.30	77.92	77.51	77.41	78.00	78.61	79.20			0	0.00%
MP 237.5	MIN	67.02	67.87	68.63	68.20	67.20	71.24	73.31	74.56	75.39	75.78	77.67	78.30	77.77	77.18	77.16	76.98	76.98	77.08	77.57	78.20				
	AVG	67.59	68.64	68.98	68.69	68.43	72.50	73.85	75.11	75.87	76.49	78.34	78.65	78.20	77.76	77.45	77.23	77.22	77.58	78.17	78.68	71.62	77.93		
KYGER	MAX	70.22	70.46	70.36	69.24	70.24	75.23	77.18	75.72	77.53	77.63	78.81	79.24	78.61	78.34	78.43	78.02	77.61	78.43	79.22	80.01			0	0.00%
MP 260.0	MIN	67.89	68.67	68.73	67.94	67.81	73.86	74.68	74.05	75.35	75.35	76.39	76.78	76.08	75.51	76.08	76.51	76.47	76.31	76.75	77.43				
	AVG	69.16	69.73	69.32	68.55	69.39	74.72	76.45	75.23	76.66	76.85	78.06	78.14	77.73	77.16	77.23	77.28	77.01	77.47	78.28	78.86	72.61	77.72		
GREENUP***	MAX	68.60	69.40	69.10	69.20	69.40	70.70	72.50	73.90	74.20	76.40	78.80	78.10	78.40	77.60	77.50	79.40	78.50	79.80	79.80	80.20			0	0.00%
MP 341.0	MIN	67.80	68.30	68.40	68.20	68.30	69.50	70.80	72.50	72.70	73.60	76.30	77.20	76.70	76.70	76.70	77.00	77.30	77.40	78.20	78.40				
UPSTREAM	AVG	68.35	69.08	68.72	68.69	68.98	70.38	72.12	72.91	73.45	75.18	77.47	77.53	77.39	77.05	77.10	77.77	77.69	78.17	78.73	79.05	70.78	77.79		
MARKLAND***	MAX	68.50	69.50	70.10	70.20	70.90	No	72.50	73.00	73.40	74.80	76.60	76.60	76.40	76.60	78.10	76.70	76.90	78.00	78.60	78.80			0	0.00%
MP 531.5	MIN	67.20	68.30	69.50	69.70	70.00	Data	71.40	72.20	72.60	73.20	74.90	75.70	75.70	76.00	76.30	76.30	76.40	76.70	77.80	77.80				
	AVG	67.98	68.93	69.84	69.90	70.53	Available	72.10	72.70	73.16	73.85	75.85	76.10	76.03	76.33	76.95	76.50	76.77	77.53	78.16	78.40	71.00	76.86		
CANNELTON	MAX	68.85	68.76	69.55	71.06	No	No	No	No	73.17	73.90	75.92	76.55	76.48	76.86	77.31	77.88	78.19	80.47	79.81	No			0	0.00%
MP 720.7	MIN	67.73	68.65	69.15	70.56	Data	Data	Data	Data	72.88	73.53	75.52	76.08	76.21	76.60	76.89	76.82	77.11	77.59	77.74	Data				
	AVG	68.07	68.68	69.40	70.79	Available	Available	Available	Available	72.95	73.68	75.62	76.28	76.38	76.69	77.06	77.12	77.69	78.29	78.34	Available	70.60	77.05		
NEWBURGH	MAX	69.67	70.90	70.70	71.02	72.21	72.14	72.59	72.43	73.27	74.68	77.38	No	76.60	76.95	77.95	79.09	79.21	82.38	81.52	81.21			0	0.00%
MP 776.1	MIN	68.81	69.46	69.91	70.68	71.56	71.62	72.10	72.00	72.97	73.76	76.03	Data	75.97	76.51	77.05	77.47	77.43	78.75	79.38	79.57				
	AVG	69.12	70.10	70.27	70.89	71.99	71.88	72.41	72.25	73.10	74.24	76.26	Available	76.29	76.68	77.41	78.21	78.17	80.18	80.46	80.30	71.62	78.22		
JOHN T. MYERS	MAX	70.18	70.95	72.01	72.75	73.29	74.12	73.80	73.80	73.81	75.02	76.37	77.18	76.73	77.22	77.32	77.77	78.84	80.04	79.93	79.50			0	0.00%
MP 846.0	MIN	69.80	70.74	71.73	72.50	72.95	73.47	73.08	73.49	73.58	74.75	76.08	76.98	76.44	76.86	76.95	77.45	77.79	78.08	78.67	78.78				
	AVG	69.97	70.89	71.87	72.64	73.09	73.87	73.41	73.67	73.68	74.91	76.17	77.14	76.59	77.12	77.11	77.57	78.17	78.89	78.99	79.06	72.80	77.68		
SMITHLAND	MAX	70.75	71.62	72.91	73.94	74.82	75.60	75.43	75.24	75.54	76.41	79.14	79.97	79.77	79.16	78.93	77.68	78.48	78.46	78.40	78.69			0	0.00%
MP 919.0	MIN	70.61	71.38	72.39	73.71	74.77	75.25	75.00	74.71	75.43	76.14	79.02	79.25	78.96	78.53	78.58	77.38	77.65	78.17	78.17	78.39				
	AVG	70.70	71.55	72.67	73.82	74.80	75.43	75.25	74.92	75.49	76.27	79.12	79.68	79.47	78.86	78.78	77.50	78.11	78.36	78.33	78.56	74.09	78.68		

Period Average for June 1-15 is 80°F and the Max is 85°F

Period Average for June 16-30 is 83°F and the Max is 87°F

Appendix E: Daily Temperature Readings

Temperature Data July 2008

CALENDAR DAY JULIAN DAY		1-Jul 183	2-Jul 184	7-Jul 189	8-Jul 190	9-Jul 191	10-Jul 192	11-Jul 193	14-Jul 196	15-Jul 197	16-Jul 198	17-Jul 199	18-Jul 200	21-Jul 203	22-Jul 204	23-Jul 205	24-Jul 206	25-Jul 207	28-Jul 210	29-Jul 211	30-Jul 212	31-Jul 213	July 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	75.16	75.31	75.31	75.72	75.65	76.46	78.39	78.17	79.25	79.27	79.52	80.04	82.06	82.65	82.53	82.67	81.55	80.37	80.67	80.92	81.28		0	0.00%
MP 31.7	MIN	74.70	74.89	74.97	75.04	75.29	75.81	77.11	77.65	78.06	77.70	78.35	78.94	81.37	82.15	81.82	81.28	80.62	79.54	80.01	80.24	80.46			
	AVG	74.98	75.08	75.14	75.33	75.35	76.31	77.53	77.95	78.80	78.48	79.14	79.65	81.85	82.44	82.22	81.99	81.08	79.90	80.31	80.52	80.85	78.81		
HANNIBAL***	MAX	77.29	75.65	75.88	76.69	77.52	77.63	78.22	79.74	79.97	79.97	80.44	81.27	83.37	83.71	84.18	84.42	83.61	85.12	83.84	83.61	83.48		0	0.00%
MP 126.4	MIN	75.42	74.95	73.78	75.76	76.46	76.82	76.82	78.93	78.93	79.50	79.63	80.20	82.54	83.25	83.61	83.61	83.14	83.61	82.90	82.90	82.67			
UPSTREAM	AVG	76.34	75.29	75.21	76.29	77.13	77.23	77.72	79.36	79.65	79.72	80.22	80.96	83.04	83.50	84.04	84.07	83.39	84.40	83.50	83.32	82.92	80.35		
RACINE***	MAX	77.49	77.28	74.60	74.92	75.61	76.51	77.20	78.49	78.77	79.59	79.97	80.69	82.30	82.70	83.68	83.60	83.52	83.99	83.66	83.80	83.70		0	0.00%
MP 237.5	MIN	76.59	76.53	74.11	74.47	74.80	75.29	76.39	77.79	78.18	78.49	79.28	79.79	81.70	81.77	82.60	82.76	82.99	83.39	83.19	83.07	83.31			
	AVG	76.98	76.99	74.38	74.73	75.33	75.90	76.82	78.21	78.56	79.18	79.66	80.28	81.93	82.20	83.27	83.22	83.30	83.71	83.41	83.46	83.55	79.77		
KYGER	MAX	77.79	77.00	77.30	75.31	75.70	75.41	76.57	78.38	78.91	79.52	80.83	81.44	82.38	83.25	84.03	83.37	83.62	83.60	83.52	84.13	83.62		0	0.00%
MP 260.0	MIN	75.49	75.19	73.84	74.07	74.96	74.49	74.64	77.16	77.30	77.67	78.10	79.10	81.11	81.03	81.40	81.66	82.01	81.95	81.95	82.40	82.56			
	AVG	76.61	76.32	75.24	74.96	75.28	75.08	75.97	77.84	78.22	78.70	79.63	80.41	81.71	82.40	82.65	82.61	82.62	82.77	82.91	83.28	83.22	79.45		
GREENUP***	MAX	78.70	78.40	No	77.80	77.90	77.40	76.60	78.40	78.70	78.70	80.80	81.70	81.70	82.30	83.00	81.60	82.60	83.40	82.10	84.00	83.20		0	0.00%
MP 341.0	MIN	77.50	77.40	Data	76.60	76.90	76.20	75.70	77.50	77.80	77.90	78.00	78.20	80.00	80.00	80.90	80.60	80.60	35.30	81.70	81.80	82.20			
UPSTREAM	AVG	78.16	77.91	Available	77.06	77.39	76.77	76.23	77.92	78.27	78.16	78.87	79.70	80.66	81.33	81.56	81.22	81.60	80.43	81.96	82.95	82.57	79.54		
MARKLAND***	MAX	79.80	79.80	79.30	80.00	80.50	79.90	80.80	81.40	82.10	82.70	82.70	82.00	81.00	82.40	82.90	82.80	82.80	83.60	83.00	84.00	83.30		0	0.00%
MP 531.5	MIN	79.10	79.00	78.40	79.20	79.80	79.70	79.80	80.50	80.60	80.60	80.00	80.20	80.40	81.00	82.00	82.00	82.00	82.40	82.40	82.60	82.80			
	AVG	79.49	79.36	79.00	79.80	80.09	79.79	80.41	80.82	81.16	81.31	81.00	81.11	80.72	81.81	82.52	82.36	82.40	82.93	82.68	83.37	83.07	81.20		
CANNELTON	MAX	No	No	No	No	No	79.00	79.56	81.50	81.50	81.82	82.22	83.53	83.80	85.35	84.29	84.07	83.64	84.38	84.29	85.14	84.61		0	0.00%
MP 720.7	MIN	Data	Data	Data	Data	Data	78.57	79.09	80.78	80.91	81.21	81.46	82.04	83.12	83.48	83.64	83.41	83.17	83.48	83.64	83.91	83.39			
	AVG	Available	Available	Available	Available	Available	78.80	79.41	81.17	81.20	81.41	81.66	82.45	83.45	84.37	83.95	83.64	83.35	83.79	83.84	84.30	83.81	82.54		
NEWBURGH	MAX	78.22	79.39	80.24	79.34	79.34	80.38	80.62	81.75	82.38	85.30	86.02	85.95	No	91.18	89.37	86.50	86.41	87.57	86.90	88.39	88.43		**2**	10.00%
MP 776.1	MIN	77.77	79.11	79.34	78.49	79.03	79.54	79.84	80.91	81.99	82.80	83.26	83.61	Data	86.86	85.82	85.17	84.34	84.85	85.23	85.86	86.13			
	AVG	77.95	79.23	79.61	78.85	79.16	79.93	80.30	81.31	82.26	83.32	84.01	84.26	Available	89.22	87.14	85.79	84.88	85.99	86.14	87.23	87.10	83.18		
JOHN T. MYERS	MAX	79.21	78.93	79.50	79.77	80.24	79.68	79.83	81.50	81.73	82.40	83.50	84.09	85.87	87.96	85.64	85.75	84.67	85.33	85.33	85.89	No		0	0.00%
MP 846.0	MIN	78.78	78.39	79.32	79.48	79.74	79.03	79.70	80.80	81.30	81.79	82.44	83.37	84.83	85.39	84.99	84.74	84.24	84.36	84.29	85.08	Data			
	AVG	79.09	78.75	79.44	79.63	80.02	79.38	79.76	81.11	81.61	82.01	82.78	83.57	85.14	86.39	85.33	85.03	84.42	84.71	84.64	85.38	Available	82.41		
SMITHLAND	MAX	78.71	78.87	79.14	79.27	79.66	79.72	79.79	81.36	81.32	81.73	82.27	82.67	83.89	84.11	84.43	84.51	84.63	85.35	84.85	85.03	86.16		0	0.00%
MP 919.0	MIN	78.35	78.39	78.94	79.09	79.27	79.20	79.43	80.65	80.83	81.52	81.99	82.38	83.44	83.79	83.97	83.79	83.64	83.73	83.61	84.31	84.61			
	AVG	78.54	78.71	79.08	79.19	79.47	79.45	79.65	81.00	81.11	81.62	82.12	82.52	83.59	84.00	84.17	84.15	84.27	84.31	84.07	84.51	85.26	81.94		

Period Average for July 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data August 2008

CALENDAR DAY JULIAN DAY		4-Aug 217	5-Aug 218	6-Aug 219	7-Aug 220	8-Aug 221	11-Aug 224	12-Aug 225	13-Aug 226	14-Aug 227	15-Aug 228	18-Aug 231	19-Aug 232	20-Aug 233	21-Aug 234	22-Aug 235	25-Aug 238	26-Aug 239	27-Aug 240	29-Aug 242	Aug 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	81.50	80.89	80.47	81.18	80.47	No	78.10	78.26	No	76.96	76.86	77.50	77.81	78.08	78.98	79.54	81.00	No	76.68		0	0.00%
MP 31.7	MIN	80.10	79.92	80.11	79.90	79.68	Data	76.69	76.84	Data	76.14	76.08	76.57	76.51	76.59	76.64	77.94	78.15	Data	76.06			
	AVG	80.84	80.50	80.31	80.57	80.10	Available	77.29	77.44	Available	76.51	76.52	76.90	77.22	77.18	77.32	78.68	79.58	Available	76.33	78.33		
HANNIBAL***	MAX	84.07	84.31	83.84	83.84	84.18	83.37	82.78	82.31	81.61	81.50	81.50	81.97	81.84	81.97	81.97	82.20	82.54	82.08	81.37		0	0.00%
MP 126.4	MIN	83.48	83.48	83.14	83.14	83.37	82.08	81.61	81.14	80.91	81.03	80.67	81.03	81.14	81.03	81.14	81.37	81.50	81.37	80.80			
UPSTREAM	AVG	83.72	83.89	83.48	83.54	83.78	82.73	82.20	81.76	81.23	81.35	81.22	81.48	81.50	81.56	81.58	81.86	82.01	81.86	81.18	82.21		
RACINE***	MAX	84.21	84.52	83.80	83.80	83.97	83.09	82.17	82.11	82.01	81.89	81.70	81.58	80.95	80.60	80.99	80.99	81.09	80.89	79.57		0	0.00%
MP 237.5	MIN	83.39	83.66	83.37	83.29	83.29	82.07	81.56	81.38	81.38	80.95	81.17	81.09	80.01	80.16	80.46	80.77	80.26	80.36	78.97			
	AVG	83.78	84.03	83.60	83.57	83.71	82.65	81.91	81.86	81.74	81.56	81.47	81.36	80.15	80.36	80.69	80.85	80.82	80.67	79.26	81.79		
KYGER	MAX	84.13	84.39	83.42	83.78	84.11	83.13	83.44	82.38	82.99	82.21	81.95	82.36	81.81	81.62	80.81	82.03	82.09	81.13	79.42		0	0.00%
MP 260.0	MIN	82.46	82.54	82.30	82.64	80.30	79.28	81.72	81.32	81.01	81.13	80.44	80.48	79.91	80.07	79.95	81.05	79.93	77.61	78.57			
	AVG	83.36	83.51	82.91	83.33	83.19	82.16	82.49	81.88	82.15	81.73	81.31	81.62	80.84	80.94	80.39	81.65	80.82	79.22	78.97	81.71		
GREENUP***	MAX	84.20	84.00	83.60	83.50	83.90	81.80	*	81.60	81.10	80.90	81.20	80.60	81.70	80.80	82.10	82.20	81.10	81.20	80.40		0	0.00%
MP 341.0	MIN	82.40	82.40	82.70	82.40	82.20	80.50	*	80.00	79.70	79.60	78.80	79.10	79.40	79.80	80.00	80.90	80.40	80.40	79.70			
UPSTREAM	AVG	83.20	83.35	82.93	82.93	83.00	81.21	*	80.66	80.41	80.12	80.00	79.90	80.37	80.27	81.10	81.51	80.88	80.79	79.94	81.25		
MARKLAND***	MAX	84.54	84.52	84.06	84.15	84.02	83.88	83.19	83.03	82.83	82.72	82.58	82.26	82.20	82.04	81.82	81.97	81.77	81.32	81.90		0	0.00%
MP 531.5	MIN	84.06	83.97	83.84	83.62	83.66	82.42	82.22	82.22	82.29	82.09	80.94	81.52	81.61	81.61	81.07	81.77	81.23	81.00	81.59			
	AVG	84.29	84.18	83.93	83.85	83.81	83.10	82.64	82.64	82.51	82.38	81.95	81.80	81.89	81.81	81.57	81.86	81.44	81.10	81.74	82.55		
CANNELTON	MAX	85.05	86.09	85.51	85.57	85.23	85.26	84.74	84.61	83.57	83.41	83.17	84.25	83.95	82.87	82.60	82.87	82.42	No	82.69		0	0.00%
MP 720.7	MIN	84.42	84.76	85.03	85.14	84.60	84.04	83.62	83.37	83.17	82.99	82.04	82.15	82.02	82.22	82.38	82.44	82.09	Data	81.79			
	AVG	84.64	85.26	85.18	85.35	84.91	84.43	84.07	83.79	83.32	83.12	82.38	82.66	82.78	82.48	82.46	82.62	82.24	Available	82.05	83.54		
NEWBURGH **	MAX	89.65	90.16	89.35	87.30	86.27	86.99	86.49	86.18	85.96	86.13	88.21	88.18	86.22	84.47	86.47	85.44	85.24	No	No		**3**	18.00%
MP 776.1	MIN	85.98	86.09	86.11	85.75	85.06	84.04	83.86	84.83	83.62	83.05	82.87	83.01	83.68	83.01	83.46	83.97	65.91	Data	Data			
	AVG	87.45	87.62	87.04	86.27	85.67	85.00	84.94	85.31	84.30	83.68	84.35	84.88	84.78	83.62	84.60	84.69	83.94	Available	Available	***85.18***		
JOHN T. MYERS**	MAX	86.99	88.09	87.17	86.40	86.09	85.68	85.12	84.94	84.16	84.51	84.47	84.76	83.41	82.78	83.50	83.19	82.71	No	No		0	0.00%
MP 846.0	MIN	85.64	86.05	86.23	85.84	85.23	84.11	83.70	83.37	82.89	82.78	82.13	82.53	82.45	82.18	81.95	82.71	82.26	Data	Data			
	AVG	86.28	86.77	86.61	86.07	85.55	84.71	84.08	83.72	83.56	83.32	82.96	83.33	82.82	82.46	82.51	82.90	82.48	Available	Available	***84.12***		
SMITHLAND**	MAX	85.95	85.96	85.89	85.87	86.16	85.62	85.06	84.69	84.70	83.46	83.43	83.32	82.02	81.57	82.54	82.54	82.36	82.18	No		0	0.00%
MP 919.0	MIN	83.88	84.51	84.83	80.46	84.63	84.36	83.77	83.68	83.26	82.63	81.90	81.66	81.39	81.21	81.36	81.79	81.70	81.82	Data			
	AVG	84.42	85.06	85.43	85.29	85.40	84.89	84.35	84.01	83.81	83.05	82.39	82.30	81.59	81.41	81.57	82.10	82.06	82.03	Available	83.40		

Period Average for August 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data September 2008

CALENDAR DAY JULIAN DAY		2-Sep 246	3-Sep 247	4-Sep 248	5-Sep 249	8-Sep 252	9-Sep 253	10-Sep 254	11-Sep 255	12-Sep 256	22-Sep 266	23-Sep 267	24-Sep 268	25-Sep 269	26-Sep 270	29-Sep 273	30-Sep 274	Sept 1-15 Period Avg	Sept 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	78.22	78.15	79.02	78.22	77.54	77.34	76.68	75.97	75.36	73.51	73.49	73.38	72.41	72.16	71.47	71.29			0	0.00%
MP 31.7	MIN	76.59	76.95	77.34	77.31	77.00	76.78	75.88	74.70	74.70	72.68	72.36	72.12	72.14	71.46	70.77	70.74				
	AVG	77.32	77.37	78.07	77.69	77.28	77.01	76.46	75.29	74.99	73.10	72.73	72.57	72.26	71.79	71.14	70.99	76.83	73.13		
HANNIBAL***	MAX	80.80	83.14	81.03	81.27	81.27	81.03	80.44	80.10	79.39	76.82	76.82	77.05	76.59	75.76	75.42	75.18			0	0.00%
MP 126.4	MIN	79.97	79.97	80.33	80.56	80.56	80.56	79.86	78.93	78.80	76.12	75.99	76.12	75.52	74.82	74.71	74.01				
UPSTREAM	AVG	80.45	80.70	80.75	81.01	80.93	80.75	80.25	79.49	79.14	76.54	76.45	76.52	76.20	75.39	75.13	74.66	80.39	75.73		
RACINE***	MAX	79.30	80.10	80.36	7.32	79.89	79.81	No	No	No	77.00	76.98	76.98	76.49	76.29	74.90	74.82			0	0.00%
MP 237.5	MIN	78.95	79.08	79.87	5.89	79.36	79.36	Data	Data	Data	76.65	76.69	76.39	76.10	75.47	74.27	74.21				
	AVG	79.16	79.62	80.00	6.34	79.69	79.56	Available	Available	Available	76.91	76.86	76.77	76.32	75.87	74.67	74.62	67.39	76.00		
KYGER	MAX	80.32	81.38	80.16	80.60	80.44	80.40	79.24	79.02	79.99	77.51	77.12	76.02	76.33	75.70	75.63	75.13			0	0.00%
MP 260.0	MIN	78.63	79.75	78.95	78.91	79.30	79.18	78.10	77.92	78.10	76.12	75.31	75.31	75.25	71.03	74.15	73.84				
	AVG	79.70	80.58	79.60	79.91	80.07	79.81	78.77	78.56	79.34	77.05	76.14	75.66	75.96	73.18	75.28	74.50	79.59	75.40		
GREENUP***	MAX	81.50	82.20	82.70	82.40	80.60	81.10	80.40	80.20	80.00	77.80	77.40	77.90	77.40	76.40	75.60	76.20			0	0.00%
MP 341.0	MIN	79.20	79.90	79.80	80.40	79.70	79.60	79.30	79.00	78.80	76.80	76.80	76.30	76.20	75.60	74.80	74.60				
UPSTREAM	AVG	80.28	80.80	81.15	81.13	80.03	80.48	79.97	79.54	79.63	77.28	77.11	77.09	76.74	76.07	75.27	75.39	80.33	76.42		
MARKLAND***	MAX	83.30	82.90	82.80	82.60	81.60	81.50	81.00	80.50	80.40	76.90	76.90	76.90	76.60	76.30	75.10	74.60			0	0.00%
MP 531.5	MIN	82.00	82.20	82.30	82.10	81.00	80.90	76.30	79.90	79.90	76.00	75.80	76.00	75.80	75.70	70.30	74.30				
	AVG	82.60	82.38	82.50	82.33	81.37	81.10	80.41	80.22	80.22	76.34	76.36	76.36	76.18	76.00	74.74	74.47	81.46	75.78		
CANNELTON	MAX	84.43	84.34	82.92	82.35	81.66	82.31	81.25	80.94	80.29	78.76	78.80	78.64	78.51	77.77	77.04	76.66			0	0.00%
MP 720.7	MIN	82.45	82.85	82.42	81.99	81.14	81.41	80.64	80.17	80.19	77.95	77.86	77.70	77.68	77.11	76.42	76.28				
	AVG	82.97	83.46	82.62	82.16	81.35	81.70	80.98	80.46	80.23	78.19	78.16	78.07	78.02	77.48	76.68	76.46	81.77	77.58		
NEWBURGH **	MAX	86.88	88.39	85.89	84.29	84.60	83.39	82.58	81.86	83.88	81.50	80.24	81.75	80.56	78.84	No	No			**1**	7.00%
MP 776.1	MIN	83.91	84.25	83.57	81.97	81.79	81.01	80.11	79.72	80.31	78.44	77.61	78.10	78.55	77.29	Data	Data				
	AVG	84.92	85.83	84.27	82.85	82.76	81.92	81.05	80.58	81.61	79.37	78.73	79.62	79.19	77.83	Available	Available	82.86	78.95		
JOHN T. MYERS**	MAX	83.84	83.30	83.05	82.71	82.08	80.94	80.17	79.72	80.53	79.23	78.62	78.85	77.67	76.96	76.96	No			0	0.00%
MP 846.0	MIN	82.62	82.62	82.45	81.66	80.60	79.93	79.34	78.84	79.07	77.02	76.87	76.82	76.84	76.32	75.74	Data				
	AVG	83.21	82.91	82.73	82.19	81.02	80.34	79.74	79.28	79.58	77.54	77.48	77.35	77.07	76.61	76.06	Available	81.22	77.02		
SMITHLAND**	MAX	82.56	82.96	82.87	81.97	82.02	81.63	81.36	80.49	80.53	77.79	77.27	77.94	77.13	76.32	77.74	76.08			0	0.00%
MP 919.0	MIN	82.15	82.33	82.00	80.91	80.67	80.35	79.75	79.84	79.52	75.83	75.97	76.08	76.05	75.69	75.34	75.34				
	AVG	82.29	82.56	82.34	81.41	81.01	80.65	80.42	80.13	79.80	76.32	76.33	76.73	76.46	75.97	75.91	75.58	81.18	76.19		

Period Average for September 1-15 is 84°F and the Max is 87°F

Period Average for September 16-30 is 82°F and the Max is 86°F

Appendix E: Daily Temperature Readings

Temperature Data October 2008

CALENDAR DAY JULIAN DAY		1-Oct 275	2-Oct 276	3-Oct 277	6-Oct 280	7-Oct 281	8-Oct 282	9-Oct 283	10-Oct 284	13-Oct 287	14-Oct 288	15-Oct 289	16-Oct 290	17-Oct 291	20-Oct 294	21-Oct 295	22-Oct 296	23-Oct 297	24-Oct 298	27-Oct 301	28-Oct 302	29-Oct 303	30-Oct 304	31-Oct 305	Oct 1-15 Period Avg	Oct 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	70.63	70.20	68.92	66.90	65.98	65.57	64.83	64.80	65.68	65.23	65.52	65.91	65.80	63.81	No	No	No	62.01	59.07	57.88	56.98	56.07	55.29			0	0.00%
MP 31.7	MIN	70.30	69.26	68.23	65.98	65.25	65.05	64.54	64.44	64.65	64.81	64.98	65.41	65.30	62.91	Data	Data	Data	60.93	58.44	57.13	56.43	54.99	54.59				
	AVG	70.48	69.71	68.56	66.43	65.63	65.25	64.75	64.60	65.09	65.02	65.25	65.63	65.56	63.41	Available	Available	Available	61.48	58.84	57.48	56.74	55.55	54.97	66.43	59.96		
HANNIBAL***	MAX	74.25	73.54	72.72	71.08	70.27	69.67	69.33	69.21	69.44	69.33	68.97	69.21	69.10	67.57	66.99	65.35	64.89	63.82	61.84	60.91	60.31	58.91	58.57			0	0.00%
MP 126.4	MIN	73.54	72.72	71.67	70.14	69.57	69.10	68.97	68.63	68.63	68.63	68.63	68.63	68.50	66.52	65.23	64.42	63.59	63.01	60.67	60.21	59.04	57.74	57.51				
UPSTREAM	AVG	73.99	73.21	72.25	70.69	69.97	69.43	69.17	68.92	69.02	69.04	68.81	69.00	68.90	67.18	66.23	65.01	64.39	63.39	61.32	60.59	59.91	58.35	58.03	70.41	63.53		
RACINE***	MAX	74.47	73.90	72.84	71.42	71.40	70.73	70.62	70.52	70.12	69.69	69.50	69.61	69.44	67.34	66.92	66.51	65.41	65.55	64.13	63.52	61.74	60.95	60.13			0	0.00%
MP 237.5	MIN	73.72	72.91	71.81	70.83	70.34	70.12	70.22	69.99	69.20	69.24	69.10	69.10	68.40	66.43	66.31	65.02	64.41	64.53	63.52	61.72	60.95	59.75	58.93				
	AVG	74.15	73.53	72.41	71.27	70.98	70.50	70.45	70.31	69.77	69.46	69.31	69.36	68.95	67.00	66.63	65.89	64.97	65.05	63.79	62.81	61.41	60.49	59.59	71.10	63.76		
KYGER	MAX	73.74	73.54	72.76	71.13	69.93	70.05	69.54	69.26	70.44	69.75	70.73	8.14	68.97	65.88	65.65	64.78	63.76	65.15	65.29	60.18	58.79	58.57	58.16			0	0.00%
MP 260.0	MIN	72.72	72.74	70.34	69.32	69.06	68.95	68.65	68.30	67.18	66.86	67.37	7.47	66.86	62.05	61.89	59.75	60.09	61.48	59.99	57.39	57.77	54.55	54.47				
	AVG	73.21	73.16	71.70	70.28	69.51	69.57	69.17	68.82	68.93	68.43	69.14	7.77	67.77	64.06	64.11	63.17	62.36	63.58	62.40	59.01	58.48	57.04	56.67	70.17	57.20		
GREENUP***	MAX	75.80	74.00	72.80	73.00	73.30	73.90	72.70	72.80	73.10	72.80	73.30	73.30	72.60	69.50	68.90	67.80	67.10	66.60	65.30	63.80	63.00	61.40	61.10			0	0.00%
MP 341.0	MIN	74.20	72.80	71.80	72.10	72.00	72.40	72.00	71.90	71.50	71.60	71.90	72.00	70.90	68.50	67.90	66.60	66.00	65.90	64.10	62.50	61.40	60.10	59.90				
UPSTREAM	AVG	74.95	73.54	72.49	72.57	72.70	73.23	72.13	72.38	72.07	72.26	72.41	72.78	71.82	69.03	68.26	67.35	66.62	66.29	64.82	63.18	62.22	60.86	60.39	72.79	66.14		
MARKLAND***	MAX	74.30	73.80	73.00	72.60	72.80	72.40	No	71.30	73.00	72.50	No	No	72.60	69.40	68.60	68.40	68.40	67.20	66.10	64.90	63.70	62.90	62.40			0	0.00%
MP 531.5	MIN	73.80	73.10	72.50	72.10	72.10	71.80	Data	70.80	71.60	71.60	Data	Data	71.40	68.30	68.30	62.50	62.00	66.60	65.00	63.70	62.90	62.00	61.80				
	AVG	74.15	73.55	72.82	72.34	72.38	72.05	Available	71.07	72.30	72.06	Available	Available	72.16	68.85	68.41	68.03	67.60	66.93	65.75	64.35	63.31	62.41	62.01	72.53	66.35		
CANNELTON	MAX	76.46	75.43	74.64	74.17	74.26	73.45	72.81	73.00	73.17	72.64	72.70	72.37	72.01	70.81	69.96	69.69	68.50	67.98	66.65	65.16	64.72	63.95	63.01			0	0.00%
MP 720.7	MIN	75.97	74.91	74.30	73.60	73.69	73.04	72.55	72.23	72.43	72.41	72.23	72.03	71.65	70.16	69.78	68.81	67.93	67.41	65.97	64.76	64.31	63.39	62.87				
	AVG	76.26	75.23	74.47	73.85	73.93	73.21	72.68	72.58	72.71	72.51	72.40	72.22	71.86	70.43	69.91	69.25	68.19	67.75	66.37	64.95	64.58	63.71	62.93	73.62	67.68		
NEWBURGH **	MAX	76.73	75.58	76.15	75.72	74.71	74.19	74.61	74.66	75.27	76.03	75.33	74.52	74.03	71.38	70.79	69.66	68.58	67.62	64.652	62.80	61.43	61.27	No			0	0.00%
MP 776.1	MIN	74.84	74.35	73.62	73.38	73.65	72.50	72.25	72.84	73.67	73.56	73.17	73.00	72.59	70.25	69.66	68.67	66.36	66.11	63.77	61.27	60.15	52.90	Data				
	AVG	75.89	74.69	74.51	74.29	74.08	73.22	73.10	73.79	74.36	74.63	74.04	73.56	73.13	70.89	70.29	69.11	67.08	67.12	64.30	62.00	60.84	58.75	Available	74.24	67.01		
JOHN T. MYERS**	MAX	75.40	74.50	74.68	73.89	73.06	72.25	72.64	72.37	72.91	72.36	73.22	72.81	71.74	69.78	69.17	68.20	67.42	65.89	64.13	61.95	60.89	No	No			0	0.00%
MP 846.0	MIN	74.57	73.67	73.11	72.43	72.19	71.94	71.49	71.47	71.85	71.62	72.05	71.71	71.11	68.86	68.22	67.17	65.91	65.25	62.94	60.69	60.15	Data	Data				
	AVG	74.84	74.01	73.50	72.93	72.57	72.08	71.84	71.74	72.18	71.97	72.55	72.23	71.34	69.22	68.71	67.60	66.53	65.59	63.64	61.16	60.47	Available	Available	72.75	66.65		
SMITHLAND**	MAX	75.18	75.13	76.12	73.24	72.84	72.55	73.56	71.87	71.98	72.41	72.39	72.16	70.84	69.39	69.30	68.92	68.23	67.37	64.94	63.28	61.59	No	No			0	0.00%
MP 919.0	MIN	74.39	73.80	73.74	72.70	72.50	72.10	71.64	71.04	71.58	71.46	71.56	70.81	70.14	68.97	68.76	67.95	67.35	66.51	63.70	61.72	60.94	Data	Data				
	AVG	74.74	74.39	74.10	72.89	72.66	72.31	72.11	71.36	71.70	71.70	71.83	71.37	70.45	69.12	68.97	68.37	67.72	66.92	64.40	62.24	61.20	Available	Available	72.71	67.08		

Period Average for October 1-15 is 77°F and the Max is 82°F
Period Average for October 16-31 is 72°F and the Max is 77°F

Appendix E: Daily Temperature Readings

Temperature Data May 2009

CALENDAR DAY JULIAN DAY		1-May 121	4-May 124	5-May 125	6-May 126	7-May 127	8-May 128	11-May 131	12-May 132	13-May 133	14-May 134	15-May 135	18-May 138	19-May 139	20-May 140	21-May 141	22-May 142	26-May 146	27-May 147	28-May 148	29-May 149	May 1-15 Period Avg	May 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	60.71	61.93	61.45	58.39	56.71	57.38	58.59	59.27	59.49	59.68	60.46	63.03	62.96	63.27	64.40	66.09	70.27	69.49	69.78	70.90			0	0.00%
MP 31.7	MIN	60.12	61.56	58.87	56.61	56.37	57.15	58.23	58.69	59.00	59.52	60.13	62.33	62.20	62.51	63.55	64.72	68.76	68.83	69.44	70.09				
	AVG	60.41	61.83	60.28	57.52	56.53	57.26	58.34	59.09	59.29	59.61	60.33	62.81	62.53	62.87	63.87	65.18	69.20	69.07	69.59	70.49	59.14	66.18		
HANNIBAL***	MAX	59.61	60.91	60.44	60.21	60.08	57.63	57.97	57.97	58.44	59.38	60.08	62.19	62.42	63.12	63.59	64.76	No	69.21	70.14	70.38			0	0.00%
MP 126.4	MIN	58.91	60.31	59.38	59.61	57.51	57.04	57.63	57.40	57.51	58.10	58.80	61.25	61.38	61.38	62.55	63.36	Data	68.50	69.21	69.80				
UPSTREAM	AVG	59.37	60.53	59.92	59.96	58.91	57.33	57.88	57.73	58.17	58.90	59.44	61.74	61.88	62.56	63.23	64.05	Available	69.05	69.77	70.08	58.92	65.29		
RACINE***	MAX	*	65.61	64.84	70.60	71.93	69.91	71.32	70.14	64.05	64.33	64.72	66.31	67.14	67.32	67.81	67.89	72.09	72.82	73.21	73.90			0	0.00%
MP 237.5	MIN	*	64.60	63.80	63.80	68.59	66.82	69.81	62.93	62.90	63.82	64.33	65.80	66.10	66.10	66.20	67.30	71.19	71.95	72.80	73.19				
	AVG	*	65.13	64.41	65.64	69.43	68.32	70.42	64.01	63.54	64.00	64.49	66.07	66.59	66.74	67.19	67.52	71.65	72.50	73.01	73.67	65.94	69.44		
KYGER	MAX	64.47	65.80	65.49	66.16	67.37	64.07	64.78	64.88	73.94	74.84	80.65	78.43	76.53	77.51	79.14	80.75	No	84.21	84.13	84.90			**7**	50.00%
MP 260.0	MIN	63.15	65.25	64.66	64.41	63.15	63.15	63.96	64.15	64.07	68.87	74.84	75.04	67.28	67.28	68.44	69.14	Data	82.72	83.19	83.33				
	AVG	63.86	65.52	65.15	64.95	63.57	63.63	64.52	64.55	68.65	71.64	79.10	77.03	71.95	74.55	75.89	77.36	Available	83.32	83.65	84.14	66.83	***78.49***		
GREENUP***	MAX	65.90	66.40	66.60	66.50	65.30	65.00	64.90	63.10	63.80	64.00	64.80	66.00	66.70	66.80	67.20	68.50	72.60	73.90	73.30	73.30			0	0.00%
MP 341.0	MIN	65.00	65.60	66.00	64.90	64.40	63.80	61.80	61.60	61.60	62.60	63.50	64.90	65.20	65.30	65.50	66.10	72.20	72.20	72.60	72.80				
UPSTREAM	AVG	65.58	66.08	66.28	65.94	64.90	64.40	63.07	62.27	62.72	63.38	63.86	65.45	65.95	66.20	66.60	67.41	72.48	72.99	72.98	73.15	64.40	69.25		
MARKLAND***	MAX	62.20	63.60	No	*	64.60	*	63.00	63.00	72.40	73.80	74.00	75.10	74.50	64.40	65.40	66.40	69.80	72.20	71.30	71.30			0	0.00%
MP 531.5	MIN	61.40	63.40	Data	*	63.80	*	62.00	62.00	62.60	72.20	73.40	74.60	63.20	63.40	64.30	65.30	69.10	69.70	70.70	70.20				
	AVG	61.88	63.53	Available	*	64.15	*	62.43	62.70	66.60	73.31	73.81	74.92	64.93	64.08	65.00	66.02	69.47	70.83	70.83	70.68	66.05	68.53		
CANNELTON	MAX	No	No	No	63.84	64.31	64.74	63.07	62.82	62.58	62.65	62.76	No	No	64.06	64.76	65.80	No	69.55	70.23	70.63			0	0.00%
MP 720.7	MIN	Data	Data	Data	63.66	64.08	64.42	62.55	62.29	62.37	62.62	62.51	Data	Data	63.84	64.51	65.41	Data	69.40	69.87	70.52				
	AVG	Available	Available	Available	63.73	64.17	64.60	62.78	62.57	62.46	62.63	62.65	Available	Available	63.92	64.60	65.60	Available	69.50	70.03	70.56	63.20	67.37		
NEWBURGH	MAX	No	No	No	64.13	63.70	64.71	64.60	63.39	63.19	63.00	63.50	63.75	64.17	65.14	65.88	66.67	69.71	70.54	71.13	71.96			0	0.00%
MP 776.1	MIN	Data	Data	Data	63.63	63.57	64.38	63.55	62.85	62.56	62.76	63.25	63.10	63.79	64.51	65.12	66.15	69.26	70.09	70.52	70.68				
	AVG	Available	Available	Available	63.88	63.63	64.51	64.17	63.12	62.97	62.89	63.40	63.44	63.99	64.82	65.46	66.42	69.46	70.26	70.89	71.12	63.57	67.32		
JOHN T. MYERS	MAX	No	No	No	No	64.33	64.54	65.08	64.78	63.93	63.91	64.31	64.98	64.85	65.37	66.24	66.97	69.42	69.91	70.90	71.22			0	0.00%
MP 846.0	MIN	Data	Data	Data	Data	64.09	64.49	64.45	63.72	63.72	63.82	64.15	64.45	64.58	65.21	66.02	66.74	69.19	69.80	70.68	70.86				
	AVG	Available	Available	Available	Available	64.21	64.51	64.73	64.27	63.81	63.87	64.23	64.73	64.76	65.33	66.15	66.87	69.33	69.85	70.81	71.01	64.23	67.65		
SMITHLAND	MAX	No	No	No	No	64.74	65.19	66.02	65.95	65.89	65.43	65.64	66.40	66.25	66.20	66.69	67.68	71.92	72.27	73.15	73.62			0	0.00%
MP 919.0	MIN	Data	Data	Data	Data	64.65	65.05	65.59	65.46	65.25	65.28	65.39	65.88	65.73	66.06	66.47	67.41	71.62	72.25	72.95	73.15				
	AVG	Available	Available	Available	Available	64.70	65.12	65.79	65.65	65.55	65.33	65.51	66.12	65.98	66.12	66.56	67.51	71.76	72.25	73.04	73.32	65.38	69.19		

Period Average for May 1-15 is 68°F and the Max is 73°F

Period Average for May 16-31 is 75°F and the Max is 80°F

Appendix E: Daily Temperature Readings

Temperature Data June 2009

CALENDAR DAY JULIAN DAY		1-Jun 152	2-Jun 153	3-Jun 154	4-Jun 155	5-Jun 156	8-Jun 159	9-Jun 160	10-Jun 161	11-Jun 162	12-Jun 163	15-Jun 166	16-Jun 167	17-Jun 168	18-Jun 169	19-Jun 170	22-Jun 173	23-Jun 174	24-Jun 175	25-Jun 176	26-Jun 177	30-Jun 181	June 1-15 Period Avg	June 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	70.74	70.00	70.93	70.00	69.46	69.33	69.80	70.99	70.57	70.59	71.11	72.09	72.36	71.96	No	72.25	73.33	74.43	73.67	74.44	75.20			0	0.00%
MP 31.7	MIN	69.35	69.58	70.21	69.08	68.81	68.85	69.42	70.03	70.02	70.00	70.72	70.84	71.44	71.15	Data	71.24	72.73	73.42	73.00	73.76	74.89				
	AVG	70.06	69.87	70.58	69.61	69.17	69.15	69.57	70.47	70.27	70.27	70.91	71.32	71.90	71.56	Available	71.84	73.17	73.92	73.30	74.13	75.04	69.99	72.91		
HANNIBAL***	MAX	71.08	71.55	72.48	71.55	70.84	71.31	71.67	72.14	72.01	71.78	72.48	73.18	73.54	74.25	73.42	73.65	74.01	74.01	74.12	75.52	77.76			0	0.00%
MP 126.4	MIN	69.67	70.50	70.84	70.97	69.91	69.44	71.20	71.20	71.44	71.44	71.31	72.25	72.84	72.95	71.44	73.18	73.08	73.18	73.31	74.12	76.93				
UPSTREAM	AVG	70.48	71.15	71.79	71.29	70.51	70.71	71.48	71.83	71.77	71.63	72.26	72.88	73.11	73.60	72.01	73.46	73.64	73.62	73.82	75.11	77.37	71.36	73.86		
RACINE***	MAX	74.41	74.11	75.02	74.43	73.68	72.82	72.84	73.90	73.88	74.60	76.31	76.82	77.16	77.16	77.71	78.18	78.10	78.49	79.81	79.38	80.36			0	0.00%
MP 237.5	MIN	73.19	73.19	73.80	73.19	72.68	71.99	71.99	72.68	73.70	73.88	75.29	75.59	76.49	76.59	76.65	77.59	77.65	77.77	78.47	78.87	79.77				
	AVG	73.96	73.77	74.45	73.91	73.25	72.35	72.56	73.61	73.74	74.36	75.75	76.22	76.75	76.85	77.32	77.91	77.78	78.27	79.05	79.12	80.01	73.79	77.93		
KYGER	MAX	85.92	83.74	75.72	75.84	74.35	78.32	82.82	83.90	80.85	74.23	76.14	77.33	77.55	78.55	78.85	79.55	79.42	79.04	79.63	*	80.75			**1**	9.00%
MP 260.0	MIN	83.01	74.51	74.51	74.35	73.25	73.54	78.12	80.44	73.43	73.54	74.64	75.63	76.63	77.10	78.00	78.40	78.40	78.53	78.63	*	79.91				
	AVG	84.56	76.32	75.32	75.28	73.75	75.17	80.73	82.42	74.26	73.88	75.70	76.82	77.16	77.92	78.48	79.01	78.96	78.80	79.17	*	80.41	77.04	78.52		
GREENUP***	MAX	72.70	72.60	73.60	73.30	72.70	71.90	72.50	74.20	73.80	73.00	73.70	74.40	75.20	75.80	No	77.20	78.60	79.40	80.40	No	80.00			0	0.00%
MP 341.0	MIN	71.90	71.90	72.00	72.40	71.40	71.00	71.50	72.40	72.50	72.00	73.00	72.70	73.70	74.20	Data	76.00	77.20	78.40	78.50	Data	78.40				
UPSTREAM	AVG	72.26	72.28	72.66	72.95	72.11	71.52	72.22	73.11	73.02	72.61	73.32	73.69	74.51	75.10	Available	76.84	78.21	78.90	79.35	Available	79.03	72.55	76.95		
MARKLAND***	MAX	72.66	73.22	73.49	73.29	72.55	72.21	72.86	72.81	72.95	73.17	73.22	73.17	73.54	73.44	74.19	76.96	78.08	78.94	79.61	80.19	79.70			0	0.00%
MP 531.5	MIN	71.83	72.43	72.86	72.59	71.89	71.44	71.94	72.64	72.73	72.48	72.50	73.00	72.81	72.97	73.15	76.26	76.71	78.01	78.73	79.02	79.09				
	AVG	72.15	72.78	73.15	72.84	72.12	71.81	72.31	72.72	72.85	72.90	72.81	73.07	73.06	73.12	73.57	76.56	77.19	78.36	79.04	79.56	79.28	72.59	76.28		
CANNELTON	MAX	72.61	73.18	73.76	73.89	73.20	73.40	73.72	74.57	74.86	74.98	74.57	74.48	74.61	74.88	No	77.29	77.61	78.01	78.64	79.11	81.19			0	0.00%
MP 720.7	MIN	72.14	72.84	73.47	73.69	72.82	73.24	73.53	74.37	74.41	74.35	74.44	74.41	74.32	74.46	Data	77.04	77.56	77.68	78.24	78.91	80.65				
	AVG	72.34	72.99	73.58	73.76	73.00	73.30	73.59	74.45	74.62	74.69	74.51	74.46	74.46	74.67	Available	77.18	77.59	77.77	78.41	79.02	80.94	73.71	77.17		
NEWBURGH	MAX	73.13	73.69	74.82	74.89	73.47	74.70	74.55	76.41	76.59	75.85	75.67	75.47	76.05	77.40	77.54	78.57	78.64	79.30	79.95	80.83	81.63			0	0.00%
MP 776.1	MIN	72.79	73.29	74.25	74.16	72.55	74.14	73.78	75.45	75.43	75.00	74.98	74.95	74.80	75.63	76.24	77.43	78.40	78.87	79.32	79.95	80.85				
	AVG	72.97	73.50	74.58	74.57	73.10	74.44	74.19	75.97	75.78	75.29	75.29	75.15	75.32	76.16	76.81	77.95	78.53	79.04	79.66	80.35	81.21	74.52	78.02		
JOHN T. MYERS	MAX	72.21	73.26	74.50	74.50	73.76	74.21	74.52	75.78	75.83	75.94	76.32	75.88	75.54	76.15	77.04	78.85	79.32	79.88	80.28	80.69	81.75			0	0.00%
MP 846.0	MIN	71.98	73.08	74.14	74.08	73.04	74.10	74.34	75.40	75.25	75.27	75.76	74.91	74.80	75.40	75.97	78.21	78.57	79.00	80.08	80.58	81.36				
	AVG	72.08	73.14	74.27	74.27	73.43	74.14	74.41	75.54	75.51	75.51	76.02	75.23	75.12	75.71	76.45	78.49	78.92	79.25	80.22	80.63	81.58	74.39	78.16		
SMITHLAND	MAX	72.97	73.40	74.01	74.68	74.01	74.10	74.08	74.53	76.01	76.10	76.46	75.97	77.33	76.60	77.25	79.12	79.79	80.49	81.19	80.85	83.19			0	0.00%
MP 919.0	MIN	72.45	73.02	73.76	74.37	73.63	73.71	73.65	74.39	75.45	75.70	76.01	75.72	72.25	75.72	76.21	78.96	78.93	79.38	80.11	80.69	82.83				
	AVG	72.71	73.20	73.85	74.50	73.86	73.91	73.88	74.46	75.83	75.87	76.33	75.86	74.79	76.09	76.64	79.02	79.31	79.91	80.60	80.74	83.08	74.40	78.61		

Period Average for June 1-15 is 80°F and the Max is 85°F
Period Average for June 16-30 is 83°F and the Max is 87°F

Appendix E: Daily Temperature Readings

Temperature Data July 2009

CALENDAR DAY JULIAN DAY		1-Jul 182	2-Jul 183	6-Jul 187	7-Jul 188	8-Jul 189	9-Jul 190	10-Jul 191	13-Jul 194	14-Jul 195	15-Jul 196	16-Jul 197	17-Jul 198	21-Jul 202	22-Jul 203	23-Jul 204	24-Jul 205	28-Jul 209	29-Jul 210	30-Jul 211	31-Jul 212	July 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	75.34	75.47	75.42	75.76	75.92	76.44	76.84	76.91	77.09	76.84	77.09	77.63	76.41	76.24	76.06	74.80	76.42	76.66	76.26	76.21		0	0.00%
MP 31.7	MIN	74.84	74.88	74.10	74.88	74.84	74.75	75.11	75.79	76.05	75.94	76.14	76.60	75.42	75.31	74.86	74.55	75.47	75.97	75.40	75.76			
	AVG	75.07	75.11	74.45	75.25	75.55	75.23	75.96	76.49	76.62	76.44	76.53	77.19	75.85	75.72	75.22	74.71	75.96	76.31	75.89	75.98	75.78		
HANNIBAL***	MAX	77.52	77.16	76.35	76.93	77.40	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		0	0.00%
MP 126.4	MIN	76.82	76.82	75.76	75.88	76.35	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data			
UPSTREAM	AVG	77.28	77.00	76.02	76.52	76.92	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	76.75		
RACINE***	MAX	80.48	80.07	78.69	78.89	78.69	78.89	79.28	79.97	79.99	No	80.87	80.97	80.67	80.69	80.69	80.52	80.48	80.58	80.38	80.79		0	0.00%
MP 237.5	MIN	79.77	79.38	78.26	78.16	78.16	78.38	78.77	79.34	79.77	Data	80.18	80.46	80.34	80.34	80.38	80.05	79.87	80.18	80.16	80.18			
	AVG	80.08	79.79	78.41	78.54	78.45	78.58	78.98	79.58	79.87	Available	80.60	80.69	80.47	80.48	80.57	80.32	80.18	80.39	80.25	80.43	79.83		
KYGER	MAX	80.85	80.24	78.93	79.46	80.03	80.03	79.63	81.34	81.54	No	81.44	82.23	81.15	81.81	81.81	81.72	84.13	82.84	81.54	81.34		0	0.00%
MP 260.0	MIN	80.24	79.44	78.22	78.20	78.53	78.71	79.20	79.91	80.20	Data	80.42	81.03	79.97	80.32	80.91	80.77	81.72	80.83	81.03	80.62			
	AVG	80.49	79.95	78.54	78.93	79.38	79.39	79.36	80.58	80.85	Available	81.08	81.45	80.63	81.11	81.25	81.26	83.42	81.74	81.26	80.97	80.61		
GREENUP***	MAX	80.20	79.00	80.00	79.10	78.70	78.50	79.00	No	No	No	No	No	No	No	79.30	80.20	81.70	80.20	79.20	77.50		0	0.00%
MP 341.0	MIN	78.70	78.40	78.40	76.40	76.70	76.60	77.30	Data	Data	Data	Data	Data	Data	Data	Data	78.80	79.30	79.10	77.00	77.00			
	AVG	79.38	78.75	79.05	77.26	77.28	77.64	78.19	Available	Available	Available	Available	Available	Available	Available	79.29	79.39	80.46	79.47	78.41	77.22	78.60		
MARKLAND***	MAX	79.56	79.36	78.48	78.24	78.21	78.62	78.17	79.11	79.21	79.03	79.34	79.57	79.23	79.27	78.71	78.80	78.87	79.16	79.61	79.50		0	0.00%
MP 531.5	MIN	79.36	79.16	77.56	77.36	77.61	77.86	77.05	77.90	78.06	78.49	78.62	79.32	78.67	78.37	78.26	78.40	78.44	78.55	78.64	78.12			
	AVG	79.45	79.24	77.92	77.67	77.85	78.10	77.57	78.31	78.57	78.64	78.90	79.45	78.97	78.83	78.43	78.58	78.67	78.80	79.13	78.89	78.60		
CANNELTON	MAX	80.92	80.74	79.81	79.70	79.75	79.43	82.17	80.44	80.60	81.41	80.69	82.04	81.25	80.87	79.09	79.16	79.03	*	*	*		0	0.00%
MP 720.7	MIN	80.69	80.53	79.12	79.25	79.16	79.07	79.75	79.59	80.02	80.44	80.56	80.80	79.75	79.54	78.85	78.85	78.89	*	*	*			
	AVG	80.82	80.67	79.46	79.41	79.45	79.23	80.53	79.85	80.25	80.68	80.62	81.41	80.22	80.07	78.98	79.03	78.95	*	*	*	79.98		
NEWBURGH**	MAX	81.86	82.36	83.35	84.24	84.97	86.41	86.52	84.79	84.25	83.84	84.74	83.39	82.29	80.73	79.65	81.95	82.90	82.20	80.73	79.65		0	0.00%
MP 776.1	MIN	80.69	80.40	79.18	79.81	80.94	81.05	82.24	81.16	82.04	81.48	81.66	81.21	80.35	79.68	79.00	79.95	80.06	79.72	79.47	78.98			
	AVG	81.27	81.18	80.30	81.42	82.14	82.63	83.55	82.55	82.77	82.23	82.63	81.86	81.28	80.05	79.29	81.13	81.05	80.65	80.07	79.21	81.36		
JOHN T. MYERS**	MAX	81.03	80.42	79.84	80.96	82.08	83.26	83.26	83.77	83.14	82.78	83.21	82.71	80.47	80.38	79.29	79.29	81.18	80.80	80.64	80.53		0	0.00%
MP 846.0	MIN	80.37	79.75	78.39	79.11	79.48	80.35	81.46	81.41	82.04	81.82	81.88	81.48	79.92	79.77	78.85	78.82	80.76	80.11	80.51	80.11			
	AVG	80.61	80.06	79.03	79.70	80.40	81.45	82.06	82.24	82.35	82.19	82.40	81.89	80.26	80.07	79.12	79.01	80.99	80.40	80.58	80.24	80.78		
SMITHLAND**	MAX	82.69	82.29	80.17	80.10	79.79	82.33	81.39	81.82	81.16	81.70	81.72	81.72	80.83	79.52	78.33	78.22	79.74	80.13	80.15	79.95		0	0.00%
MP 919.0	MIN	82.13	81.82	79.02	79.02	78.44	79.20	80.38	80.38	80.29	80.31	80.71	80.62	79.74	79.03	78.12	77.88	79.43	79.75	79.97	79.72			
	AVG	82.28	82.02	79.47	79.34	78.93	79.90	80.63	80.94	80.63	80.77	81.04	81.19	80.23	79.30	78.22	78.14	79.54	79.98	80.06	79.82	80.12		

Period Average for July 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data August 2009

CALENDAR DAY JULIAN DAY		3-Aug 215	4-Aug 216	5-Aug 217	6-Aug 218	7-Aug 219	10-Aug 222	11-Aug 223	12-Aug 224	13-Aug 225	14-Aug 226	17-Aug 229	18-Aug 230	19-Aug 231	20-Aug 232	21-Aug 233	24-Aug 236	25-Aug 237	26-Aug 238	27-Aug 239	28-Aug 240	31-Aug 243	Aug 1-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	76.06	76.08	75.20	75.92	76.24	76.48	76.75	77.22	77.23	77.04	78.48	77.90	77.41	77.56	78.39	77.85	78.08	77.56	77.81	78.10	75.52		0	0.00%
MP 31.7	MIN	75.45	75.45	75.06	75.07	75.06	75.76	76.21	76.41	76.75	76.41	77.18	76.82	76.95	76.91	77.11	77.29	76.86	76.68	77.04	76.91	74.71			
	AVG	75.85	75.71	75.09	75.54	75.55	76.16	76.54	76.88	77.05	76.64	77.81	77.46	77.20	77.15	77.61	77.65	77.41	77.12	77.47	77.54	75.20	76.70		
HANNIBAL***	MAX	No	No	No	No	No	No	78.69	79.16	79.39	80.44	80.91	81.61	81.27	81.84	81.84	81.14	80.56	79.86	79.39	79.63	78.93		0	0.00%
MP 126.4	MIN	Data	Data	Data	Data	Data	Data	77.86	78.33	79.16	79.03	79.74	80.56	80.67	80.67	80.91	80.10	79.39	79.16	78.93	79.03	78.10			
UPSTREAM	AVG	Available	Available	Available	Available	Available	Available	78.47	78.89	79.27	79.95	80.53	81.05	80.90	81.39	81.29	80.58	80.15	79.55	79.13	79.33	78.51	79.93		
RACINE***	MAX	79.99	79.67	79.81	79.28	80.05	80.87	81.30	81.97	81.38	81.77	No	84.17	83.29	83.27	84.11	80.97	81.79	82.66	82.68	82.89	82.48		0	0.00%
MP 237.5	MIN	78.67	78.67	78.95	78.95	78.95	80.20	80.56	80.75	80.85	80.85	Data	82.66	82.78	79.77	78.67	77.49	77.41	77.10	82.03	82.46	81.20			
	AVG	79.51	79.29	79.39	79.12	79.61	80.56	80.95	81.16	81.09	81.34	Available	83.25	83.11	82.52	82.53	79.58	79.89	81.16	82.43	82.66	82.04	81.24		
KYGER	MAX	81.24	80.54	79.85	80.32	82.34	85.02	84.90	83.54	83.29	83.01	No	84.92	84.52	87.43	86.92	80.52	80.01	80.14	No	80.62	79.61		0	0.00%
MP 260.0	MIN	79.75	79.75	79.52	79.89	79.83	82.32	82.30	82.40	82.72	82.11	Data	83.82	83.72	83.92	80.73	79.91	79.52	79.22	Data	79.91	78.53			
	AVG	80.66	80.18	79.74	80.07	81.09	***84.17***	83.00	82.95	82.90	82.57	Available	***84.29***	***84.13***	***85.71***	82.15	80.30	79.76	79.72	Available	80.18	79.19	81.72		
GREENUP***	MAX	77.30	No	No	75.00	No	No	80.50	74.40	74.80	74.50	79.80	No	No	No	No	No	No	78.00	77.80	76.70	80.30		0	0.00%
MP 341.0	MIN	76.60	Data	Data	73.80	Data	Data	68.00	71.50	70.80	70.30	71.80	Data	Data	Data	Data	Data	Data	75.20	75.40	75.10	73.40			
UPSTREAM	AVG	76.98	Available	Available	74.55	Available	Available	71.98	73.76	73.29	71.86	77.64	Available	Available	Available	Available	Available	Available	76.61	76.18	75.96	78.27	75.19		
MARKLAND***	MAX	78.03	76.46	76.35	74.98	75.29	76.62	76.98	77.79	79.18	79.50	80.58	80.89	81.19	81.46	81.72	80.31	80.15	80.17	80.49	80.42	79.70		0	0.00%
MP 531.5	MIN	76.37	76.17	74.75	74.34	74.62	75.92	75.76	76.46	77.20	78.69	79.83	80.42	80.87	81.07	81.34	79.65	79.45	79.66	79.93	79.84	79.36			
	AVG	77.08	76.35	75.78	74.65	74.93	76.23	76.23	76.95	78.19	79.00	80.16	80.58	81.03	81.26	81.52	79.88	79.79	79.83	80.12	80.03	79.49	78.53		
CANNELTON	MAX	86.74	88.32	88.12	80.74	76.35	77.63	77.68	77.61	78.04	*	*	*	*	*	*	83.48	81.82	81.54	81.37	83.07	No		0	0.00%
MP 720.7	MIN	86.27	87.96	86.77	77.32	75.54	77.00	77.14	77.41	77.92	*	*	*	*	*	*	82.26	80.91	80.78	80.76	80.82	Data			
	AVG	86.56	88.13	87.48	78.94	75.90	77.27	77.41	77.54	78.01	*	*	*	*	*	*	82.77	81.34	81.13	80.92	81.31	Available	81.05		
NEWBURGH **	MAX	78.19	79.11	78.93	78.91	78.15	82.44	83.07	80.65	81.54	81.68	84.83	85.86	85.21	83.91	83.86	80.51	79.93	82.00	84.33	86.02	81.95		0	0.00%
MP 776.1	MIN	76.59	77.99	77.99	77.41	76.53	78.37	79.34	78.96	78.44	78.82	81.25	81.84	82.47	82.45	82.00	79.54	79.48	80.82	81.57	82.09	80.80			
	AVG	77.39	78.54	78.33	78.09	77.01	79.61	80.85	79.60	79.21	79.75	82.49	83.31	83.77	82.79	82.84	80.08	79.72	81.38	82.61	83.34	81.24	80.57		
JOHN T. MYERS**	MAX	79.99	78.80	78.75	79.07	79.07	78.96	78.58	79.32	80.04	80.74	81.84	82.65	83.10	82.76	82.51	79.95	79.90	80.46	81.03	81.88	80.73		0	0.00%
MP 846.0	MIN	79.09	78.53	78.42	78.49	77.94	78.08	78.15	78.35	79.09	79.88	80.87	81.37	81.88	81.77	81.64	79.61	79.57	79.84	80.20	80.37	79.90			
	AVG	79.65	78.64	78.62	78.76	78.54	78.41	78.38	78.76	79.52	80.28	81.30	81.85	82.32	82.09	82.00	79.69	79.76	80.01	80.47	80.75	80.26	79.99		
SMITHLAND**	MAX	79.84	79.81	79.11	78.89	79.45	79.93	79.97	80.33	80.11	80.15	82.04	83.39	82.17	82.11	81.86	80.74	81.36	81.07	81.90	81.19	80.87		0	0.00%
MP 919.0	MIN	79.36	79.11	78.49	78.08	78.76	79.11	79.70	79.57	79.27	79.29	81.63	81.79	81.66	81.70	81.63	80.49	79.93	79.68	79.88	79.88	80.11			
	AVG	79.58	79.63	78.82	78.45	79.13	79.38	79.82	79.90	79.60	79.62	81.75	82.06	81.90	81.86	81.76	80.64	80.65	80.02	80.75	80.42	80.51	80.30		

Period Average for August 1-31 is 84°F and the Max is 89°F

Appendix E: Daily Temperature Readings

Temperature Data Septmeber 2009

CALENDAR DAY JULIAN DAY		1-Sep 244	2-Sep 245	3-Sep 246	4-Sep 247	8-Sep 251	9-Sep 252	10-Sep 253	11-Sep 254	14-Sep 257	15-Sep 258	16-Sep 259	17-Sep 260	18-Sep 261	21-Sep 264	22-Sep 265	23-Sep 266	24-Sep 267	25-Sep 268	28-Sep 271	29-Sep 272	30-Sep 273	Sept 1-15 Period Avg	Sept 16-30 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	75.06	74.79	75.18	75.02	74.01	73.98	74.28	73.96	73.96	73.45	74.52	73.49	73.09	72.97	73.36	73.13	73.26	73.22	71.91	70.63	68.68			0	0.00%
MP 31.7	MIN	74.16	73.56	73.56	73.42	73.22	73.20	73.31	72.97	73.04	72.50	73.24	72.43	72.41	72.05	72.43	72.43	72.54	72.84	71.10	69.76	67.44				
	AVG	74.74	74.06	74.09	73.94	73.64	73.54	73.75	73.36	73.51	73.12	73.48	72.82	72.73	72.43	72.80	72.75	72.95	72.99	71.61	70.28	67.87	73.77	72.06		
HANNIBAL***	MAX	78.33	77.99	77.63	77.40	76.69	77.16	77.05	76.35	75.99	75.99	75.88	75.88	75.52	74.95	74.82	74.95	74.95	75.29	74.48	73.31	72.01			0	0.00%
MP 126.4	MIN	77.52	76.93	76.69	76.69	76.35	76.46	75.99	75.52	75.18	75.29	75.18	74.82	74.71	74.59	74.59	74.59	74.48	74.82	73.31	72.01	71.20				
UPSTREAM	AVG	77.99	77.53	77.15	77.01	76.53	76.81	76.58	76.03	75.63	75.65	75.59	75.36	75.17	74.76	74.74	74.74	74.71	75.03	74.05	72.82	71.74	76.69	74.43		
RACINE***	MAX	81.68	81.28	80.97	80.89	80.05	79.77	79.50	79.48	77.98	78.10	78.18	77.88	77.57	77.49	77.10	76.98	76.98	77.10	75.90	75.31	73.88			0	0.00%
MP 237.5	MIN	80.67	80.48	80.28	80.36	79.48	79.38	79.18	78.95	77.67	77.67	77.67	77.47	77.26	76.98	76.78	76.65	76.78	76.67	75.29	73.88	72.42				
	AVG	81.35	80.92	80.69	80.59	79.85	79.58	79.37	79.19	77.75	77.90	77.94	77.67	77.42	77.30	76.95	76.82	76.83	76.92	75.70	74.78	73.17	79.72	76.50		
KYGER	MAX	78.83	78.34	78.26	78.04	78.04	78.43	79.14	77.83	76.33	76.33	76.86	76.73	77.04	76.16	76.04	76.84	76.73	76.92	74.86	74.43	72.86			0	0.00%
MP 260.0	MIN	78.02	77.51	77.22	77.22	77.51	77.12	76.82	76.61	75.72	75.53	75.63	75.84	75.72	75.61	75.61	75.72	76.23	76.23	74.03	72.76	71.56				
	AVG	78.42	77.93	77.82	77.80	77.92	77.76	77.67	77.22	76.11	76.01	76.23	76.31	76.41	75.94	75.84	76.37	76.51	76.68	74.48	73.80	72.12	77.47	75.52		
GREENUP***	MAX	78.70	78.60	78.70	78.40	85.30	83.30	*	*	*	*	75.50	70.30	69.60	68.50	68.50	80.50	74.50	72.60	68.80	74.30	72.40			0	0.00%
MP 341.0	MIN	76.70	75.40	75.60	62.00	66.40	76.60	*	*	*	*	70.40	68.90	68.80	67.60	66.20	65.50	72.60	70.80	67.30	67.30	71.00				
UPSTREAM	AVG	77.98	76.85	77.11	70.61	76.82	79.50	*	*	*	*	72.80	69.63	69.19	68.08	67.30	73.33	73.66	71.91	68.10	71.10	71.68	76.48	70.62		
MARKLAND***	MAX	79.81	79.84	79.92	79.81	78.51	78.69	78.35	78.57	78.44	78.26	78.21	77.76	77.52	76.87	77.00	77.09	76.64	76.42	74.71	73.08	71.37			0	0.00%
MP 531.5	MIN	79.30	79.16	79.29	79.30	78.15	77.99	77.67	77.72	77.56	77.77	77.76	77.23	76.30	76.39	76.77	76.64	76.41	76.08	72.93	71.38	70.21				
	AVG	79.51	79.47	79.56	79.51	78.36	78.28	77.91	78.04	77.90	77.98	77.93	77.49	77.26	76.59	76.85	76.86	76.51	76.20	73.89	72.35	70.66	78.65	75.69		
CANNELTON	MAX	No	79.61	79.88	79.47	79.66	79.86	79.83	79.54	79.20	78.78	78.73	78.49	78.17	78.12	77.88	77.74	77.49	76.44	74.14	73.85	72.46			0	0.00%
MP 720.7	MIN	Data	79.32	79.23	79.20	78.98	79.03	79.02	78.73	78.33	78.42	78.30	77.88	77.85	77.88	77.58	77.58	77.09	75.88	73.56	73.22	72.09				
	AVG	Available	79.45	79.39	79.33	79.25	79.25	79.27	79.07	78.56	78.54	78.49	78.15	77.94	78.03	77.75	77.66	77.30	76.16	73.80	73.55	72.30	79.12	76.47		
NEWBURGH **	MAX	81.64	84.36	80.91	83.14	81.12	82.29	81.88	84.18	81.81	80.94	80.47	79.79	79.39	78.80	79.25	79.97	78.73	78.75	74.88	72.86	74.62			0	0.00%
MP 776.1	MIN	79.56	78.57	78.62	78.53	78.80	79.36	79.21	79.18	78.76	79.14	78.73	78.22	77.81	77.13	76.82	77.23	77.36	77.31	72.79	71.76	65.16				
	AVG	80.27	80.32	79.45	79.91	79.87	80.61	80.19	80.84	79.81	79.77	79.41	78.78	78.29	77.84	77.74	78.29	77.90	77.63	73.79	72.08	71.83	80.11	76.69		
JOHN T. MYERS**	MAX	79.38	80.69	79.95	79.83	79.92	80.15	80.20	80.44	79.99	79.16	79.03	78.31	78.53	77.50	77.72	77.70	77.74	76.98	76.42	74.23	72.07			0	0.00%
MP 846.0	MIN	78.91	78.96	78.80	78.46	78.84	78.58	78.76	78.66	78.64	78.55	78.21	77.70	77.38	76.89	77.14	77.32	77.00	76.60	74.28	72.10	71.46				
	AVG	79.17	79.62	79.24	78.93	79.31	79.17	79.19	79.26	79.12	78.75	78.47	77.99	77.75	77.22	77.37	77.46	77.28	76.75	75.43	73.11	71.69	79.18	76.41		
SMITHLAND**	MAX	79.81	80.31	81.64	81.16	79.88	80.08	81.00	81.05	79.54	79.25	78.96	78.78	78.87	77.38	77.36	77.52	77.32	76.93	76.01	74.43	73.40			0	0.00%
MP 919.0	MIN	78.85	78.75	78.96	78.64	78.17	78.04	78.73	78.75	78.24	78.60	78.57	78.17	77.90	77.16	77.14	77.00	76.87	76.48	74.48	73.42	72.18				
	AVG	79.36	79.46	79.49	79.36	78.80	78.84	79.38	79.52	78.69	78.92	78.81	78.40	78.32	77.26	77.26	77.15	77.05	76.70	75.20	73.76	72.74	79.18	76.60		

Period Average for September 1-15 is 84°F and the Max is 87°F
Period Average for September 16-30 is 82°F and the Max is 86°F

Appendix E: Daily Temperature Readings

Temperature Data October 2009

CALENDAR DAY JULIAN DAY		1-Oct 274	2-Oct 275	5-Oct 278	6-Oct 279	7-Oct 280	8-Oct 281	9-Oct 282	12-Oct 285	13-Oct 286	14-Oct 287	15-Oct 288	16-Oct 289	19-Oct 292	20-Oct 293	22-Oct 295	23-Oct 296	26-Oct 299	27-Oct 300	28-Oct 301	29-Oct 302	30-Oct 303	Oct 1-15 Period Avg	Oct 16-31 Period Avg	# of Days Max Exceeded	Monthly % Exceedance of Max
MONTGOMERY	MAX	67.71	66.74	64.20	63.99	63.63	62.69	62.26	60.55	59.34	59.47	58.32	57.18	54.46	53.82	54.01	54.12	53.28	55.62	54.63	54.09	54.55			0	0.00%
MP 31.7	MIN	66.90	65.62	63.25	63.37	62.96	61.90	61.83	59.63	59.09	58.86	57.49	56.23	53.67	53.49	53.42	53.83	52.72	53.92	54.01	53.87	54.36				
	AVG	67.41	66.16	63.72	63.59	63.12	62.28	62.05	60.09	59.24	59.16	57.86	56.67	54.03	53.67	53.66	53.99	53.05	54.98	54.23	53.97	54.48	62.24	54.27		
HANNIBAL***	MAX	71.31	70.27	67.93	67.80	67.10	66.40	65.82	64.42	62.65	62.31	60.91	60.08	56.46	55.63	54.70	54.93	54.70	54.36	53.29	52.95	52.59			0	0.00%
MP 126.4	MIN	69.67	69.21	67.10	66.76	66.63	65.46	65.23	62.55	62.31	60.91	59.85	59.14	55.40	54.70	54.12	54.59	54.23	53.29	52.59	52.48	52.12				
UPSTREAM	AVG	70.74	69.67	67.54	67.34	66.90	66.03	65.60	63.57	62.51	61.75	60.22	59.71	56.05	55.23	54.46	54.73	54.47	53.80	52.94	52.76	52.38	65.62	54.65		
RACINE***	MAX	72.42	72.01	70.01	69.42	69.12	68.63	68.20	67.89	67.12	66.84	66.22	65.33	62.62	61.93	61.44	61.03	60.85	60.73	60.22	59.97	59.75			0	0.00%
MP 237.5	MIN	71.70	71.19	68.99	68.79	68.63	68.10	67.71	67.04	66.61	66.43	65.19	64.80	61.54	61.21	60.64	60.42	60.34	59.91	59.71	59.52	59.42				
	AVG	72.11	71.72	69.69	69.16	68.93	68.38	67.97	67.62	66.90	66.65	65.65	65.13	62.31	61.69	61.15	60.85	60.69	60.46	60.02	59.71	59.62	68.62	61.16		
KYGER	MAX	71.64	70.34	68.14	68.26	67.37	66.57	66.00	No	No	64.78	63.37	62.38	60.09	59.97	60.40	60.07	58.38	58.38	57.75	57.77	57.45			0	0.00%
MP 260.0	MIN	70.09	69.04	67.30	66.86	66.57	65.55	65.49	Data	Data	63.86	61.99	61.97	59.08	57.59	58.16	58.28	57.28	57.14	57.36	56.98	56.86				
	AVG	70.92	69.69	67.86	67.53	67.09	66.17	65.70	Available	Available	64.51	62.62	62.13	59.65	59.05	59.26	59.43	57.84	57.84	57.51	57.50	57.12	66.90	58.73		
GREENUP***	MAX	71.40	69.50	67.20	68.00	67.90	67.30	64.30	64.00	63.80	62.20	61.20	61.90	63.00	54.70	59.40	62.80	64.20	62.30	61.00	59.50	55.80			0	0.00%
MP 341.0	MIN	69.20	65.80	66.10	66.00	67.00	64.20	63.10	62.60	59.50	58.40	59.90	59.90	57.20	50.90	53.20	56.20	62.60	60.10	59.40	52.90	53.80				
UPSTREAM	AVG	70.35	67.30	66.81	66.98	67.51	64.74	63.90	63.17	61.21	60.08	60.70	61.41	59.39	51.80	55.55	60.54	63.32	60.92	60.13	55.86	54.31	64.80	58.32		
MARKLAND***	MAX	70.20	69.62	68.83	68.40	68.02	67.35	66.94	63.72	63.32	63.19	62.71	62.19	60.96	60.31	59.50	60.04	60.03	59.56	58.98	59.29	59.32			0	0.00%
MP 531.5	MIN	69.62	69.30	68.14	68.04	67.33	66.94	65.57	62.73	63.09	62.69	62.20	61.41	60.28	59.88	59.22	59.50	59.45	58.96	58.82	58.89	58.89				
	AVG	69.78	69.42	68.37	68.14	67.64	67.10	66.14	62.97	63.24	62.89	62.45	61.82	60.50	60.08	59.34	59.72	59.62	59.19	58.89	59.16	59.15	66.19	59.75		
CANNELTON	MAX	71.47	70.65	69.10	69.03	68.56	68.11	67.42	63.57	63.61	62.58	61.93	61.77	60.39	60.01	58.77	59.05	59.23	59.68	59.59	59.22	58.89			0	0.00%
MP 720.7	MIN	70.66	70.25	68.65	68.70	68.18	67.68	66.88	63.18	62.91	62.15	61.79	61.32	59.99	59.50	58.62	59.00	59.00	59.56	59.38	59.05	58.75				
	AVG	71.02	70.46	68.88	68.86	68.39	67.90	67.19	63.32	63.26	62.37	61.87	61.58	60.17	59.73	58.68	59.03	59.09	59.61	59.47	59.14	58.80	66.68	59.53		
NEWBURGH **	MAX	72.28	72.09	71.38	69.48	70.41	69.22	68.90	63.81	63.68	63.19	62.71	61.29	61.39	61.03	61.41	61.38	60.40	60.06	59.70	59.74	60.03			0	0.00%
MP 776.1	MIN	71.67	70.81	68.25	68.85	68.45	68.14	66.43	63.28	63.05	62.04	61.21	59.92	59.34	59.95	60.30	60.60	59.05	59.45	59.29	59.27	59.23				
	AVG	71.90	71.36	69.30	69.15	68.94	68.46	67.49	63.59	63.30	62.65	61.75	60.47	60.09	60.38	60.70	60.95	59.51	59.74	59.49	59.47	59.62	67.08	60.04		
JOHN T. MYERS**	MAX	71.40	70.99	69.26	68.76	68.27	67.51	66.54	64.58	63.77	62.96	61.92	61.12	58.89	59.18	59.81	60.46	59.77	59.36	59.20	59.22	59.72			0	0.00%
MP 846.0	MIN	70.93	70.57	68.38	67.95	67.21	66.51	66.00	63.66	62.98	61.93	61.18	60.28	58.33	58.64	59.40	59.83	59.27	59.14	58.98	59.05	59.18				
	AVG	71.08	70.78	68.62	68.28	67.67	67.06	66.27	63.89	63.43	62.45	61.49	60.74	58.66	58.93	59.58	60.15	59.44	59.27	59.09	59.11	59.49	66.46	59.45		
SMITHLAND**	MAX	72.14	71.06	68.07	67.78	69.06	67.28	66.97	63.82	63.14	61.56	60.66	59.56	57.00	56.59	57.31	57.92	58.62	58.55	58.57	58.21	58.69			0	0.00%
MP 919.0	MIN	71.08	70.47	67.35	67.44	67.03	66.78	65.26	63.12	61.57	60.67	59.61	58.30	56.43	56.19	56.68	57.31	58.26	58.44	58.23	57.92	58.12				
	AVG	71.55	70.68	67.67	67.63	67.56	67.07	66.34	63.39	62.33	61.12	60.11	58.93	56.62	56.41	56.95	57.65	58.40	58.51	58.46	58.02	58.43	65.95	57.84		

Period Average for October 1-15 is 77°F and the Max is 82°F
Period Average for October 16-30 is 72°F and the Max is 77°F

Appendix F: Longitudional Bacteria Survey 2003 - 2006

Longitudinal Bacteria Survey Logistics and Details								
Round	**Survey**	**Reach**	**Year**	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**
1	**A**	Upper	2003	Jul 28-31	Aug 4-7	Aug 11-14	Aug 18-21	Aug 25-28
1	**B**	Mid	2003	Sept 29 - Oct 2	Oct 6-9	Oct 13-16	Oct 20-23	Oct 27-30
1	**C**	Lower	2004	May 3-6	May 10-13	May 17-20	May 24-27	June 7-10
2	**D**	Upper	2004	July 26-29	Aug 2-5	Aug 9-12	Aug 16-19	Aug 23-26
2	**F**	Mid	2005	May 9-12	May 16-19	May 23-26	May 30 - Jun 2	Jun 6-9
2	**E**	Lower	2004	Sept 13-16	Sept 20-23	Sept 27-30	Oct 4-7	Oct 11-14
3	**I**	Upper	2006	Sep 11-14	Sep 18-21	Sep 25-28	Oct 2-5	Oct 9-12
3	**G**	Mid	2006	May 22-25	May 30 - Jun 2	Jun 5-8	Jun 12-15	Jun 19-22
3	**H**	Lower	2006	Jul 24-27	Jul 31 - Aug 3	Aug 7-10	Aug 14-17	Aug 21-24
4	**L**	Upper	2007	Sep 24-27	-	-	-	-
4	**L**	Mid	2007	Oct 1-4	-	-	-	-
4	**L**	Lower	2007	Oct 8-11	-	-	-	-
5	**M**	Upper	2008	Jun 4-7, 2008	-	-	-	-
5	**M**	Mid	2008	Jun 29-30, 2008	-	-	-	-
5	**M**	Lower	2008	May 5-8, 2008	-	-	-	-

Appendix F: E. coli Concentration Data in colonies per 100 mL

Mile Point		Round 1 Monthly Geometric Mean	Round 1 Percent Individual Exceedences		Round 2 Monthly Geometric Mean	Round 2 Percent Individual Exceedences		Round 3 Monthly Geometric Mean	Round 3 Percent Individual Exceedences	Geometric Mean Exceedences
1.5	A	**196**	**46.7**	D	**532**	**53.3**	I	54	0	**exceeds**
3.3	A	**213**	**53.3**	D	**418**	**46.7**	I	88	**20.0**	**exceeds**
6.4	A	**308**	**53.3**	D	**289**	**40.0**	I	59	0	**exceeds**
9.5	A	**198**	**60.0**	D	**381**	**60.0**	I	48	0	**exceeds**
11.4	A	**172**	**53.3**	D	**297**	**53.3**	I	50	6.7	**exceeds**
12.5	A	**180**	**60.0**	D	**238**	**53.3**	I	60	6.7	**exceeds**
14.4	A	**200**	**53.3**	D	**313**	**46.7**	I	56	6.7	**exceeds**
17.7	A	**155**	**60.0**	D	**312**	**46.7**	I	64	**13.3**	**exceeds**
20.5	A	**203**	**60.0**	D	**353**	**66.7**	I	51	0	**exceeds**
20.8	A	**181**	**53.3**	D	**261**	**46.7**	I	50	0	**exceeds**
21.8	A	**161**	**60.0**	D	**226**	**46.7**	I	40	0	**exceeds**
22.9	A	**214**	**60.0**	D	**357**	**66.7**	I	120	**33.3**	**exceeds**
25.5	A	**131**	**40.0**	D	**208**	**46.7**	I	48	0	**exceeds**
25.8	A	**177**	**46.7**	D	**203**	**46.7**	I	55	**13.3**	**exceeds**
26.4	A	**160**	**46.7**	D	**191**	**46.7**	I	59	6.7	**exceeds**
28.3	A	**144**	**46.7**	D	**150**	**46.7**	I	73	**20.0**	**exceeds**
32.9	A	**151**	**60.0**	D	**132**	**40.0**	I	55	**20.0**	**exceeds**
37.6	A	**164**	**64.3**	D	95	**40.0**	I	55	**20.0**	**exceeds**
41.2	A	125	**60.0**	D	94	**40.0**	I	51	**20.0**	
44.8	A	**145**	**60.0**	D	106	**40.0**	I	52	**20.0**	**exceeds**
48.7	A	**135**	**46.7**	D	78	**40.0**	I	54	**20.0**	**exceeds**
52.5	A	103	**53.3**	D	54	7.7	I	36	**20.0**	
56.4	A	**139**	**60.0**	D	58	7.1	I	37	**20.0**	**exceeds**
60.3	A	128	**60.0**	D	69	**13.3**	I	74	**40.0**	
66.4	A	**237**	**66.7**	D	94	**13.3**	I	88	**20.0**	**exceeds**
66.9	A	**194**	**60.0**	D	104	**14.3**	-	-	-	**exceeds**
68.2	-	-	-	-	-	-	I	99	**20.0**	**exceeds**
70.7	A	**170**	**53.3**	D	104	**13.3**	I	73	**20.0**	**exceeds**
71.8	A	**176**	**60.0**	D	**132**	**26.7**	I	74	**20.0**	**exceeds**
74.9	A	110	**40.0**	D	71	6.7	I	48	6.7	
80.2	A	99	**46.7**	D	65	**13.3**	I	36	0	
85.6	A	84	**33.3**	D	46	0	I	31	0	
91.2	A	**151**	**40.0**	D	81	**26.7**	I	48	0	**exceeds**
94.2	A	**228**	**53.3**	D	78	**13.3**	I	36	0	**exceeds**
97.8	A	**202**	**33.3**	D	124	**20.0**	I	40	0	**exceeds**
102.6	A	**154**	**33.3**	D	76	6.7	I	32	0	**exceeds**
107.7	A	121	**20.0**	D	43	0	I	26	0	
113.0	A	67	**20.0**	D	50	0	I	22	0	
118.3	A	49	**20.0**	D	35	0	I	15	0	
123.7	A	55	**20.0**	D	28	0	I	13	0	
124.9	A	44	**20.0**	D	27	0	I	12	0	
129.1	A	65	**20.0**	D	48	6.7	I	15	0	
133.4	A	68	**20.0**	D	47	0	I	21	0	
138.7	A	63	**13.3**	D	51	6.7	I	13	0	
144.2	A	44	**20.0**	D	29	0	I	14	0	
149.6	A	34	**13.3**	D	21	0	I	12	0	
155.0	A	36	**13.3**	D	15	0	I	9	0	
160.4	A	53	0	D	23	0	I	14	0	
165.8	A	70	**13.3**	D	16	0	I	16	6.7	
171.2	A	66	**13.3**	D	15	0	I	12	0	
175.1	A	80	**13.3**	D	18	0	I	19	0	
179.4	A	113	**33.3**	D	16	0	I	17	0	
183.5	A	114	**20.0**	D	18	0	I	16	0	
185.9	A	85	0	D	22	0	I	27	0	
190.8	A	70	0	D	18	0	I	30	6.7	

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in colonies per 100 mL

Mile Point		Round 1 Monthly Geometric Mean	Round 1 Percent Individual Exceedences		Round 2 Monthly Geometric Mean	Round 2 Percent Individual Exceedences		Round 3 Monthly Geometric Mean	Round 3 Percent Individual Exceedences	Geometric Mean Exceedences
195.7	A	46	0	D	15	0	I	22	0	
200.7	A	43	0	D	16	0	I	17	0	
205.7	A	50	0	D	17	0	I	**157**	**53.3**	**exceeds**
210.7	A	43	0	D	11	0	I	**162**	**53.3**	**exceeds**
215.7	A	42	0	D	10	0	I	**179**	**46.7**	**exceeds**
220.4	A	42	0	D	11	0	I	**176**	**53.3**	**exceeds**
225.4	A	35	0	D	12	0	I	**156**	**40.0**	**exceeds**
230.4	A	30	0	D	11	0	I	113	**40.0**	
235.6	A	28	0	D	14	0	I	**132**	**40.0**	**exceeds**
240.4	A	39	0	D	16	0	I	129	**40.0**	
245.4	A	45	0	D	14	0	I	**150**	**46.7**	**exceeds**
250.4	A	62	6.7	D	30	6.7	I	**213**	**60.0**	**exceeds**
255.5	A	54	0	D	31	6.7	I	**288**	**60.0**	**exceeds**
260.6	A	44	0	D	22	0	I	**256**	**60.0**	**exceeds**
265.7	A	47	0	D	28	0	I	**294**	**60.0**	**exceeds**
269.8	A	74	6.7	D	47	**13.3**	I	**227**	**46.7**	**exceeds**
275.2	A	53	0	D	26	0	I	**148**	**20.0**	**exceeds**
280.8	B	40	0	F	28	0	G	14	0	**exceeds**
280.8	-	-	-	-	-	-	I	**164**	**33.3**	**exceeds**
285.9	B	40	0	F	24	0	G	9	0	**exceeds**
285.9	-	-	-	-	-	-	I	**195**	**46.7**	**exceeds**
291.4	B	38	0	F	20	0	G	8	0	**exceeds**
291.4	-	-	-	-	-	-	I	**175**	**46.7**	**exceeds**
296.6	B	34	0	F	18	0	G	8	0	**exceeds**
296.6	-	-	-	-	-	-	I	**145**	**40.0**	**exceeds**
302.0	B	40	6.7	F	16	0	G	5	0	
307.7	B	57	**20.0**	F	39	6.7	G	24	0	
313.3	B	68	**20.0**	F	58	6.7	G	48	**20.0**	
317.2	B	77	**13.3**	F	53	6.7	G	51	**20.0**	
321.5	B	68	**13.3**	F	36	0	G	58	6.7	
327.4	B	51	**13.3**	F	24	0	G	35	7.1	
327.7	B	67	**20.0**	F	30	0	G	37	**20.0**	
328.0	B	79	**13.3**	F	28	0	G	44	**13.3**	
332.5	B	55	6.7	F	19	0	G	31	0	
338.1	B	49	**13.3**	F	21	0	G	20	0	
343.5	B	45	6.7	F	19	0	G	25	0	
349.2	B	65	**13.3**	F	22	0	G	23	0	
352.0	B	67	**20.0**	F	18	0	G	23	0	
353.8	B	55	6.7	F	18	0	G	26	0	
359.3	B	84	**26.7**	F	19	0	G	41	6.7	
364.6	B	54	**13.3**	F	17	0	G	29	0	
369.8	B	60	**20.0**	F	14	0	G	19	0	
375.0	B	58	**13.3**	F	16	0	G	18	0	
380.4	B	66	**13.3**	F	12	0	G	20	0	
385.4	B	58	**26.7**	F	11	0	G	12	0	
390.6	B	50	**13.3**	F	9	0	G	14	0	
395.0	B	57	**20.0**	F	9	0	G	11	0	
400.4	B	37	6.7	F	11	0	G	8	0	
405.8	B	46	**13.3**	F	13	0	G	16	0	
411.4	B	34	0	F	11	0	G	13	0	
416.4	B	24	0	F	9	0	G	9	0	
421.6	B	21	0	F	8	0	G	7	0	
426.4	B	27	0	F	8	0	G	7	0	
431.4	B	21	0	F	7	0	G	6	0	
436.8	B	24	0	F	7	0	G	13	0	

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in colonies per 100 mL

Mile Point	Round 1			Round 2			Round 3			
		Monthly Geometric Mean	Percent Individual Exceedences		Monthly Geometric Mean	Percent Individual Exceedences		Monthly Geometric Mean	Percent Individual Exceedences	Geometric Mean Exceedences
441.5	B	24	0	F	7	0	G	6	0	
446.5	B	23	0	F	8	0	G	7	0	
451.6	B	29	0	F	6	0	G	6	0	
455.3	B	32	0	F	6	0	G	22	**13.3**	
460.0	B	25	0	F	5	0	G	14	**13.3**	
465.0	B	42	**13.3**	F	8	0	G	10	0	
468.7	B	65	**20.0**	F	8	0	G	13	0	
472.7	B	84	**26.7**	F	36	6.7	G	40	0	
477.6	B	103	**20.0**	F	42	6.7	G	34	0	
482.2	B	130	**26.7**	F	36	6.7	G	66	**20.0**	
486.2	B	**169**	**20.0**	F	30	0	G	61	**20.0**	**exceeds**
489.7	B	96	**20.0**	F	27	0	G	27	0	
493.2	B	**147**	25	F	28	0	G	34	0	**exceeds**
498.0	B	**134**	**20.0**	F	23	0	G	30	0	**exceeds**
503.1	B	59	0	F	12	0	G	21	0	
508.3	B	52	0	F	10	0	G	13	0	
513.4	B	50	0	F	7	0	G	11	0	
518.5	B	39	6.7	F	8	0	G	10	0	
523.4	B	37	**20.0**	F	5	0	G	9	0	
528.4	B	34	**20.0**	F	5	0	G	8	0	
533.2	B	39	**20.0**	F	6	0	G	8	0	
538.5	B	47	**20.0**	F	7	0	G	8	0	
543.5	B	34	0	F	8	0	G	7	0	
548.3	B	41	0	F	8	0	G	8	0	
553.6	B	41	0	F	7	0	G	6	0	
558.8	B	42	**13.3**	F	8	0	G	6	0	
562.7	B	39	**13.3**	F	6	0	G	10	0	
567.6	B	35	0	F	7	0	G	6	0	
572.5	B	31	0	F	4	0	G	7	0	
577.4	B	31	0	F	5	0	G	5	0	
582.9	B	28	0	F	5	0	G	5	0	
587.8	B	19	0	F	4	0	G	5	0	
592.2	B	21	0	F	5	0	G	7	0	
597.1	B	19	0	F	4	0	G	8	0	
602.2	B	17	0	F	5	0	G	18	6.7	
604.3	B	17	0	F	6	0	G	47	**20.0**	
607.5	B	40	6.7	F	11	0	G	51	**20.0**	**exceeds**
607.5	-	-	-	-	-	-	H	23	0	**exceeds**
609.7	B	39	6.7	F	13	0	G	123	**40.0**	**exceeds**
609.7	-	-	-	-	-	-	H	23	0	**exceeds**
612.2	B	26	0	F	16	0	G	**157**	**20.0**	**exceeds**
612.2	-	-	-	-	-	-	H	26	6.7	**exceeds**
617.6	B	51	**13.3**	F	32	6.7	G	**280**	**60.0**	**exceeds**
617.6	-	-	-	-	-	-	H	63	**20.0**	**exceeds**
623.1	B	57	**13.3**	F	20	6.7	G	**146**	**40.0**	**exceeds**
623.1	-	-	-	-	-	-	H	49	**20.0**	**exceeds**
628.1	B	49	**13.3**	F	30	6.7	G	**209**	**46.7**	**exceeds**
628.1	-	-	-	-	-	-	H	49	**13.3**	**exceeds**
630.0	C	**155**	**40.0**	E	104	**40.0**	-	-	-	**exceeds**
631.6	C	**156**	**40.0**	E	111	**40.0**	G	**819**	66.7	**exceeds**
631.6	-	-	-	-	-	-	H	54	**20.0**	**exceeds**
637.6	C	**180**	**46.7**	E	107	**46.7**	G	**2301**	91.7	**exceeds**
637.6	-	-	-	-	-	-	H	45	**20.0**	**exceeds**
643.1	C	**218**	**60.0**	E	101	**40.0**	G	**472**	58.3	**exceeds**
643.1	-	-	-	-	-	-	H	30	0	**exceeds**

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in colonies per 100 mL

Mile Point		Round 1 Monthly Geometric Mean	Round 1 Percent Individual Exceedences		Round 2 Monthly Geometric Mean	Round 2 Percent Individual Exceedences		Round 3 Monthly Geometric Mean	Round 3 Percent Individual Exceedences	Geometric Mean Exceedences
648.9	C	**228**	**60.0**	E	95	**33.3**	G	91	11.1	**exceeds**
648.9	-	-	-	-	-	-	H	21	0	**exceeds**
654.0	C	**229**	**53.3**	E	85	**26.7**	H	15	0	**exceeds**
659.2	C	**227**	**53.3**	E	65	**13.3**	H	15	0	**exceeds**
664.2	C	**254**	**60.0**	E	75	**20.0**	H	10	0	**exceeds**
669.1	C	**216**	**60.0**	E	77	**26.7**	H	16	6.7	**exceeds**
674.5	C	**174**	**46.7**	E	66	**26.7**	H	9	**13.3**	**exceeds**
680.4	C	**181**	**53.3**	E	61	**13.3**	H	9	0	**exceeds**
685.6	C	**166**	**46.7**	E	60	0	H	7	0	**exceeds**
690.7	C	**185**	**60.0**	E	52	0	H	6	0	**exceeds**
695.6	C	**148**	**40.0**	E	49	0	H	3	0	**exceeds**
700.9	C	**162**	**46.7**	E	44	0	H	8	0	**exceeds**
706.2	C	**143**	**46.7**	E	35	0	H	5	0	**exceeds**
711.5	C	90	**40.0**	E	33	0	H	6	0	
717.4	C	104	**40.0**	E	34	0	H	4	0	
721.5	C	**200**	**46.7**	E	66	**13.3**	H	3	0	**exceeds**
727.0	C	**182**	**60.0**	E	59	**13.3**	H	5	0	**exceeds**
732.5	C	**182**	**60.0**	E	66	**13.3**	H	14	6.7	**exceeds**
738.8	C	**180**	**40.0**	E	43	0	H	10	0	**exceeds**
742.4	C	**182**	**53.3**	E	44	0	H	8	0	**exceeds**
746.4	C	**167**	**46.7**	E	42	0	H	5	0	**exceeds**
750.6	C	**162**	**46.7**	E	39	0	H	9	0	**exceeds**
754.8	C	**166**	**40.0**	E	44	0	H	9	0	**exceeds**
758.0	C	**158**	**40.0**	E	64	6.7	H	26	**20.0**	**exceeds**
763.2	C	**144**	**40.0**	E	35	0	H	56	**20.0**	**exceeds**
769.1	C	**156**	**40.0**	E	33	0	H	16	0	**exceeds**
773.6	C	**156**	**40.0**	E	30	6.7	H	11	0	**exceeds**
778.2	C	**141**	**33.3**	E	35	0	H	15	0	**exceeds**
782.8	C	**136**	**40.0**	E	39	0	H	18	0	**exceeds**
787.0	C	124	**33.3**	E	35	0	H	10	0	
792.7	C	**135**	**26.7**	E	36	0	H	14	6.7	**exceeds**
794.2	C	**153**	**33.3**	E	53	6.7	H	25	6.7	**exceeds**
799.5	-	-	-	-	-	-	H	31	**20.0**	**exceeds**
800.0	C	**152**	**40.0**	E	92	**20.0**	-	-	-	**exceeds**
805.8	C	**144**	**33.3**	E	43	0	H	34	**20.0**	**exceeds**
811.3	C	**177**	**40.0**	E	59	0	H	45	6.7	**exceeds**
817.0	C	**222**	**53.3**	E	70	6.7	H	19	0	**exceeds**
823.2	C	**257**	**73.3**	E	69	0	H	17	0	**exceeds**
829.5	C	**204**	**53.3**	E	60	0	H	12	0	**exceeds**
832.2	C	**162**	**26.7**	E	45	0	H	29	0	**exceeds**
837.2	C	**137**	**40.0**	E	41	0	H	20	0	**exceeds**
842.3	C	**140**	**26.7**	E	40	0	H	12	0	**exceeds**
846.5	C	120	**26.7**	E	49	6.7	H	14	0	
851.3	C	115	**13.3**	E	46	0	H	13	0	
855.5	C	120	**20.0**	E	40	0	H	10	0	
859.7	C	118	**20.0**	E	42	0	H	7	0	
864.4	C	106	**26.7**	E	42	0	H	5	0	
869.8	C	113	**26.7**	E	43	0	H	4	0	
875.7	C	78	**20.0**	E	36	0	H	5	0	
880.7	C	65	**20.0**	E	25	0	H	4	0	
885.0	C	66	6.7	E	26	0	H	3	0	
889.2	C	51	6.7	E	32	0	H	3	0	
891.7	C	48	6.7	E	27	0	H	2	0	
897.5	C	82	**33.3**	E	17	0	H	3	0	
903.2	C	80	**40.0**	E	16	0	H	2	0	

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in colonies per 100 mL

		Round 1			Round 2			Round 3		
Mile Point		Monthly Geometric Mean	Percent Individual Exceedences		Monthly Geometric Mean	Percent Individual Exceedences		Monthly Geometric Mean	Percent Individual Exceedences	Geometric Mean Exceedences
908.0	C	72	**26.7**	E	19	0	H	2	0	
912.6	C	46	6.7	E	14	0	H	2	0	
917.6	C	58	**20.0**	E	14	0	H	2	0	
923.4	C	53	**20.0**	E	15	0	H	2	0	
928.2	C	43	6.7	E	13	0	H	4	0	
932.2	C	36	0	E	12	0	H	2	0	
936.2	C	31	0	E	16	0	H	5	0	
937.7	C	31	0	E	15	0	H	4	0	
940.9	C	32	0	E	16	0	H	6	0	
944.2	C	28	0	E	15	0	H	4	0	
947.5	C	32	6.7	E	17	0	H	4	0	
952.2	C	33	6.7	E	21	0	H	4	0	
957.7	C	39	6.7	E	16	0	H	4	0	
963.0	C	33	6.7	E	18	0	H	3	0	
969.2	C	34	7.1	E	21	0	H	5	0	
974.1	C	32	6.7	E	18	0	H	6	0	
979.2	C	34	6.7	E	19	0	H	11	0	

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey A *(July 28 - Aug 28, 2003)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
1.5	**400**	**320**	**710**	178	238	**267**	**750**	**820**	**790**	191	119	152	24	25	24	196	7
3.3	**430**	**370**	**400**	**285**	235	**445**	**960**	**750**	**1330**	185	144	162	22	19	26	213	8
6.4	**270**	**340**	**370**	222	**432**	**421**	**1110**	**960**	**1040**	108	185	139	172	148	194	308	8
9.5	**690**	173	**720**	**335**	**450**	**490**	**800**	**960**	**1010**	**242**	172	146	3	21	16	198	9
11.4	**370**	218	**670**	**386**	**345**	**380**	**540**	**820**	**880**	228	125	99	12	10	9	172	8
12.5	**490**	**264**	**810**	**378**	**309**	**386**	**620**	**930**	**990**	194	173	147	5	12	8	180	9
14.4	**890**	200	**440**	**435**	**357**	**740**	**645**	**720**	**500**	192	143	238	14	15	11	200	8
17.7	**610**	**410**	**630**	**502**	**450**	**930**	**459**	**760**	**480**	99	93	89	3	5	12	155	9
20.5	**990**	**680**	**660**	**770**	**700**	**1040**	**535**	**635**	**770**	98	111	114	3	6	26	203	9
20.8	**1220**	**1300**	109	**1110**	**750**	**750**	**465**	**504**	**580**	93	98	199	6	7	6	181	8
21.8	**1190**	**640**	**1190**	**1260**	**960**	**990**	**380**	**496**	**500**	46	105	115	2	5	2	161	9
22.9	**1220**	**1210**	**880**	**1350**	**1080**	**606**	**1350**	**565**	**469**	108	80	228	6	5	4	214	9
25.5	240	200	173	**1150**	**770**	**647**	**599**	**410**	**479**	50	73	82	14	7	4	131	6
25.8	170	**1190**	**1660**	193	**379**	**1300**	**561**	**385**	**520**	67	78	87	10	14	24	177	7
26.4	200	200	**1470**	**365**	**276**	**521**	**526**	**518**	**540**	96	93	131	11	14	14	160	7
28.3	**264**	**350**	**1560**	223	**324**	**600**	214	**383**	**504**	70	89	86	14	11	12	144	7
32.9	**255**	**560**	**1920**	**450**	**512**	**395**	**419**	**580**	**511**	74	80	75	5	8	8	151	9
37.6	**420**	**700**	**1300**	**486**	**547**	**620**	**455**	**299**	**328**	51	53	47	6	5	-	164	9
41.2	**440**	**580**	**910**	**518**	**500**	**526**	**260**	**337**	**288**	64	50	47	10	5	5	125	9
44.8	**1020**	**1050**	**1470**	**529**	**540**	**580**	**248**	**253**	**244**	28	73	68	7	11	6	145	9
48.7	**1790**	**1080**	**680**	**448**	**605**	**562**	214	**325**	192	33	34	53	5	9	13	135	7
52.5	**530**	**720**	**650**	**534**	**493**	**368**	**285**	**248**	240	34	28	22	9	7	3	103	8
56.4	**930**	**1330**	**1020**	**630**	**640**	**572**	**533**	**253**	**294**	33	29	38	9	6	6	139	9
60.3	**1240**	**810**	**880**	**660**	**534**	**399**	**341**	**408**	**386**	28	29	19	7	8	7	128	9
66.4	**1173**	**860**	**1970**	**660**	**505**	**534**	**385**	**296**	**247**	70	34	32	50	34	**320**	237	10
66.9	**1370**	**1350**	**1550**	**670**	**430**	**559**	**566**	**278**	**295**	74	25	26	33	28	21	194	9
70.7	**1350**	**1682**	**1670**	**437**	**495**	**445**	**260**	**422**	234	42	35	29	24	23	13	170	8
71.8	**1660**	**1500**	**1700**	**417**	**328**	**381**	**425**	**406**	**405**	46	26	45	8	24	30	176	9
74.9	**1150**	**3080**	**2280**	**326**	**266**	**264**	201	158	238	41	17	12	6	5	12	110	6
80.2	**1110**	**2190**	**1790**	192	**492**	**345**	**276**	210	**243**	21	15	24	4	5	3	99	7
85.6	**630**	**340**	**560**	167	**249**	**262**	152	167	126	24	28	26	12	10	9	84	5
91.2	**575**	**480**	**655**	**274**	236	150	118	**330**	162	21	27	52	221	6	**1080**	151	6
94.2	**630**	**558**	**750**	**249**	208	**291**	162	153	166	21	30	70	**498**	**402**	**1609**	228	8
97.8	**585**	**385**	**583**	166	178	155	139	128	147	29	34	118	**910**	148	**1550**	202	5
102.6	**466**	**461**	**580**	172	147	**276**	135	132	172	21	38	35	**515**	173	102	154	5
107.7	**1020**	**655**	**641**	147	112	150	114	162	115	34	32	22	155	55	40	121	3
113.0	**545**	**910**	**648**	126	114	152	91	140	67	20	13	34	12	5	7	67	3
118.3	**327**	**519**	**568**	93	68	114	142	93	104	20	10	16	6	3	4	49	3

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey A *(July 28 - Aug 28, 2003)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
123.7	**408**	**590**	**830**	68	99	112	73	93	86	20	19	26	8	9	2	55	3
124.9	**295**	**367**	**582**	84	91	102	86	99	93	28	13	5	5	5	2	44	3
129.1	**555**	**610**	**447**	105	90	89	99	131	102	17	19	21	15	8	10	65	3
133.4	**365**	**487**	**435**	26	69	131	127	96	86	51	26	24	42	7	18	68	3
138.7	**326**	235	**285**	111	77	47	91	58	36	147	25	22	25	17	17	63	2
144.2	**447**	**345**	**309**	86	82	56	93	63	43	19	10	8	12	8	6	44	3
149.6	**344**	**244**	218	73	108	120	46	51	88	10	7	8	1	3	13	34	2
155.0	**342**	233	**269**	93	105	86	53	52	50	16	19	12	7	2	2	36	2
160.4	205	169	238	91	114	102	66	135	58	25	31	17	7	15	13	53	0
165.8	**337**	**365**	205	179	119	115	108	101	79	25	26	24	95	5	13	70	2
171.2	**291**	178	**308**	148	148	144	111	96	127	17	14	31	20	20	**<10**	76	2
175.1	144	**250**	194	167	178	**306**	122	105	172	17	16	58	**<10**	30	55	93	2
179.4	179	140	**249**	113	**261**	**522**	75	98	**281**	18	18	42	36	**300**	200	113	5
183.5	167	172	170	**260**	172	**619**	210	69	79	13	21	34	**500**	100	**<100**	115	3
185.9	236	178	127	142	125	135	40	96	96	45	34	52	68	38	93	85	0
190.8	184	156	156	105	142	127	99	84	89	38	29	26	44	30	21	70	0
195.7	**-**	60	179	113	102	184	80	69	33	33	28	13	18	18	12	46	0
200.7	69	88	91	115	107	122	70	114	79	23	23	19	8	12	7	43	0
205.7	231	140	121	117	163	147	118	91	138	19	25	16	7	6	6	50	0
210.7	121	144	104	148	140	153	76	166	56	17	12	16	5	8	6	43	0
215.7	115	135	98	141	128	167	75	117	99	6	20	15	10	6	6	42	0
220.4	138	108	96	161	161	127	108	99	86	23	21	9	3	7	6	42	0
225.4	114	86	84	124	126	116	101	70	86	14	14	8	7	4	4	35	0
230.4	90	53	59	126	114	114	73	58	47	11	8	8	6	5	7	30	0
235.6	82	62	56	75	71	166	47	58	38	13	13	8	6	3	6	28	0
240.4	118	105	156	225	172	185	53	33	70	13	16	**<10**	6	3	11	43	0
245.4	72	114	105	138	220	128	79	108	93	12	17	15	7	10	10	45	0
250.4	93	102	**1420**	150	199	140	86	91	146	11	22	16	12	19	13	62	1
255.5	78	107	154	132	173	238	79	102	116	10	22	23	14	8	26	54	0
260.6	15	88	109	133	138	179	73	93	127	24	15	21	8	13	15	44	0
265.7	140	91	68	155	238	172	56	39	39	17	19	9	46	12	15	47	0
269.8	**249**	79	231	115	118	124	46	78	111	15	50	73	93	15	46	74	1
275.2	77	83	178	155	206	135	42	78	50	16	21	17	49	16	21	53	0

Exceeds Criteria
E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL
E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey B *(Sept. 29 - Oct. 30, 2003)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
280.8	101	89	70	25	18	17	6	14	14	60	79	61	74	83	115	40	0
285.9	93	99	64	28	18	25	11	14	14	66	66	56	61	34	156	40	0
291.4	162	111	98	15	16	19	8	19	7	68	68	44	114	24	118	38	0
296.6	153	118	120	26	24	32	6	5	10	75	50	70	24	12	91	34	0
302.0	162	153	91	19	26	31	4	6	6	35	79	65	**1020**	15	83	40	1
307.7	**336**	162	96	**244**	23	24	24	7	5	118	82	78	**560**	11	84	57	3
313.3	**452**	85	111	52	30	21	27	5	30	84	93	82	**1310**	29	**256**	68	3
317.2	**503**	105	114	57	30	37	20	11	24	137	122	75	**1470**	79	72	77	2
321.5	**378**	184	108	33	27	51	8	17	19	47	83	69	**1250**	196	56	68	2
327.4	168	96	105	41	25	17	7	5	13	49	105	51	**375**	**285**	99	51	2
327.7	**305**	120	80	67	32	17	7	12	10	70	64	58	**2220**	**397**	109	67	3
328.0	**304**	132	74	69	35	54	9	8	68	73	53	56	**1470**	227	214	79	2
332.5	196	210	88	24	35	23	16	13	5	42	59	43	**547**	126	220	55	1
338.1	**276**	135	89	39	18	19	14	15	5	36	51	44	**446**	108	119	49	2
343.5	102	111	126	24	22	29	8	15	1	81	67	41	**424**	213	128	45	1
349.2	131	125	138	30	28	45	12	11	29	52	55	35	**325**	210	**642**	65	2
352.0	186	102	152	28	32	52	55	6	10	54	75	62	**252**	**264**	**315**	67	3
353.8	118	91	96	36	29	38	12	6	12	60	68	66	236	163	**402**	55	1
359.3	130	**242**	**530**	26	55	57	9	29	32	47	56	77	190	**469**	**358**	84	4
364.6	84	98	**429**	32	40	53	1	17	24	43	60	76	131	140	**294**	54	2
369.8	179	**337**	**473**	24	37	37	4	12	21	37	50	57	130	130	**265**	60	3
375.0	133	**363**	**640**	26	40	43	5	10	11	50	74	39	101	129	201	58	2
380.4	205	**406**	**575**	34	27	21	15	17	11	60	73	58	64	201	236	66	2
385.4	**345**	**638**	**420**	20	35	19	7	7	4	36	53	60	111	223	**356**	58	4
390.6	172	**429**	**485**	47	29	26	8	6	12	27	25	40	89	112	156	50	2
395.0	**449**	**387**	**269**	30	28	28	8	5	10	47	34	51	196	132	201	57	3
400.4	131	199	**249**	28	15	26	1	9	8	23	49	36	112	139	112	37	1
405.8	190	**244**	**365**	24	26	23	7	10	16	25	31	26	135	114	96	46	2
411.4	75	133	186	29	27	33	23	7	8	36	20	16	50	69	38	34	0
416.4	166	96	93	27	28	20	6	12	5	19	17	26	13	30	15	24	0
421.6	145	115	91	17	12	11	10	5	4	34	25	23	19	23	15	21	0
426.4	125	126	192	11	7	93	11	8	5	30	25	15	33	23	30	27	0
431.4	140	102	105	11	24	12	5	5	5	31	16	28	43	14	17	21	0
436.8	127	141	49	15	15	13	9	13	18	24	32	17	35	12	21	24	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey B *(Sept. 29 - Oct. 30, 2003)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
441.5	105	138	72	18	15	15	7	7	8	34	25	25	26	26	22	24	0
446.5	147	96	89	26	15	19	7	3	7	22	25	17	37	25	18	23	0
451.6	156	135	102	14	14	20	30	26	13	22	16	15	34	29	23	29	0
455.3	105	54	84	15	26	10	78	17	46	27	28	22	28	35	25	32	0
460.0	102	88	79	16	23	14	24	5	24	32	19	26	16	36	14	25	0
465.0	105	93	101	17	16	15	60	**245**	**277**	28	13	26	28	14	39	42	2
468.7	73	91	147	9	19	30	**830**	**800**	**910**	24	24	29	29	16	58	65	3
472.7	61	73	81	24	26	12	**1150**	**577**	**620**	21	20	25	118	**630**	82	84	4
477.6	96	76	80	20	16	17	**2910**	**2490**	**1660**	19	30	59	200	40	145	103	3
482.2	75	60	101	22	15	33	**8660**	**2490**	**7700**	20	38	38	127	64	**260**	130	4
486.2	68	89	132	11	20	51	**4880**	**15530**	**15530**	20	29	76	209	120	227	169	3
489.7	105	99	190	16	36	58	**475**	**760**	**810**	24	45	84	36	127	70	96	3
493.2	108	144	199	21	30	76	**880**	**780**	**1040**	**-**	**-**	**-**	50	86	225	147	3
498.0	125	232	226	14	25	93	**1080**	**960**	**610**	42	40	93	105	179	214	134	3
503.1	93	91	132	12	37	37	34	68	26	59	26	41	162	214	169	59	0
508.3	79	119	96	11	10	33	40	47	69	23	28	50	181	190	112	52	0
513.4	79	50	59	28	26	40	41	26	29	32	36	35	156	199	126	50	0
518.5	50	75	68	17	25	17	9	22	12	28	30	32	148	150	**260**	39	1
523.4	57	46	68	11	13	26	5	7	15	26	28	29	**356**	**318**	**435**	37	3
528.4	53	44	116	12	7	8	8	13	13	16	15	26	**451**	**354**	**334**	34	3
533.2	55	101	90	14	20	24	10	4	8	13	28	19	**561**	**418**	**436**	39	3
538.5	88	96	93	20	27	22	10	11	12	24	24	19	**510**	**333**	**477**	47	3
543.5	84	99	74	15	17	15	13	9	20	12	24	11	214	142	166	34	0
548.3	96	66	101	41	20	33	68	6	24	15	15	8	194	110	213	41	0
553.6	101	84	122	14	18	21	42	8	46	15	6	24	197	210	228	41	0
558.8	99	72	64	14	17	15	19	7	194	14	10	36	**276**	**261**	171	42	2
562.7	80	84	88	16	23	20	19	7	63	10	8	15	**249**	220	**265**	39	2
567.6	108	86	60	17	17	12	12	26	40	10	8	15	150	222	166	35	0
572.5	86	81	64	9	23	12	16	23	33	11	12	5	105	201	167	31	0
577.4	102	91	71	11	11	12	12	23	37	11	12	10	86	148	155	31	0
582.9	75	88	91	11	18	13	24	12	22	8	17	14	31	140	66	28	0
587.8	68	79	48	3	8	6	26	15	29	12	11	7	18	58	46	19	0
592.2	81	86	63	5	11	6	14	19	40	13	13	14	23	55	20	21	0
597.1	79	86	62	11	8	13	68	61	15	11	9	5	8	17	6	19	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey B *(Sept. 29 - Oct. 30, 2003)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
602.2	75	70	54	12	50	9	12	11	12	9	7	11	7	16	20	17	0
604.3	86	72	108	58	5	12	11	7	14	9	5	13	14	12	15	17	0
607.5	165	138	125	203	14	24	**422**	39	14	18	14	15	25	19	17	40	1
609.7	119	133	98	119	31	15	**250**	162	15	26	12	14	20	12	15	39	1
612.2	140	100	60	101	19	15	76	11	15	11	8	17	12	18	16	26	0
617.6	136	136	110	161	31	24	**1420**	20	24	20	14	15	**350**	12	16	51	2
623.1	200	100	110	185	33	11	**1860**	35	30	19	17	12	**624**	15	20	57	2
628.1	192	93	108	**447**	43	7	**1010**	22	34	24	15	7	89	28	15	49	2

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey C *(May 3 - June 10, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
630.0	**1110**	**790**	**561**	63	22	36	**2280**	24	15	138	105	111	**516**	**272**	162	155	6
631.6	**3650**	**630**	**628**	54	27	31	**1920**	22	10	68	104	184	**511**	167	**260**	156	6
637.6	**1440**	**1140**	**525**	40	58	20	75	57	**570**	79	178	86	**423**	**425**	**317**	180	7
643.1	**1020**	**1010**	**780**	38	42	24	**412**	**406**	**640**	73	108	74	**345**	**450**	**387**	218	9
648.9	**1200**	**1140**	**780**	47	22	28	**539**	**690**	**603**	91	104	125	**282**	**355**	**291**	228	9
654.0	**1220**	**930**	**790**	39	35	33	**790**	**510**	**900**	127	96	81	161	**317**	**329**	229	8
659.2	**1190**	**990**	**990**	22	34	26	**720**	**921**	**1310**	114	73	93	**323**	**322**	142	227	8
664.2	**1120**	**820**	**2010**	60	27	37	**459**	**601**	**530**	228	84	78	**548**	**332**	**273**	254	9
669.1	**1090**	**780**	**1370**	38	25	26	**346**	**495**	**428**	100	75	70	**392**	**442**	**533**	216	9
674.5	**1120**	**960**	**930**	23	21	25	**247**	**341**	198	86	133	91	**285**	**304**	231	174	7
680.4	**1220**	**1440**	**790**	36	22	16	**305**	216	**276**	114	82	72	**252**	**375**	**365**	181	8
685.6	**866**	**1120**	**910**	23	19	15	**252**	233	194	98	82	101	**341**	**388**	**288**	166	7
690.7	**990**	**1130**	**990**	26	26	19	**248**	**337**	**261**	74	133	117	**311**	**325**	**291**	185	9
695.6	**720**	**580**	**561**	18	20	13	185	166	238	80	117	64	**472**	**384**	**424**	148	6
700.9	**780**	**780**	**652**	23	28	16	**260**	127	179	100	88	58	**505**	**414**	**554**	162	7
706.2	**690**	**630**	**652**	20	10	25	192	**248**	93	70	50	48	**413**	**700**	**727**	143	7
711.5	**537**	**548**	**490**	27	15	11	61	60	41	24	40	25	**440**	**575**	**370**	90	6
717.4	**500**	**620**	**577**	20	22	16	42	59	38	34	58	43	**410**	**710**	**572**	104	6
721.5	**682**	**840**	**910**	19	18	18	120	108	84	**1020**	**1170**	**710**	**274**	201	199	200	7
727.0	**760**	**622**	**830**	20	17	15	71	91	86	**524**	**730**	**590**	**420**	**268**	**275**	182	9
732.5	**800**	**580**	**658**	18	12	113	48	50	166	**303**	**481**	**249**	**396**	**328**	**590**	182	9
738.8	**780**	**615**	**710**	27	28	117	105	50	95	205	196	236	**346**	**306**	**440**	180	6
742.4	**680**	**750**	**480**	18	24	91	70	38	**313**	**337**	152	202	**573**	**341**	**498**	182	8
746.4	**670**	**573**	**614**	16	14	46	81	72	144	**445**	185	144	**525**	**506**	**336**	167	7
750.6	**680**	**690**	**730**	11	22	50	101	45	147	**314**	125	131	**353**	**605**	**485**	162	7
754.8	**560**	**730**	**710**	22	27	49	116	91	99	104	162	204	**370**	**514**	**361**	166	6
758.0	**860**	**480**	**910**	17	23	22	104	70	167	108	119	233	**630**	**370**	**349**	158	6
763.2	**770**	**840**	**677**	10	15	19	81	67	172	170	93	185	**433**	**434**	**365**	144	6
769.1	**661**	**1070**	**680**	15	19	38	117	101	93	115	91	101	**620**	**414**	**507**	156	6
773.6	**820**	**830**	**1140**	20	20	12	104	96	201	151	77	135	**482**	**388**	**372**	156	6
778.2	**600**	**840**	**1080**	16	19	33	120	105	93	130	77	98	**327**	**353**	225	141	5
782.8	**700**	**545**	**650**	19	17	28	108	105	91	144	111	83	**283**	**331**	**326**	136	6
787.0	**780**	**680**	**612**	30	15	27	48	76	96	132	91	99	185	**305**	**260**	124	5
792.7	**590**	**437**	**700**	36	20	32	156	192	123	118	64	52	214	**391**	172	135	4

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey C *(May 3 - June 10, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
794.2	**605**	**539**	**540**	52	16	116	147	201	141	158	82	42	198	**245**	**328**	153	5
800.0	**580**	**580**	**660**	22	22	46	192	140	155	71	133	82	**310**	**460**	**250**	152	6
805.8	**501**	**491**	**475**	24	30	49	102	162	126	79	70	86	234	**481**	**528**	144	5
811.3	**431**	**547**	**575**	99	35	41	**375**	228	135	199	65	88	**275**	**327**	225	177	6
817.0	**461**	**623**	**352**	133	41	28	220	101	61	**299**	**597**	**1350**	231	**269**	**517**	222	8
823.2	**385**	**529**	**553**	**378**	102	24	**295**	240	31	**427**	**441**	**980**	**318**	**398**	**272**	257	11
829.5	**340**	**330**	**365**	127	120	35	228	214	58	**585**	**308**	**294**	**295**	**299**	154	204	8
832.2	**346**	**399**	**494**	56	41	28	185	162	76	**575**	206	132	201	228	201	162	4
837.2	**372**	**540**	**287**	39	31	18	79	98	52	**383**	**248**	228	**339**	222	133	137	6
842.3	**580**	**503**	**423**	61	15	21	43	66	67	**2360**	240	150	88	217	229	140	4
846.5	**600**	**567**	**321**	30	17	36	82	82	53	91	172	228	196	**265**	113	120	4
851.3	**585**	**423**	225	52	34	49	60	56	32	132	172	186	120	219	135	115	2
855.5	**476**	**350**	219	42	37	30	68	79	52	**345**	126	178	173	167	152	120	3
859.7	**495**	**540**	**345**	51	40	19	55	96	42	229	108	172	179	161	121	118	3
864.4	**352**	**383**	200	36	29	38	46	57	36	**285**	131	**244**	170	91	161	106	4
869.8	**530**	**358**	**283**	28	26	20	73	49	24	**1940**	152	119	133	185	102	113	4
875.7	**360**	**295**	**275**	28	16	15	47	47	28	147	101	127	135	101	82	78	3
880.7	**263**	**359**	201	20	10	10	52	28	13	**533**	39	111	124	98	72	65	3
885.0	220	**308**	172	10	17	22	38	38	25	122	57	145	131	124	80	66	1
889.2	**357**	238	233	11	12	15	35	29	17	20	53	60	120	86	91	51	1
891.7	**255**	144	190	7	12	20	26	25	16	57	34	52	140	121	74	48	1
897.5	172	**249**	166	17	6	9	26	43	10	**596**	**572**	**281**	**270**	170	140	82	5
903.2	172	**241**	126	13	9	10	17	17	13	**670**	**631**	**441**	**303**	**249**	114	80	6
908.0	222	196	**387**	12	6	9	17	13	12	**600**	**401**	**249**	185	210	93	72	4
912.6	131	158	116	13	5	6	5	18	8	203	**274**	228	98	114	91	46	1
917.6	238	214	167	12	8	7	14	16	5	**256**	**381**	**333**	133	122	75	58	3
923.4	137	167	**291**	11	12	10	5	10	17	129	**403**	**261**	135	75	91	53	3
928.2	70	**261**	111	6	10	9	7	15	15	107	238	86	102	113	74	43	1
932.2	102	160	96	9	12	7	10	10	9	93	75	99	74	79	52	36	0
936.2	47	150	88	20	3	11	**-**	5	23	64	73	48	104	15	53	31	0
937.7	96	130	142	10	4	12	7	4	14	118	74	38	41	65	70	31	0
940.9	68	108	84	12	6	6	11	11	28	93	54	75	33	53	55	32	0
944.2	45	91	111	20	5	11	7	6	13	96	34	121	26	53	36	28	0
947.5	83	118	99	8	5	16	13	9	6	**328**	59	53	33	70	43	32	1

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey C *(May 3 - June 10, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
952.2	66	58	82	25	10	6	3	9	15	**377**	70	44	96	44	57	33	1
957.7	41	77	81	38	9	19	8	9	19	**524**	40	132	56	48	35	39	1
963.0	68	77	75	8	13	12	7	6	32	60	44	**305**	40	50	56	33	1
969.2	30	55	74	5	8	25	3	7	**-**	**273**	112	191	47	71	41	34	1
974.1	39	64	62	6	4	20	14	6	24	166	64	**299**	40	40	50	32	1
979.2	66	65	72	17	4	**309**	8	12	11	47	31	112	51	36	44	34	1

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey D *(July 26 - Aug 26, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
1.5	**8160**	**12030**	**4880**	**387**	188	**326**	206	145	158	137	147	158	**1190**	**539**	**698**	532	8
3.3	**6490**	**7700**	**2380**	186	138	**242**	140	172	158	172	180	59	**720**	**580**	**960**	418	7
6.4	**470**	**680**	**1140**	214	197	156	78	178	114	89	190	110	**1090**	**710**	**1480**	289	6
9.5	**6300**	**2360**	**3450**	**247**	148	**425**	132	72	35	**281**	60	60	**1080**	**1080**	**1660**	381	9
11.4	**2600**	**273**	**497**	197	186	215	**421**	135	66	**365**	161	53	**640**	**880**	**670**	297	8
12.5	**1280**	**534**	**2060**	**344**	119	**294**	96	93	87	69	69	20	**820**	**780**	**560**	238	8
14.4	**2760**	**1310**	**1720**	230	**250**	233	152	124	77	141	65	39	**600**	**1020**	**1010**	313	7
17.7	**2250**	**2600**	**2720**	221	201	**493**	114	96	93	55	82	36	**750**	**670**	**880**	312	7
20.5	**1370**	**608**	**2380**	**325**	**259**	**572**	89	98	180	34	64	**500**	**830**	**1310**	**930**	353	10
20.8	**1560**	**523**	**1780**	238	172	**339**	30	78	198	46	46	93	**810**	**910**	**1330**	261	7
21.8	**1973**	**477**	**2720**	195	214	**410**	50	75	84	27	38	34	**690**	**540**	**1180**	226	7
22.9	**1850**	**960**	**1780**	**520**	**346**	**561**	48	118	169	**269**	46	18	**1290**	**1660**	**1350**	357	10
25.5	**1010**	**1530**	**1530**	178	173	**455**	101	82	99	26	23	13	**466**	**602**	**1040**	208	7
25.8	**1120**	**1290**	**1410**	122	201	**332**	115	67	122	28	17	20	**539**	**640**	**800**	203	7
26.4	**930**	**1370**	**3040**	132	204	**261**	88	88	99	15	19	20	**425**	**480**	**700**	191	7
28.3	**470**	**930**	**1790**	130	**248**	227	73	82	56	17	15	12	**450**	**445**	**388**	150	7
32.9	**620**	**770**	**930**	143	167	210	62	50	49	13	12	11	**485**	**458**	**505**	132	6
37.6	**444**	**614**	**930**	107	219	107	15	32	35	8	8	8	**422**	**423**	**465**	95	6
41.2	**481**	**515**	**630**	118	119	107	33	26	28	10	8	10	**502**	**386**	**425**	94	6
44.8	**480**	**639**	**514**	150	147	201	41	31	38	6	11	30	**400**	**295**	**313**	106	6
48.7	**260**	**345**	**255**	186	156	127	37	48	20	5	13	3	**290**	**320**	**450**	78	6
52.5	150	167	**320**	108	-	-	32	38	19	4	10	6	179	173	222	54	1
56.4	133	144	137	-	201	105	31	24	24	23	5	5	225	**275**	152	58	1
60.3	**357**	161	**279**	99	162	192	28	22	49	5	10	7	205	190	190	69	2
66.4	**318**	228	166	205	125	143	38	35	48	34	20	21	**298**	209	150	94	2
66.9	**437**	167	130	228	135	117	63	-	70	26	17	25	237	**304**	145	104	2
70.7	**246**	173	231	**730**	124	179	142	51	53	14	20	26	150	115	238	104	2
71.8	**429**	158	192	**305**	206	198	**552**	**422**	47	18	28	26	147	172	113	132	4
74.9	222	144	**608**	153	93	175	120	25	25	13	8	12	80	120	153	71	1
80.2	**432**	**247**	178	185	219	162	32	55	24	6	5	7	98	86	133	65	2
85.6	178	219	166	140	153	147	19	25	12	7	7	4	108	54	64	46	0
91.2	**256**	206	153	86	84	96	**254**	11	**860**	10	10	24	68	78	**260**	81	4
94.2	184	180	**304**	99	101	67	82	210	**272**	5	7	20	101	61	143	78	2
97.8	222	125	138	121	105	127	**590**	**331**	**602**	93	21	19	127	83	84	124	3

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey D *(July 26 - Aug 26, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
102.6	**354**	96	152	96	119	118	150	75	96	16	9	21	98	84	78	76	1
107.7	129	202	219	137	116	82	10	12	19	7	6	10	72	96	64	43	0
113.0	236	236	236	144	108	116	47	13	13	8	10	5	122	63	57	50	0
118.3	137	236	225	72	121	99	12	9	4	5	7	6	47	93	56	35	0
123.7	133	137	166	75	111	96	12	9	4	2	4	3	46	64	74	28	0
124.9	128	135	121	80	105	80	10	7	4	5	3	3	65	62	55	27	0
129.1	123	112	117	99	104	88	**277**	26	41	8	5	6	64	48	52	48	1
133.4	119	74	117	65	65	72	147	75	101	6	6	6	131	51	24	47	0
138.7	123	91	80	84	75	86	124	11	8	**614**	3	14	231	50	30	51	1
144.2	96	101	114	73	50	54	22	20	3	12	7	6	58	26	32	29	0
149.6	91	88	62	38	52	57	6	4	7	14	6	2	28	23	79	21	0
155.0	47	89	51	40	48	46	3	3	1	3	3	5	120	21	29	15	0
160.4	25	35	23	41	72	53	26	20	19	5	3	11	35	32	63	23	0
165.8	29	17	15	44	63	49	25	7	6	2	3	2	56	59	31	16	0
171.2	10	15	15	21	50	30	14	17	9	**<1**	3	3	53	71	60	18	0
175.1	17	20	21	24	60	65	11	6	12	4	5	1	93	119	59	18	0
179.4	15	18	26	16	34	56	8	5	15	1	6	5	62	64	93	16	0
183.5	26	36	11	24	26	44	11	5	16	3	5	5	77	69	91	18	0
185.9	32	30	14	21	27	37	38	21	19	7	6	5	40	61	60	22	0
190.8	18	15	17	20	40	26	20	19	19	5	5	3	61	50	56	18	0
195.7	17	11	7	14	22	28	30	20	15	1	10	2	70	74	55	15	0
200.7	17	16	10	20	27	31	35	38	34	**<1**	2	4	48	50	34	20	0
205.7	24	24	11	20	21	21	17	23	17	10	2	4	56	42	38	17	0
210.7	15	10	14	17	19	20	8	15	13	**<1**	1	4	45	35	40	13	0
215.7	12	15	38	26	11	29	5	6	5	**<1**	1	2	44	49	38	12	0
220.4	18	12	24	29	20	16	6	2	13	**<1**	**<1**	4	48	52	39	15	0
225.4	19	20	14	20	13	13	11	4	5	10	**<1**	2	51	44	47	14	0
230.4	16	11	15	36	26	13	5	5	5	2	2	1	56	54	45	11	0
235.6	34	11	33	31	24	20	3	2	5	10	4	5	57	52	62	14	0
240.4	24	24	32	37	60	54	4	5	2	5	2	5	64	63	99	16	0
245.4	31	26	26	31	33	23	6	1	2	3	2	7	84	74	160	14	0
250.4	26	25	99	36	30	23	5	5	36	8	3	**2360**	51	54	80	30	1
255.5	22	31	56	32	35	60	5	2	56	15	28	21	40	96	**543**	31	1
260.6	24	22	26	21	23	36	11	13	8	3	9	8	64	219	158	22	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey D *(July 26 - Aug 26, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
265.7	34	28	36	46	23	38	13	6	23	17	14	31	89	53	52	28	0
269.8	133	25	28	**308**	39	30	26	23	56	4	6	50	**360**	101	202	47	2
275.2	60	38	28	79	91	60	18	22	34	1	**<1**	9	71	96	68	33	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey E *(Sept 13 - Oct 14, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
630.0	194	**242**	108	**324**	**249**	234	**261**	**329**	**276**	38	44	26	76	22	11	104	6
631.6	**284**	219	91	**302**	**595**	**272**	**342**	221	**248**	44	44	31	58	23	12	111	6
637.6	198	228	**264**	**337**	**387**	**409**	**248**	**266**	**401**	62	30	28	18	11	16	107	7
643.1	**377**	**340**	221	**365**	**335**	**378**	214	180	**272**	59	36	35	15	7	11	101	6
648.9	**261**	141	**250**	**335**	196	**260**	206	185	**263**	39	53	54	15	13	14	95	5
654.0	200	228	**461**	**282**	**505**	192	192	178	**260**	25	38	33	7	13	5	85	4
659.2	148	162	126	**302**	**254**	180	194	141	204	21	32	17	11	12	5	65	2
664.2	125	**242**	141	**305**	**302**	238	236	219	196	14	32	31	9	12	9	75	3
669.1	238	**249**	185	**245**	**337**	227	237	153	**276**	31	24	24	9	11	5	77	4
674.5	152	**248**	84	**319**	**363**	152	170	**354**	143	18	26	18	7	7	9	66	4
680.4	124	120	84	**354**	238	101	185	**313**	135	15	18	35	10	6	13	61	2
685.6	88	108	77	185	194	199	199	215	148	20	19	24	13	7	18	60	0
690.7	88	105	82	135	133	105	154	117	228	26	17	29	7	14	7	52	0
695.6	43	91	61	122	142	107	179	221	142	13	17	15	15	16	13	49	0
700.9	53	47	33	62	112	93	190	156	204	19	19	12	16	15	14	44	0
706.2	32	44	30	82	86	58	126	147	172	24	16	19	7	6	7	35	0
711.5	21	31	34	79	131	84	153	115	114	15	17	12	9	6	9	33	0
717.4	36	28	24	96	77	79	142	127	194	12	23	15	7	8	9	34	0
721.5	147	102	162	**293**	234	**330**	119	123	114	31	25	20	14	8	14	66	2
727.0	119	96	178	214	**308**	**249**	130	79	161	25	19	15	10	13	8	59	2
732.5	166	178	118	**291**	**313**	162	145	110	108	22	27	27	11	7	16	66	2
738.8	71	50	63	162	236	192	82	131	93	20	23	16	5	11	5	43	0
742.4	93	111	68	130	152	162	149	137	86	26	12	12	4	6	11	44	0
746.4	76	82	44	84	135	162	111	105	147	25	20	24	5	6	6	42	0
750.6	67	65	50	93	140	156	101	114	143	28	15	15	6	4	7	39	0
754.8	29	53	68	49	113	133	184	238	196	22	23	24	7	8	11	44	0
758.0	55	70	43	120	99	110	128	120	166	24	28	15	**2480**	10	8	64	1
763.2	39	29	40	84	54	109	214	83	179	23	23	18	15	3	5	35	0
769.1	34	34	33	121	73	84	228	112	153	21	23	18	2	4	7	33	0
773.6	15	27	22	82	78	82	148	148	**259**	11	15	15	10	3	6	30	1
778.2	31	26	29	93	127	93	89	117	123	26	33	23	7	6	5	35	0
782.8	22	20	31	63	107	105	178	133	197	25	22	25	7	7	25	39	0
787.0	22	22	34	38	64	122	140	153	172	23	12	20	16	9	9	35	0
792.7	17	17	11	89	84	60	161	225	140	25	39	25	10	6	24	36	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey E *(Sept 13 - Oct 14, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
794.2	43	23	20	137	86	114	33	206	120	20	19	50	12	14	**1120**	53	1
800.0	110	30	22	99	99	91	236	186	**331**	14	25	19	62	**560**	**1350**	92	3
805.8	24	27	31	76	115	76	148	192	185	24	18	24	15	12	26	43	0
811.3	81	34	24	82	120	45	185	124	96	140	34	23	229	19	11	59	0
817.0	82	41	32	84	114	118	84	77	81	**260**	108	10	74	48	68	70	1
823.2	79	59	49	133	122	96	86	78	55	130	117	15	86	54	24	69	0
829.5	81	55	25	76	133	74	133	129	72	43	44	24	60	39	41	60	0
832.2	62	37	28	102	109	69	71	105	75	19	17	18	46	34	21	45	0
837.2	46	41	25	109	101	78	140	108	69	20	12	4	31	41	31	41	0
842.3	45	37	37	62	99	61	47	67	64	19	25	14	43	32	28	40	0
846.5	28	36	28	91	121	32	201	**261**	128	19	25	25	36	23	35	49	1
851.3	46	38	22	118	147	118	131	124	84	41	19	15	17	26	17	46	0
855.5	44	26	29	96	49	88	118	70	96	34	25	13	30	19	17	40	0
859.7	54	34	15	120	96	47	186	126	86	17	26	13	25	25	18	42	0
864.4	24	42	31	111	118	64	86	178	84	26	26	16	22	15	19	42	0
869.8	40	36	31	104	82	118	124	101	91	17	25	15	38	15	16	43	0
875.7	24	49	24	52	59	86	120	119	60	17	17	12	18	36	16	36	0
880.7	32	30	19	99	33	66	46	50	50	28	14	8	10	7	12	25	0
885.0	37	26	19	47	64	57	82	155	45	13	8	9	8	11	11	26	0
889.2	34	24	24	126	55	68	96	99	57	26	17	15	13	8	10	32	0
891.7	26	20	23	54	39	105	60	39	86	17	13	14	11	12	12	27	0
897.5	34	28	17	51	45	96	17	13	24	15	8	11	5	3	7	17	0
903.2	23	30	16	53	82	59	12	16	12	14	10	5	3	7	7	16	0
908.0	34	15	21	53	52	36	27	15	24	16	10	15	5	5	30	19	0
912.6	23	25	19	50	55	43	9	9	10	11	10	8	5	2	11	14	0
917.6	15	25	11	61	44	38	13	12	7	8	11	11	14	4	5	14	0
923.4	8	28	18	58	99	82	11	23	28	2	15	20	1	6	6	15	0
928.2	22	13	26	32	69	145	9	14	36	2	3	12	2	5	8	13	0
932.2	15	18	20	28	35	19	13	22	26	5	7	7	5	5	4	12	0
936.2	52	17	25	42	36	46	24	5	67	2	4	9	48	5	5	16	0
937.7	9	23	22	30	57	46	15	12	23	2	5	14	21	19	8	15	0
940.9	21	11	21	21	33	35	20	18	50	4	5	13	15	15	6	16	0
944.2	21	25	14	31	33	34	13	8	19	4	5	13	29	21	6	15	0
947.5	29	12	13	67	33	29	18	15	31	6	3	7	32	15	15	17	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey E *(Sept 13 - Oct 14, 2004)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
952.2	24	12	25	39	26	70	26	34	31	6	10	46	26	13	7	21	0
957.7	13	8	27	31	33	40	37	20	36	5	4	12	14	10	14	16	0
963.0	29	9	32	24	29	48	54	36	45	2	3	9	26	15	14	18	0
969.2	5	16	30	29	39	46	58	60	34	10	6	15	22	13	18	21	0
974.1	12	10	33	57	62	37	11	44	37	5	20	7	10	7	11	18	0
979.2	8	8	17	30	21	33	27	21	34	4	2	13	114	26	93	19	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey F *(May 9 - June 9, 2005)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
280.8	11	12	20	210	102	101	206	166	141	12	12	5	7	7	5	28	0
285.9	17	10	14	79	91	53	185	132	90	17	16	9	4	4	7	24	0
291.4	11	22	15	93	88	77	156	131	85	6	5	11	3	3	3	20	0
296.6	19	14	9	82	70	47	101	129	78	11	12	11	3	2	1	18	0
302.0	6	9	7	120	96	70	122	91	77	6	6	6	3	4	2	16	0
307.7	82	11	14	111	86	89	**276**	57	84	31	14	7	50	28	10	39	1
313.3	185	43	86	187	66	70	**424**	93	113	72	10	12	34	15	24	58	1
317.2	105	27	18	**308**	192	47	131	119	51	34	14	39	24	46	34	53	1
321.5	96	53	24	138	76	46	139	56	84	39	21	9	14	26	2	36	0
327.4	47	36	19	81	46	38	120	126	72	13	14	13	3	3	4	24	0
327.7	57	31	42	70	38	41	142	132	81	28	13	14	10	5	4	30	0
328.0	34	20	36	74	56	37	108	104	63	21	11	18	9	4	10	28	0
332.5	18	23	12	50	46	39	82	91	69	18	8	12	5	2	5	19	0
338.1	61	20	8	38	59	36	105	99	53	22	10	17	17	**<1**	2	26	0
343.5	60	25	18	45	40	44	63	36	52	12	5	9	4	5	5	19	0
349.2	54	29	48	55	46	38	54	55	41	11	7	12	4	11	5	22	0
352.0	39	35	28	35	45	44	55	46	44	13	10	13	1	4	4	18	0
353.8	40	27	33	42	53	46	47	61	75	7	6	9	4	4	2	18	0
359.3	26	34	28	44	45	45	66	52	66	5	7	15	3	2	11	19	0
364.6	38	19	46	32	28	63	46	53	82	6	5	15	4	1	4	17	0
369.8	15	13	38	24	35	33	36	20	93	10	10	15	10	1	1	14	0
375.0	19	23	42	24	37	30	70	75	82	2	12	12	3	1	5	16	0
380.4	24	22	25	26	34	20	46	67	66	9	4	6	**<1**	**<1**	2	18	0
385.4	17	32	21	21	23	22	68	37	42	5	5	3	2	3	**<1**	13	0
390.6	26	13	15	10	24	29	35	23	39	6	4	8	1	1	**<1**	11	0
395.0	21	13	12	22	37	19	81	56	28	4	4	4	**<1**	**<1**	**<1**	16	0
400.4	14	22	21	13	14	10	50	35	47	6	10	11	**<1**	1	4	12	0
405.8	21	15	15	16	10	13	17	36	192	4	8	22	5	2	6	13	0
411.4	26	26	8	7	5	21	36	34	45	7	6	10	2	3	10	11	0
416.4	46	27	14	7	7	6	30	28	35	2	5	6	**<1**	1	10	10	0
421.6	30	19	12	5	6	5	32	38	45	5	5	9	3	1	**<1**	10	0
426.4	12	28	15	6	4	7	25	19	20	5	7	5	6	**<1**	3	9	0
431.4	17	13	**<10**	7	7	3	21	17	19	8	3	5	4	**<1**	10	9	0
436.8	23	14	21	7	3	**<1**	23	18	31	7	10	1	7	5	3	9	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey F *(May 9 - June 9, 2005)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
441.5	21	16	15	3	3	5	35	22	29	7	6	4	**<1**	3	1	8	0
446.5	24	16	9	3	7	3	26	32	24	2	5	5	5	6	5	8	0
451.6	11	5	**<10**	6	6	13	19	15	21	4	1	4	5	**<1**	6	7	0
455.3	10	14	5	9	5	5	16	19	16	7	8	3	2	1	3	6	0
460.0	11	15	10	1	2	7	22	15	32	5	6	4	2	**<1**	1	6	0
465.4	17	11	13	13	4	15	11	29	31	**<1**	4	13	3	1	15	9	0
468.7	11	9	12	5	3	25	19	33	24	2	4	10	14	1	2	8	0
472.7	70	66	14	34	12	19	66	44	45	59	14	6	29	8	**2910**	36	1
477.6	33	24	44	14	13	35	46	49	36	30	18	86	42	175	**434**	42	1
482.2	46	39	41	11	30	24	54	34	48	13	10	15	58	**261**	181	36	1
486.2	50	36	34	18	16	35	34	47	53	11	11	35	7	148	64	30	0
489.7	41	46	49	11	15	13	31	70	44	12	18	18	15	45	68	27	0
493.2	33	41	50	14	17	25	42	54	39	15	20	27	11	46	41	28	0
498.0	28	22	47	18	6	43	22	19	33	19	25	44	2	30	91	23	0
503.1	24	21	20	14	18	15	21	21	13	24	40	28	**<1**	2	3	15	0
508.3	9	13	24	6	5	16	21	14	20	13	11	12	1	20	5	10	0
513.4	20	17	18	10	6	12	9	11	13	3	5	6	1	2	3	7	0
518.5	13	24	6	5	3	16	17	9	14	6	15	7	5	**<1**	10	9	0
523.4	12	12	9	11	5	11	9	13	7	3	2	2	**<1**	**<1**	4	6	0
528.4	4	12	11	10	5	15	13	7	11	7	4	3	**<1**	1	2	6	0
533.2	19	24	11	7	10	7	10	5	12	4	5	4	**<1**	5	2	7	0
538.5	19	9	17	11	12	11	8	8	10	3	5	6	3	**<1**	10	8	0
543.5	15	7	15	10	6	10	7	11	18	5	5	12	2	2	11	8	0
548.3	36	9	10	13	5	6	119	12	11	12	5	**<1**	5	**<1**	7	11	0
553.6	28	12	6	9	6	6	75	10	8	16	4	7	3	2	1	7	0
558.8	10	5	13	8	7	11	52	11	13	6	5	5	6	3	2	8	0
562.7	15	7	9	4	7	3	30	10	7	13	6	5	4	3	2	6	0
567.6	7	5	5	11	5	5	26	6	5	10	5	6	6	5	4	7	0
572.5	15	6	6	5	4	7	30	10	6	6	1	2	2	**<1**	2	5	0
577.4	6	24	6	5	4	9	36	7	10	7	2	5	**<1**	3	1	6	0
582.9	5	6	1	15	4	6	31	13	14	6	2	4	3	**<1**	**<1**	6	0
587.8	6	2	5	7	2	6	28	13	21	7	2	3	**<1**	1	**<1**	5	0
592.2	4	5	6	7	5	2	28	8	14	3	3	1	3	1	10	5	0
597.1	7	3	8	3	7	8	36	11	8	4	1	2	1	**<1**	1	4	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey F *(May 9 - June 9, 2005)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
602.2	13	4	7	5	5	5	21	9	15	7	3	5	2	3	**<1**	6	0
604.3	17	2	7	34	10	3	20	22	17	17	2	5	1	3	1	6	0
607.5	20	6	9	15	6	7	30	12	21	41	10	30	3	2	10	11	0
609.7	52	7	3	11	13	7	21	12	16	24	25	28	6	10	14	13	0
612.2	20	4	11	84	8	8	24	15	14	58	29	56	12	4	8	16	0
617.6	36	7	10	21	7	8	42	20	16	**13000**	162	16	81	67	5	32	1
623.1	18	13	7	17	10	5	44	15	26	**326**	35	19	46	17	10	20	1
628.1	23	11	12	60	10	11	57	19	15	**2760**	17	16	184	19	20	30	1

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey G *(May 22 - June 22, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
280.8	36	24	31	11	15	12	55	44	43	8	13	5	7	1	5	14	0
285.9	11	24	15	11	15	8	36	33	32	5	8	10	1	1	3	9	0
291.4	26	30	19	4	4	5	18	24	25	2	6	4	10	3	3	8	0
296.6	19	13	21	5	5	12	19	28	26	6	7	6	2	1	3	8	0
302.0	11	11	14	5	10	7	14	24	16	1	3	**<1**	**<1**	1	**<1**	7	0
307.7	21	19	12	126	24	5	37	22	25	162	2	6	139	135	7	24	0
313.3	12	10	6	**286**	22	28	114	22	59	**245**	**247**	96	28	55	98	48	3
317.2	56	11	7	234	12	7	147	55	29	**502**	**367**	**291**	84	27	17	51	3
321.5	59	15	16	93	89	34	199	144	53	**241**	201	230	25	23	7	58	1
327.4	7	12	26	56	-	27	118	64	43	179	**361**	204	5	7	7	35	1
327.7	16	11	15	79	46	24	138	50	36	**423**	**260**	**273**	7	5	5	37	3
328.0	22	13	14	63	53	54	96	105	51	**282**	**248**	167	11	6	17	44	2
332.5	26	13	75	15	44	59	111	99	69	138	108	86	3	5	2	31	0
338.1	12	24	11	46	34	25	66	67	76	104	121	77	1	1	**<1**	25	0
343.5	21	29	29	26	39	29	58	52	38	68	84	60	8	2	3	25	0
349.2	17	16	36	40	28	28	80	47	50	50	67	47	2	1	17	23	0
352.0	18	18	28	24	32	24	46	43	68	69	68	45	5	2	6	23	0
353.8	18	16	35	22	25	30	63	53	77	58	54	83	6	2	11	26	0
359.3	23	10	32	24	29	26	52	130	**340**	53	52	84	9	38	61	41	1
364.6	21	23	24	24	30	35	62	58	155	42	50	39	4	18	8	29	0
369.8	15	12	28	11	25	29	93	86	130	65	44	23	3	1	3	19	0
375.0	11	14	40	19	13	13	58	88	114	20	12	14	10	6	4	18	0
380.4	12	23	28	8	12	15	58	84	115	8	15	25	6	13	15	20	0
385.4	23	16	12	8	8	2	88	118	56	16	20	7	1	3	6	12	0
390.6	13	17	17	6	6	10	93	56	82	3	14	14	8	7	5	14	0
395.0	14	24	17	9	4	5	55	96	60	21	21	16	**<1**	4	1	14	0
400.4	12	11	12	3	3	5	42	31	46	16	37	17	**<1**	**<1**	2	12	0
405.8	14	15	9	2	5	14	110	34	84	14	19	25	7	10	22	16	0
411.4	13	9	7	5	12	2	40	34	58	32	18	16	13	8	8	13	0
416.4	7	10	10	5	3	5	50	31	46	12	12	18	4	3	2	9	0
421.6	11	8	3	11	3	4	54	71	40	13	14	8	**<1**	**<1**	1	10	0
426.4	15	14	5	1	1	3	50	44	29	20	11	11	4	**<1**	4	8	0
431.4	2	4	4	3	5	2	34	47	15	14	10	6	2	1	10	6	0
436.8	11	9	9	5	5	4	76	72	24	-	-	-	-	-	-	13	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey G *(May 22 - June 22, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
441.5	6	8	4	3	3	2	76	44	44	-	-	-	2	3	2	6	0
446.5	9	10	12	3	4	3	62	91	43	6	14	5	1	2	1	7	0
451.6	4	3	6	2	2	3	58	68	34	6	14	32	1	1	3	6	0
455.3	4	5	6	**1610**	131	**1350**	42	55	40	10	13	7	4	4	4	22	2
460.0	4	6	6	3	**1260**	**390**	26	52	26	11	13	3	3	2	10	14	2
465.4	5	5	46	5	4	34	44	53	37	14	13	12	1	1	8	10	0
468.7	6	3	28	16	1	10	51	37	56	14	10	11	18	18	13	13	0
472.7	13	5	92	19	13	64	66	52	54	24	56	34	96	60	199	40	0
477.6	19	15	98	9	10	28	42	39	49	29	20	61	67	68	96	34	0
482.2	41	66	199	13	15	14	50	34	28	34	108	75	**510**	**544**	**364**	66	3
486.2	34	53	76	14	8	33	34	55	55	25	53	30	**595**	**580**	**880**	61	3
489.7	27	70	36	8	6	17	41	66	32	19	40	24	38	40	26	27	0
493.2	32	47	46	13	68	88	46	52	64	18	17	24	18	29	26	34	0
498.0	12	15	86	13	33	46	49	46	36	24	33	27	38	36	23	30	0
503.1	24	28	28	10	7	9	58	42	46	33	28	14	11	17	18	21	0
508.3	10	9	38	3	3	5	40	42	43	20	17	18	3	6	36	13	0
513.4	16	21	25	6	10	4	28	24	29	24	32	19	2	1	3	11	0
518.5	10	18	37	2	6	12	32	43	18	12	24	11	2	1	11	10	0
523.4	15	16	28	5	4	6	23	20	23	7	19	23	3	1	2	9	0
528.4	10	13	15	12	3	2	32	27	25	18	13	11	5	2	**<1**	10	0
533.2	6	14	15	4	5	2	26	28	46	15	17	22	4	2	1	8	0
538.5	13	15	14	1	5	3	26	29	35	6	13	15	**<1**	5	3	9	0
543.5	10	12	12	5	4	3	38	36	45	6	10	3	**<1**	**<1**	2	9	0
548.3	12	10	11	5	20	2	16	29	13	44	12	2	5	1	3	8	0
553.6	2	6	10	1	3	4	13	17	23	22	16	6	46	1	2	6	0
558.8	5	15	9	1	1	1	16	28	20	12	14	3	4	10	**<10**	6	0
562.7	10	21	214	7	7	2	17	24	19	10	11	10	3	2	5	10	0
567.6	9	56	19	1	6	3	16	20	10	11	8	5	1	1	1	6	0
572.5	5	13	8	2	2	6	11	17	17	11	10	4	28	20	1	7	0
577.4	8	5	5	3	1	1	16	25	20	17	5	11	2	4	2	5	0
582.9	17	8	4	1	**<1**	2	18	10	14	11	12	5	29	1	**<1**	7	0
587.8	5	5	4	2	**<1**	1	7	11	10	11	3	12	14	8	12	6	0
592.2	4	5	7	1	**<1**	27	24	19	18	10	3	5	32	6	3	8	0
597.1	5	10	11	44	1	2	16	15	18	1	3	9	22	10	15	8	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey G *(May 22 - June 22, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
602.2	12	5	19	**3650**	4	4	29	28	14	5	10	9	22	28	29	18	1
604.3	**293**	6	15	**2280**	3	214	**620**	21	26	69	5	9	200	43	37	47	3
607.5	**840**	64	17	**1010**	93	150	**411**	42	31	15	6	3	49	41	13	51	3
609.7	**460**	**356**	52	**528**	**467**	**1080**	**249**	93	150	11	17	14	162	86	82	123	6
612.2	**17330**	156	53	**890**	119	**4350**	231	30	192	43	8	11	185	56	240	157	3
617.6	**3080**	**498**	161	**>24192**	**1280**	**276**	**1240**	99	74	12	18	6	**680**	**710**	**411**	204	8
623.1	**4350**	148	180	**790**	**276**	162	**860**	80	115	23	6	2	**1260**	**415**	68	146	6
628.1	**13000**	161	214	**9210**	104	**1200**	**1860**	93	**291**	15	7	2	**541**	**465**	44	209	7
631.6	**15530**	**1670**	133	**9800**	**1790**	132	**3970**	**279**	178	-	-	-	**545**	**568**	186	819	8
637.6	**9800**	**7700**	**800**	**8160**	**7700**	**4610**	**4610**	**1260**	98	-	-	-	**1120**	**1520**	**1300**	2301	11
643.1	93	**553**	98	**1050**	**2760**	**780**	**3450**	**2810**	**2380**	-	-	-	46	155	65	472	7
648.9	-	-	-	178	232	**375**	59	49	31	-	-	-	66	131	35	91	1

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey H *(July 24 - Aug 24, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
607.5	40	39	34	24	8	7	7	10	10	15	14	20	162	122	51	23	0
609.7	50	37	30	16	16	15	4	4	8	19	14	19	219	114	75	23	0
612.2	41	30	46	20	7	29	6	6	6	17	15	34	**307**	144	86	26	1
617.6	144	24	16	32	9	15	10	15	16	72	81	93	**1780**	**1520**	**1310**	63	3
623.1	66	22	12	48	13	20	8	7	7	150	36	30	**4160**	**1150**	**346**	49	3
628.1	79	14	11	55	19	11	9	6	8	210	35	44	**3650**	**1990**	179	49	2
631.6	130	11	8	75	13	16	12	13	5	98	82	37	**1350**	**1470**	**1410**	54	3
637.6	140	30	64	26	16	15	4	2	3	60	73	46	**880**	**930**	**990**	45	3
643.1	52	79	108	23	25	18	1	2	2	33	52	114	148	210	140	30	0
648.9	59	127	50	14	15	15	18	1	4	60	45	36	26	26	15	21	0
654.0	154	57	53	6	9	11	4	3	3	26	27	40	10	17	15	15	0
659.2	78	54	194	12	9	15	1	2	7	23	25	26	8	12	12	15	0
664.2	158	135	192	13	8	13	**<1**	1	3	36	25	24	1	1	4	12	0
669.1	**387**	204	220	22	19	12	**<1**	2	3	31	34	21	4	7	3	19	1
674.5	153	**319**	**325**	10	12	14	**<1**	2	**<1**	6	6	12	5	2	2	13	2
680.4	70	225	142	15	19	12	1	3	1	11	4	9	3	2	2	9	0
685.6	126	141	73	18	30	15	1	2	**<1**	5	3	5	3	1	1	8	0
690.7	107	74	76	10	25	8	**<1**	1	4	3	**<1**	4	3	1	2	8	0
695.6	**-**	24	20	7	5	4	2	**<1**	**<1**	3	1	1	**<1**	3	3	4	0
700.9	96	167	84	12	15	16	3	2	3	4	6	6	4	1	2	8	0
706.2	64	63	77	4	5	6	**<1**	**<1**	2	9	6	5	3	1	1	7	0
711.5	41	32	37	7	5	3	4	10	20	4	2	5	3	2	2	6	0
717.4	15	22	22	5	3	20	3	1	1	2	1	5	3	**<1**	1	4	0
721.5	**-**	**-**	**-**	6	11	5	2	2	3	8	12	5	2	**<1**	**<1**	4	0
727.0	34	30	20	3	3	3	6	2	2	10	5	16	**<1**	3	2	6	0
732.5	26	25	23	7	5	3	6	5	6	15	**424**	194	8	9	7	14	1
738.8	15	17	28	7	5	10	3	2	3	28	66	61	5	9	5	10	0
742.4	28	25	30	6	4	10	**<1**	10	1	10	25	28	4	9	3	9	0
746.4	19	19	28	7	5	9	1	1	3	2	5	6	2	4	9	5	0
750.6	51	34	102	7	5	5	4	3	4	3	3	12	13	11	14	9	0
754.8	73	30	96	6	3	7	**<1**	1	3	91	7	6	10	8	10	11	0
758.0	44	28	45	11	2	3	91	2	6	**1100**	**550**	**890**	9	10	8	26	3
763.2	58	26	59	99	19	13	**910**	**890**	**960**	124	93	80	4	5	5	56	3
769.1	219	57	61	172	22	12	5	3	12	44	30	6	4	6	1	16	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey H *(July 24 - Aug 24, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
773.6	110	70	34	44	96	21	3	**<1**	1	7	10	15	15	1	3	13	0
778.2	67	76	45	15	26	15	5	2	3	30	33	28	4	10	7	15	0
782.8	70	50	48	5	13	12	5	3	11	93	166	238	2	5	7	18	0
787.0	63	40	45	8	9	17	3	**<1**	2	23	17	30	**<1**	4	14	14	0
792.7	135	99	54	6	9	7	3	2	2	116	102	**249**	4	1	5	14	1
794.2	73	81	84	10	6	13	4	1	25	31	42	**840**	44	13	44	25	1
799.5	61	77	72	13	13	9	3	1	5	**600**	**3450**	**1250**	12	12	9	31	3
805.8	84	80	46	7	5	12	10	3	5	**1250**	**860**	**1550**	13	12	17	34	3
811.3	51	45	66	154	5	3	126	12	3	188	84	34	234	**365**	93	45	1
817.0	20	28	29	33	13	5	17	9	4	46	43	27	32	24	27	19	0
823.2	156	46	50	19	15	7	8	7	10	27	11	22	6	18	8	17	0
829.5	101	78	46	7	5	8	8	1	10	11	8	16	9	19	13	12	0
832.2	49	46	59	16	18	22	12	21	29	25	28	86	29	26	33	29	0
837.2	79	55	34	8	8	12	18	15	29	36	72	73	4	5	12	20	0
842.3	49	53	24	10	3	15	15	11	8	14	24	25	5	3	3	12	0
846.5	33	51	30	9	10	8	7	13	8	46	50	35	5	2	12	14	0
851.3	33	51	30	3	6	4	6	**<1**	5	133	162	178	4	5	5	15	0
855.5	29	29	15	5	2	3	4	4	4	93	50	72	5	3	5	10	0
859.7	34	26	14	2	4	7	3	1	5	21	14	17	4	2	8	7	0
864.4	30	52	13	9	2	1	**<1**	**<1**	2	13	15	19	5	1	1	6	0
869.8	39	24	17	5	3	1	1	**<1**	1	4	6	8	3	3	1	4	0
875.7	30	26	11	**<1**	3	2	1	1	2	8	4	5	7	5	5	5	0
880.7	24	15	12	2	**<1**	2	**<1**	2	**<1**	4	3	4	7	5	4	5	0
885.0	24	8	5	3	3	3	2	**<1**	**<1**	3	5	**<1**	10	4	2	4	0
889.2	22	7	9	**<1**	1	4	1	**<1**	**<1**	2	10	3	2	**<1**	**<1**	4	0
891.7	31	13	6	**<1**	3	1	**<1**	**<1**	1	2	2	3	1	1	1	3	0
897.5	14	8	11	3	1	1	12	4	2	2	2	**<1**	11	3	2	4	0
903.2	17	4	4	2	1	1	**<1**	**<1**	**<1**	1	3	1	1	**<1**	1	2	0
908.0	11	5	3	1	**<1**	**<1**	1	4	1	**<1**	**<1**	10	**<1**	1	1	2	0
912.6	16	5	4	2	**<1**	**<1**	1	2	2	**<1**	1	3	1	**<1**	**<1**	2	0
917.6	6	7	3	1	1	2	2	**<1**	**<1**	**<1**	2	2	1	**<1**	**<1**	2	0
923.4	7	10	5	6	2	1	5	1	3	3	**<1**	**<1**	1	2	**<1**	3	0
928.2	4	7	5	13	4	1	3	3	1	3	**<10**	10	4	2	2	3	0
932.2	5	5	2	10	8	1	1	**<1**	1	2	**<1**	1	5	2	1	2	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey H *(July 24 - Aug 24, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
936.2	40	4	15	10	1	5	18	**<1**	5	3	2	2	22	25	1	6	0
937.7	8	11	6	2	3	5	10	2	5	2	2	1	18	7	4	4	0
940.9	20	11	11	3	4	4	6	6	6	15	2	5	7	7	4	6	0
944.2	40	3	5	2	3	4	6	6	3	4	3	4	2	2	6	4	0
947.5	15	4	5	7	1	1	13	5	3	2	3	3	7	5	7	4	0
952.2	14	11	8	3	3	1	7	4	10	3	3	**<1**	7	5	3	5	0
957.7	5	5	11	7	3	7	4	8	3	2	**<1**	**<1**	5	4	3	5	0
963.0	-	-	-	4	2	2	10	5	3	4	1	2	4	6	4	3	0
969.2	-	-	-	3	5	4	4	5	4	3	5	5	17	7	8	5	0
974.1	-	-	-	7	4	1	5	12	5	5	11	3	12	22	5	6	0
979.2	-	-	-	9	1	24	151	3	41	14	1	37	15	12	11	11	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey I *(Sept 11 - Oct 12, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
1.5	31	46	34	104	79	108	39	33	30	63	51	162	46	54	43	54	0
3.3	34	21	**500**	108	86	**620**	34	30	141	88	67	**276**	46	33	211	88	3
6.4	28	32	53	128	144	154	25	26	39	64	98	56	62	91	49	59	0
9.5	20	24	40	66	96	104	25	33	67	116	68	75	20	37	51	48	0
11.4	25	18	38	52	75	**313**	34	39	29	82	55	77	44	44	57	50	1
12.5	24	32	81	125	147	**480**	18	45	46	84	59	79	33	28	70	60	1
14.4	31	20	31	99	75	**397**	27	37	71	79	68	84	32	40	67	56	1
17.7	24	31	47	187	**304**	**277**	31	25	39	93	86	120	26	40	73	64	2
20.5	27	25	50	105	112	192	28	16	39	78	84	108	35	38	31	51	0
20.8	18	30	44	112	126	199	29	24	28	88	73	75	26	54	33	50	0
21.8	19	30	30	83	96	153	15	23	24	64	64	124	15	31	25	40	0
22.9	219	**404**	**263**	107	78	**291**	28	21	**363**	**570**	98	156	50	36	82	120	5
25.5	15	24	70	69	62	209	22	28	50	137	70	107	30	20	37	48	0
25.8	14	24	51	108	55	**443**	24	22	47	81	58	**740**	25	29	45	55	2
26.4	19	26	56	120	76	**309**	36	44	60	82	162	186	25	30	28	59	1
28.3	28	34	53	114	118	**283**	31	46	47	**429**	119	**342**	34	28	40	73	3
32.9	12	21	24	61	70	84	47	46	35	**360**	**370**	**522**	18	26	23	55	3
37.6	17	21	29	50	59	34	45	50	34	**435**	**437**	**607**	27	31	16	55	3
41.2	19	18	30	55	44	147	28	47	34	**370**	**383**	**611**	16	10	16	51	3
44.8	22	15	26	57	39	83	20	34	22	**566**	**527**	**1130**	18	15	29	52	3
48.7	19	44	26	68	51	78	16	23	15	**910**	**740**	**960**	30	13	13	54	3
52.5	19	15	24	46	33	39	10	8	11	**1170**	**1140**	**1140**	5	7	12	36	3
56.4	18	27	15	39	23	20	19	16	11	**1090**	**1200**	**720**	14	5	11	37	3
60.3	20	15	**572**	20	36	**261**	10	13	**312**	**860**	**1140**	**730**	13	5	166	74	6
66.4	37	27	147	47	62	199	51	30	39	**535**	**466**	**547**	186	23	48	88	3
68.2	86	28	114	86	45	124	56	32	67	**478**	**506**	**535**	76	28	187	99	3
70.7	70	37	34	62	60	42	43	55	49	**453**	**400**	**536**	40	33	43	73	3
71.8	58	34	93	64	81	66	37	24	52	**397**	**348**	**408**	25	43	61	74	3
74.9	30	21	26	60	91	86	29	18	30	**258**	178	178	30	21	24	48	1
80.2	20	22	29	51	31	50	25	17	18	141	156	133	22	18	25	36	0
85.6	19	11	11	44	25	49	18	26	18	84	147	114	28	25	18	31	0
91.2	118	46	45	28	28	93	27	17	15	86	133	108	33	17	179	48	0
94.2	11	21	53	34	27	138	13	11	33	126	78	107	25	28	51	36	0
97.8	13	21	44	99	66	78	15	24	14	125	107	96	32	22	37	40	0

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey I *(Sept 11 - Oct 12, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
102.6	10	17	16	107	71	42	18	11	16	96	101	60	28	26	26	32	0
107.7	36	32	29	27	41	22	8	10	14	63	61	57	24	25	14	26	0
113.0	19	8	15	67	44	46	7	5	10	55	49	35	24	33	22	22	0
118.3	14	5	8	31	34	26	16	6	11	17	26	17	15	15	12	15	0
123.7	13	9	6	16	15	15	13	14	5	16	30	15	10	10	16	13	0
124.9	13	12	10	22	26	19	4	7	11	8	14	14	13	10	11	12	0
129.1	10	12	26	18	19	18	10	6	20	13	17	15	16	14	17	15	0
133.4	23	22	25	28	15	24	22	22	14	26	15	12	52	20	14	21	0
138.7	25	25	12	19	18	12	11	11	6	26	11	5	12	12	17	13	0
144.2	32	7	12	13	16	14	8	19	11	26	25	10	16	9	12	14	0
149.6	12	11	24	17	15	8	5	2	10	38	15	8	20	18	9	12	0
155.0	28	13	13	5	6	8	9	4	4	20	14	12	15	5	10	9	0
160.4	191	24	24	9	12	8	10	11	10	10	7	10	13	9	11	14	0
165.8	**5736**	48	19	22	15	9	5	9	9	8	9	3	10	11	5	16	1
171.2	115	26	46	8	12	13	6	5	15	7	8	12	5	5	10	12	0
175.1	41	35	78	16	11	13	16	14	10	16	29	16	13	15	15	19	0
179.4	57	43	47	12	13	18	15	23	12	7	16	14	11	7	17	17	0
183.5	41	21	22	11	10	9	22	22	15	13	20	16	9	15	13	16	0
185.9	186	31	128	17	5	15	18	17	22	17	23	29	31	23	41	27	0
190.8	140	110	**310**	13	12	23	25	24	31	20	15	15	20	18	22	30	1
195.7	47	48	30	24	23	27	15	18	23	15	14	10	25	15	23	22	0
200.7	14	18	24	12	14	15	24	19	25	12	12	8	13	27	34	17	0
205.7	**680**	**490**	**419**	15	17	21	27	20	19	**1370**	**1380**	**520**	**960**	**509**	228	157	8
210.7	**910**	**647**	**500**	15	17	12	16	29	27	**2360**	**1210**	**373**	**910**	210	**590**	162	8
215.7	**960**	**500**	**1370**	16	12	16	34	23	20	**2280**	**3080**	**2100**	215	104	**600**	179	7
220.4	**1550**	**990**	**1300**	8	15	13	26	18	19	**1660**	**1470**	**1670**	**649**	236	**276**	176	8
225.4	**1250**	**1080**	**1480**	16	8	8	31	15	34	**2190**	**3080**	**3450**	108	72	126	156	6
230.4	**830**	**1020**	**930**	14	15	16	41	31	34	**770**	**332**	**550**	86	59	80	113	6
235.6	**2190**	**1200**	**2380**	9	12	8	25	28	34	**2100**	**1300**	**1290**	91	75	21	132	6
240.4	**1080**	**1550**	**2100**	15	18	15	25	25	28	**900**	**810**	**1200**	83	55	45	129	6
245.4	**1660**	**1400**	**1610**	13	16	19	34	19	31	**820**	**820**	**840**	**306**	84	104	150	7
250.4	**1400**	**1260**	**1500**	17	20	13	27	44	28	**2140**	**660**	**527**	**1620**	**395**	**471**	213	9
255.5	**1660**	**1491**	**1520**	13	13	15	38	30	38	**2060**	**2010**	**2490**	**960**	**1420**	**1350**	288	9
260.6	**1720**	**1610**	**1860**	15	12	24	39	41	38	**1550**	**2380**	**1780**	**610**	**526**	**461**	256	9

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey I *(Sept 11 - Oct 12, 2006)*																Geometric	
Mile Point	Week 1			Week 2			Week 3			Week 4			Week 5			Mean	# > SS Max
	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB	LDB	MID	RDB		
265.7	**1940**	**1680**	**1990**	15	14	21	63	67	43	**2480**	**990**	**910**	**1160**	**880**	**910**	294	9
269.8	**3080**	**1400**	**1300**	36	46	24	59	64	82	96	175	**700**	**487**	**1120**	**494**	227	7
275.2	**3260**	**1480**	**1560**	21	25	16	48	73	58	153	166	152	228	144	212	148	3
280.8	**1990**	**2480**	**1080**	25	25	30	77	67	63	115	115	**433**	173	141	**382**	164	5
285.9	**1550**	**1520**	**1300**	22	32	29	73	88	65	**515**	72	**601**	**278**	200	**700**	195	7
291.4	**1520**	**1550**	**910**	21	18	22	46	74	57	**599**	199	**295**	**369**	186	**510**	175	7
296.6	**1500**	**1520**	**1120**	35	20	19	56	47	52	**365**	41	210	**487**	**275**	130	145	6

Exceeds Criteria

E. coli monthly geometric mean not to exceed 130 colonies/ 100 mL

E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey L *(Sept 24 - Oct 11, 2007)*				
Mile Point	LDB	MID	RDB	#> SS Max
1.5	6	6	3	0
3.3	20	15	12	0
12.5	16	8	2	0
22.9	172	6	21	0
25.5	14	6	2	0
25.8	16	15	21	0
26.4	14	16	16	0
28.3	12	13	11	0
32.9	5	9	3	0
37.6	2	4	5	0
41.2	3	<1	<1	0
48.7	2	5	10	0
52.5	2	1	3	0
66.4	37	38	28	0
68.2	24	43	133	0
74.9	9	15	5	0
80.2	3	5	3	0
85.6	13	11	8	0
91.2	5	3	6	0
94.2	5	1	3	0
97.8	4	2	3	0
102.6	7	7	10	0
107.7	1	2	<1	0
113	2	3	2	0
118.3	1	2	1	0
123.7	<1	2	3	0
129.1	30	6	1	0
138.7	2	1	1	0
149.6	2	2	1	0
155	<1	1	2	0
165.8	5	5	5	0
171.2	1	2	5	0
175.1	3	7	5	0
183.5	2	<1	1	0
185.9	1	4	7	0
190.8	1	3	10	0
195.7	3	1	<1	0
200.7	<1	1	2	0
205.7	8	1	3	0
210.7	1	<1	2	0
215.7	3	3	4	0
220.4	1	1	<1	0
225.4	<1	6	2	0
230.4	4	<1	1	0
235.6	<1	3	<1	0
245.4	3	4	2	0
250.4	3	5	223	0
255.5	7	5	8	0
260.6	7	2	3	0
265.7	5	4	10	0

Exceeds Criteria

E. coli individual sample not to exceed 240 colonies/ 100 ml

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey L *(Sept 24 - Oct 11, 2007)*				
Mile Point	LDB	MID	RDB	#> SS Max
269.8	2	9	50	0
275.2	5	1	4	0
280.8	15	6	14	0
285.9	2	3	3	0
291.4	<1	1	2	0
302	1	2	12	0
302	2	2	3	0
307.7	26	31	18	0
313.3	223	**269**	12	1
317.2	37	29	34	0
321.5	30	35	31	0
328	24	15	13	0
332.5	3	7	5	0
338.1	4	2	5	0
343.5	1	1	2	0
349.2	3	2	2	0
352	2	3	2	0
353.8	24	3	18	0
359.3	7	10	8	0
364.6	3	8	5	0
369.8	2	2	4	0
375	1	1	2	0
380.4	3	1	1	0
385.4	3	2	1	0
390.6	2	10	1	0
400.4	1	2	1	0
405.8	2	4	6	0
411.4	6	1	3	0
416.4	6	8	4	0
421.6	4	3	1	0
426.4	<1	3	10	0
431.4	2	1	2	0
436.8	2	1	3	0
446.5	1	<1	4	0
451.6	<1	<1	2	0
460	1	<1	4	0
465.4	5	5	8	0
468.7	5	7	4	0
472.7	13	21	10	0
477.6	19	17	19	0
482.2	35	38	25	0
486.2	35	25	15	0
489.7	36	25	16	0
493.2	15	24	17	0
498	50	35	24	0
503.1	21	17	21	0
508.3	8	12	10	0
513.4	21	23	15	0
518.5	1	<10	1	0
528.4	108	<10	-	0

Exceeds Criteria

E. coli individual sample not to exceed 240 colonies/ 100 ml

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey L *(Sept 24 - Oct 11, 2007)*				
Mile Point	LDB	MID	RDB	#> SS Max
533.2	10	3	2	0
538.5	2	<1	1	0
543.5	5	5	2	0
548.3	1	4	1	0
553.6	<1	1	<1	0
567.6	2	<1	3	0
572.5	<1	<1	<1	0
587.8	1	<1	<1	0
592.2	<1	<1	2	0
597.1	<1	<1	<1	0
602.2	1	1	6	0
604.3	3	<1	6	0
607.5	4	4	3	0
609.7	2	11	6	0
612.2	3	2	1	0
617.6	5	8	3	0
623.1	8	6	4	0
628.1	13	13	15	0
631.6	16	6	5	0
637.6	1	3	1	0
643.1	<1	5	2	0
648.9	3	<1	2	0
654	1	<1	<1	0
659.2	2	<1	2	0
664.2	<1	<1	<1	0
669.1	1	<1	<1	0
674.5	2	1	<1	0
680.4	<1	<1	<1	0
690.7	<1	3	1	0
695.6	<1	<1	<1	0
700.9	<1	10	2	0
706.2	1	2	<1	0
711.5	<1	<1	2	0
727	1	10	3	0
732.5	2	10	5	0
742.4	4	1	<1	0
746.4	1	<1	15	0
750.6	10	15	8	0
754.8	<1	1	10	0
758	**500**	28	2	1
769.1	10	8	8	0
773.6	1	1	1	0
778.2	2	1	<1	0
782.8	<1	<1	4	0
787	<1	1	<1	0
792.7	<1	2	2	0
794.2	6	1	69	0
805.8	9	6	3	0
811.3	11	10	4	0
817	5	4	7	0

Exceeds Criteria

E. coli individual sample not to exceed 240 colonies/ 100 ml

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey L *(Sept 24 - Oct 11, 2007)*				
Mile Point	**LDB**	**MID**	**RDB**	**#> SS Max**
823.2	2	<1	2	0
829.5	2	1	<1	0
837.2	8	3	<1	0
842.3	3	<1	2	0
846.5	4	10	4	0
851.3	3	2	1	0
864.4	2	2	2	0
869.8	3	1	2	0
875.7	2	1	<1	0
880.7	<1	<1	<1	0
885	1	1	<1	0
889.2	2	<1	<1	0
891.7	2	2	1	0
897.5	3	<1	<1	0
903.2	<1	1	<1	0
908	2	<1	1	0
912.6	1	<1	2	0
917.6	<1	<1	2	0
923.4	25	9	2	0
932.2	1	3	<1	0
936.2	1	7	3	0
937.7	4	6	4	0
940.9	2	4	4	0
944.2	2	2	15	0
947.5	4	4	2	0
952.2	2	1	4	0
957.7	2	5	5	0
963	2	4	1	0
969.2	2	5	5	0
974.1	7	7	1	0
979.2	10	15	15	0

Exceeds Criteria

E. coli individual sample not to exceed 240 colonies/ 100 ml

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey M *(May 5 - June 30, 2008)*					
Date	Mile Point	LDB	MID	RDB	#>SS Max
04-Jun-08	1.5	**1610**	**1080**	**2480**	3
04-Jun-08	3.3	**4610**	**1130**	**1970**	3
04-Jun-08	12.5	**1350**	**990**	**930**	3
04-Jun-08	22.9	**3650**	**1180**	**5480**	3
04-Jun-08	25.5	**2190**	**1260**	**2100**	3
04-Jun-08	25.8	**3260**	**1530**	**2760**	3
04-Jun-08	26.4	**2380**	**1400**	**2910**	3
04-Jun-08	28.3	**2140**	**780**	**1720**	3
04-Jun-08	32.9	**1040**	**1410**	**1040**	3
04-Jun-08	37.6	**647**	**930**	**643**	3
05-Jun-08	41.2	**405**	**372**	**506**	3
05-Jun-08	44.8	**830**	**495**	**372**	3
05-Jun-08	48.7	**315**	**295**	**245**	3
05-Jun-08	52.5	**271**	140	**710**	2
05-Jun-08	66.4	**2610**	**349**	**572**	3
05-Jun-08	68.2	**930**	**315**	**1290**	3
05-Jun-08	74.9	**654**	**292**	**628**	3
05-Jun-08	80.2	**427**	**310**	**677**	3
05-Jun-08	85.6	**520**	**544**	**1850**	3
05-Jun-08	91.2	**1380**	**260**	**570**	3
05-Jun-08	94.2	**720**	203	**900**	2
05-Jun-08	97.8	**1400**	**620**	**670**	3
05-Jun-08	102.6	**634**	**478**	**432**	3
05-Jun-08	107.7	**980**	**720**	**600**	3
05-Jun-08	113	**525**	**646**	**660**	3
05-Jun-08	118.3	**303**	**500**	**560**	3
05-Jun-08	123.7	**625**	**810**	**690**	3
06-Jun-08	129.1	**538**	**645**	**453**	3
06-Jun-08	138.7	**449**	**489**	**418**	3
06-Jun-08	149.6	**687**	**477**	**406**	3
06-Jun-08	155	**395**	**590**	**364**	3
06-Jun-08	165.8	**930**	**687**	**378**	3
06-Jun-08	171.2	**610**	**1020**	**1050**	3
06-Jun-08	175.1	**960**	**680**	**1190**	3
06-Jun-08	183.5	**647**	**600**	**1110**	3
06-Jun-08	185.9	**2360**	**1430**	**1180**	3
06-Jun-08	190.8	**2360**	**1420**	**1230**	3
06-Jun-08	195.7	**2610**	**1530**	**1660**	3
06-Jun-08	200.7	**1720**	**1260**	**1900**	3
07-Jun-08	205.7	**1150**	**800**	**-**	2
07-Jun-08	210.7	**930**	**1050**	**577**	3
07-Jun-08	215.7	**990**	**1020**	**620**	3
07-Jun-08	220.4	**860**	**910**	**1050**	3
07-Jun-08	225.4	**680**	**586**	**642**	3
07-Jun-08	230.4	**990**	**554**	**620**	3
07-Jun-08	235.6	**560**	**504**	**570**	3
07-Jun-08	240.4	**820**	**930**	**860**	3
07-Jun-08	245.4	**691**	**960**	**720**	3
07-Jun-08	250.4	**1070**	**1050**	**910**	3
07-Jun-08	255.5	**610**	**880**	**1050**	3

Exceeds Criteria
E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey M *(May 5 - June 30, 2008)*					
Date	Mile Point	LDB	MID	RDB	#>SS Max
07-Jun-08	260.6	**1050**	**1080**	**614**	3
07-Jun-08	265.7	**960**	**840**	**614**	3
07-Jun-08	269.8	**810**	**700**	**910**	3
07-Jun-08	275.2	**960**	**810**	**780**	3
07-Jun-08	280.8	**1460**	**1180**	**830**	3
29-Jun-08	280.8	50	72	102	0
07-Jun-08	285.9	**830**	**730**	**1020**	3
29-Jun-08	285.9	**322**	60	76	1
29-Jun-08	291.4	**520**	66	114	1
29-Jun-08	302	127	108	**275**	1
29-Jun-08	307.7	**263**	**283**	**561**	3
29-Jun-08	313.3	**280**	88	178	1
29-Jun-08	317.2	**276**	46	140	1
29-Jun-08	321.5	**780**	**298**	110	2
29-Jun-08	328	**357**	**267**	155	2
29-Jun-08	332.5	**261**	120	81	1
29-Jun-08	338.1	**349**	**284**	184	2
30-Jun-08	343.5	138	148	115	0
30-Jun-08	349.2	140	162	93	0
30-Jun-08	352	186	140	179	0
30-Jun-08	353.8	210	141	108	0
30-Jun-08	359.3	148	169	**475**	1
30-Jun-08	364.6	153	**276**	**243**	2
30-Jun-08	369.8	96	161	203	0
30-Jun-08	375	**324**	**291**	210	2
30-Jun-08	380.4	54	166	152	0
30-Jun-08	385.4	96	121	71	0
30-Jun-08	390.6	84	50	65	0
30-Jun-08	400.4	80	73	78	0
30-Jun-08	405.8	60	109	147	0
30-Jun-08	411.4	54	91	121	0
30-Jun-08	416.4	40	51	44	0
30-Jun-08	421.6	46	62	16	0
30-Jun-08	426.4	32	19	17	0
30-Jun-08	431.4	12	6	5	0
30-Jun-08	436.8	5	7	8	0
30-Jun-08	446.5	8	9	20	0
05-May-08	637.6	**387**	172	93	1
05-May-08	643.1	**461**	**477**	217	2
05-May-08	648.9	**345**	**430**	214	2
05-May-08	654	**434**	**276**	**325**	3
05-May-08	659.2	**319**	**555**	**283**	3
05-May-08	664.2	**740**	**480**	**413**	3
05-May-08	669.1	**680**	**542**	**438**	3
05-May-08	674.5	**683**	**780**	**810**	3
05-May-08	680.4	**700**	**640**	**430**	3
05-May-08	690.7	**423**	**460**	**593**	3
05-May-08	695.6	**469**	**581**	**298**	3
05-May-08	700.9	**339**	225	**340**	2
05-May-08	706.2	**307**	206	**441**	2

Exceeds Criteria
E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix F: E. coli Concentration Data in Colonies per 100 mL

Survey M *(May 5 - June 30, 2008)*					
Date	Mile Point	LDB	MID	RDB	#>SS Max
05-May-08	711.5	**577**	**244**	192	2
05-May-08	727	**303**	219	155	1
05-May-08	732.5	**294**	**305**	**347**	3
06-May-08	742.4	126	130	121	0
06-May-08	746.4	121	111	96	0
06-May-08	750.6	114	186	110	0
06-May-08	754.8	86	132	122	0
06-May-08	758	210	133	130	0
06-May-08	769.1	161	142	156	0
06-May-08	773.6	78	135	104	0
06-May-08	778.2	161	119	194	0
06-May-08	782.8	167	231	121	0
06-May-08	787	101	135	96	0
06-May-08	792.7	**401**	219	102	1
06-May-08	794.2	**478**	**411**	99	2
06-May-08	805.8	**356**	**276**	158	2
06-May-08	811.3	210	178	137	0
06-May-08	817	135	162	134	0
06-May-08	823.2	179	106	102	0
06-May-08	829.5	197	**293**	148	1
06-May-08	837.2	192	126	131	0
06-May-08	842.3	203	155	238	0
07-May-08	846.5	111	114	26	0
07-May-08	851.3	96	108	38	0
07-May-08	864.4	135	107	66	0
07-May-08	869.8	166	150	83	0
07-May-08	875.7	105	148	59	0
07-May-08	880.7	81	147	72	0
07-May-08	885	229	194	52	0
07-May-08	889.2	118	162	86	0
07-May-08	891.7	62	69	46	0
07-May-08	897.5	122	79	46	0
07-May-08	903.2	54	52	60	0
07-May-08	908	66	54	35	0
07-May-08	912.6	45	28	28	0
07-May-08	917.6	60	48	21	0
07-May-08	923.4	43	116	66	0
08-May-08	932.2	41	34	25	0
08-May-08	936.2	34	12	33	0
08-May-08	937.7	35	44	31	0
08-May-08	940.9	30	28	29	0
08-May-08	944.2	56	28	27	0
08-May-08	947.5	47	50	13	0
08-May-08	952.2	48	35	13	0
08-May-08	957.7	29	24	10	0
08-May-08	963	28	19	20	0
08-May-08	969.2	13	22	19	0
08-May-08	974.1	15	24	17	0
08-May-08	979.2	43	16	19	0

Exceeds Criteria
E. coli individual sample not to exceed 240 colonies/ 100 mL

Appendix G: Contact Recreation Program Bacteria Data Summary

2005 Fecal Coliform and E. Coil Single Sample Criteria Violations

City	Mile Point	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations
		May		June		July		August		September		Ocotober		Annual Summary	
Pittsburgh	1.4 LDB	4	67%	1	20%	2	33%	4	80%	1	17%	2	40%	14	40%
	1.4 MID	3	50%	1	20%	4	67%	3	60%	1	17%	2	40%	14	40%
	1.4 RDB	2	33%	2	40%	4	67%	3	60%	1	17%	1	20%	13	20%
	4.3	2	33%	1	20%	3	50%	3	60%	3	50%	3	60%	15	60%
Total		11	46%	5	25%	13	54%	13	65%	6	25%	8	40%	56	40%
Wheeling	84.2														
	86.8	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%	1	20%
	91.4	0	0%	0	0%	4	67%	0	0%	0	0%	0	0%	4	0%
	92.8	1	17%	2	40%	2	33%	2	40%	1	17%	1	20%	9	20%
Total		1	6%	2	13%	6	33%	2	13%	1	6%	2	13%	14	13%
Huntington	305.1	0	0%	0	0%	2	33%	1	20%	1	17%	0	0%	4	0%
	308.1	1	17%	1	20%	2	33%	1	20%	0	0%	1	20%	6	20%
	314.8	0	0%	0	0%	2	33%	2	40%	1	17%	0	0%	5	0%
Total		2	6%	3	8%	12	33%	6	23%	3	10%	3	8%	29	8%
Cincinnati	462.6	1	17%	1	20%	0	0%	1	20%	0	0%	0	0%	3	0%
	463.9														
	469.9														
	470	1	17%	0	0%	2	33%	2	40%	1	17%	0	0%	6	0%
	477.5	1	17%	1	20%	1	17%	1	20%	1	17%	1	20%	6	20%
Total		2	17%	1	10%	3	25%	3	30%	2	17%	1	10%	12	10%
Louisville	594	0	0%	0	0%	0	0%	1	20%	1	17%	1	20%	3	20%
	608.7	0	0%	2	40%	0	0%	1	20%	1	17%	0	0%	4	0%
	619.3	3	50%	2	40%	0	0%	2	40%	2	33%	0	0%	9	0%
Total		5	17%	5	23%	3	6%	7	28%	6	21%	2	8%	28	8%
Evansville	791.5	1	20%	1	20%	1	17%	3	50%	2	40%	1	20%	9	20%
	793.7	0	0%	2	40%	1	17%	4	67%	2	40%	2	40%	11	40%
	797.3	3	60%	3	60%	6	100%	5	83%	5	100%	3	60%	25	60%

Appendix G: Contact Recreation Program Bacteria Data Summary

2006 Fecal Coliform and E. Coil Single Sample Criteria Violations

City	Mile Point	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations
		May		June		July		August		September		Ocotober		Annual Summary	
Pittsburgh	1.4 LDB	4	67%	5	100%	3	50%	3	60%	1	33%	2	40%	18	40%
	1.4 MID	2	33%	4	80%	2	33%	2	40%	1	33%	2	40%	13	40%
	1.4 RDB	5	83%	5	100%	3	50%	3	60%	1	33%	2	40%	19	40%
	4.3	2	40%	4	80%	4	67%	4	80%	1	33%	2	40%	17	40%
Total		13	56%	18	90%	12	50%	12	60%	4	33%	8	40%	67	40%
Wheeling	84.2	2	33%	3	60%	0	0%	1	20%	1	17%	4	80%	11	80%
	86.8	0	0%	1	20%	0	0%	1	20%	1	17%	3	60%	6	60%
	91.4	0	0%	1	20%	0	0%	1	20%	0	0%	3	60%	5	60%
	92.8	1	17%	3	60%	1	17%	2	40%	2	33%	4	80%	13	80%
Total		3	13%	8	40%	1	4%	5	25%	4	17%	14	70%	35	70%
Huntington	305.1	1	17%	1	25%	1	17%	0	0%	0	0%	3	60%	6	60%
	308.1	0	0%	1	25%	3	50%	2	40%	1	17%	2	40%	9	40%
	314.8	0	0%	1	25%	2	33%	0	0%	2	33%	1	20%	6	20%
Total		4	7%	11	29%	7	26%	7	16%	7	17%	20	48%	56	48%
Cincinnati	462.6	0	0%	0	0%	0	0%	1	20%	4	67%	3	60%	8	60%
	463.9														
	469.9														
	470	0	0%	2	40%	3	60%	2	40%	4	67%	3	60%	14	60%
	477.5	0	0%	1	20%	2	40%	0	0%	4	67%	3	60%	10	60%
Total		0	0%	3	30%	5	50%	2	20%	8	67%	6	60%	24	60%
Louisville	594	1	17%	0	0%	0	0%	0	0%	1	17%	0	0%	2	0%
	608.7	0	0%	1	20%	2	33%	1	20%	3	50%	0	0%	7	0%
	619.3	3	50%	4	80%	4	67%	2	40%	4	67%	3	60%	20	60%
Total		4	17%	8	33%	11	38%	5	20%	16	50%	9	30%	53	30%
Evansville	791.5	3	50%	1	20%	1	17%	1	20%	4	67%	2	40%	12	40%
	793.7	6	100%	3	60%	1	17%	3	60%	4	67%	3	60%	20	60%
	797.3	5	83%	1	20%	0	0%	1	20%	4	67%	4	80%	15	80%

Appendix G: Contact Recreation Program Bacteria Data Summary

2007 Fecal Coliform and E. Coil Single Sample Criteria Violations

City	Mile Point	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations
		May		June		July		August		September		Ocotober		Annual Summary	
Pittsburgh	1.4 LDB	0	0%	1	25%	1	20%	4	80%	4	67%	1	20%	11	20%
	1.4 MID	0	0%	1	25%	0	0%	5	100%	4	67%	1	20%	11	20%
	1.4 RDB	0	0%	1	25%	0	0%	4	80%	4	67%	1	20%	10	20%
	4.3	0	0%	1	25%	0	0%	5	100%	3	50%	1	20%	10	20%
Total		0	0%	4	25%	1	5%	18	90%	15	63%	4	20%	42	20%
Wheeling	84.2	0	0%	4	80%	0	0%	4	80%	2	33%	3	60%	13	60%
	86.8	0	0%	3	60%	0	0%	1	20%	0	0%	0	0%	4	0%
	91.4	2	33%	3	60%	0	0%	2	40%	2	33%	0	0%	9	0%
	92.8	1	17%	4	80%	0	0%	3	60%	1	17%	3	60%	12	60%
Total		3	13%	14	70%	0	0%	10	50%	5	21%	6	30%	38	30%
Huntington	305.1	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%
	308.1	3	50%	1	20%	2	29%	4	80%	2	33%	0	0%	12	0%
	314.8	2	33%	0	0%	0	0%	1	20%	0	0%	0	0%	3	0%
Total		9	28%	15	23%	2	7%	15	38%	7	14%	6	8%	54	8%
Cincinnati	462.6	0	0%	1	20%	0	0%	0	0%	0	0%	1	20%	2	20%
	463.9	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%	1	20%
	469.9	0	0%	0	0%	0	0%	0	0%	2	33%	2	40%	4	40%
	470	0	0%	0	0%	0	0%	1	20%	3	50%	2	40%	6	40%
	477.5	0	0%	1	20%	0	0%	0	0%	0	0%	1	20%	2	20%
Total		0	0%	1	5%	0	0%	1	5%	5	21%	6	30%	13	30%
Louisville	594	0	0%	0	0%	0	0%	1	20%	0	0%	2	40%	3	40%
	608.7	0	0%	0	0%	1	14%	2	40%	0	0%	0	0%	3	0%
	619.3	4	67%	3	60%	1	14%	3	60%	3	50%	2	40%	16	40%
Total		4	17%	4	16%	2	7%	7	31%	8	18%	10	28%	35	28%
Evansville	791.5	0	0%	0	0%	0	0%	2	40%	0	0%	0	0%	2	0%
	793.7	2	33%	2	40%	2	29%	4	80%	4	67%	3	60%	17	60%
	797.3	0	0%	0	0%	0	0%	0	0%	1	17%	0	0%	1	0%

Appendix G: Contact Recreation Program Bacteria Data Summary

2008 Fecal Coliform and E. Coil Single Sample Criteria Violations

City	Mile Point	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations
		May		June		July		August		September		Ocotober		Annual Summary	
Pittsburgh	1.4 LDB	3	60%	5	100%	3	60%	3	60%	2	40%	2	40%	18	40%
	1.4 MID	5	100%	4	80%	3	60%	2	40%	2	40%	3	60%	19	60%
	1.4 RDB	3	60%	5	100%	3	60%	2	40%	2	40%	1	20%	16	20%
	4.3	4	80%	5	100%	4	80%	1	20%	1	20%	2	40%	17	40%
Total		15	75%	19	95%	13	65%	8	40%	7	35%	8	40%	70	40%
Wheeling	84.2	3	60%	2	40%	1	20%	0	0%	0	0%	0	0%	6	0%
	86.8	3	60%	2	40%	1	20%	0	0%	0	0%	0	0%	6	0%
	91.4	3	60%	3	60%	2	40%	0	0%	0	0%	1	20%	9	20%
	92.8	3	60%	4	80%	3	60%	1	20%	3	60%	1	20%	15	20%
Total		12	60%	11	55%	7	35%	1	5%	3	15%	2	10%	36	10%
Huntington	305.1	1	20%	1	20%	1	20%	0	0%	0	0%	0	0%	3	0%
	308.1	2	40%	0	0%	4	80%	2	40%	0	0%	0	0%	8	0%
	314.8	3	60%	2	40%	0	0%	0	0%	0	0%	0	0%	5	0%
Total		18	45%	14	29%	12	34%	3	11%	3	4%	2	3%	52	3%
Cincinnati	462.6	2	40%	1	20%	0	0%	0	0%	0	0%	0	0%	3	0%
	463.9	2	40%	1	20%	0	0%	0	0%	0	0%	0	0%	3	0%
	469.9	2	40%	0	0%	1	20%	1	20%	1	20%	0	0%	5	0%
	470	2	40%	2	40%	1	20%	1	20%	1	20%	0	0%	7	0%
	477.5	3	60%	1	20%	1	20%	0	0%	2	40%	0	0%	7	0%
Total		9	45%	4	20%	3	15%	2	10%	4	20%	0	0%	22	0%
Louisville	594	2	40%	3	60%	0	0%	0	0%	0	0%	0	0%	5	0%
	608.7	1	20%	3	60%	0	0%	0	0%	0	0%	0	0%	4	0%
	619.3	2	40%	2	40%	1	20%	2	40%	3	60%	3	50%	13	50%
Total		14	36%	12	45%	4	9%	4	13%	7	20%	3	13%	44	13%
Evansville	791.5	2	40%	1	20%	0	0%	0	0%	0	0%	0	0%	3	0%
	793.7	2	40%	1	20%	2	40%	0	0%	2	40%	1	20%	8	20%
	797.3	2	40%	3	60%	1	20%	0	0%	0	0%	0	0%	6	0%

Appendix G: Contact Recreation Program Bacteria Data Summary

2009 Fecal Coliform and E. Coil Single Sample Criteria Violations

City	Mile Point	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations	No. of Violations	Percent Violations
		May		June		July		August		September		Ocotober		Annual Summary	
Pittsburgh	1.4 LDB	2	40%	2	40%	3	60%	2	40%	4	80%	2	67%	15	67%
	1.4 MID	3	60%	2	40%	4	80%	2	40%	4	80%	2	67%	17	67%
	1.4 RDB	3	60%	2	40%	4	80%	2	40%	4	80%	1	33%	16	33%
	4.3	3	60%	1	20%	3	60%	2	40%	4	80%	2	67%	15	67%
Total		11	55%	7	35%	14	70%	8	40%	16	80%	7	58%	63	58%
Wheeling	84.2	1	20%	1	20%	1	20%	1	20%	0	0%	1	20%	5	20%
	86.8	1	20%	2	40%	0	0%	0	0%	0	0%	0	0%	3	0%
	91.4	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	1	0%
	92.8	3	60%	4	80%	2	40%	1	20%	0	0%	1	20%	11	20%
Total		5	25%	8	40%	3	15%	2	10%	0	0%	2	10%	20	10%
Huntington	305.1	1	20%	0	0%	0	0%	1	20%	0	0%	0	0%	2	0%
	308.1	1	20%	2	40%	1	20%	3	60%	0	0%	0	0%	7	0%
	314.8	3	60%	0	0%	1	20%	2	40%	0	0%	0	0%	6	0%
Total		10	31%	10	20%	5	14%	8	33%	0	0%	2	3%	35	3%
Cincinnati	462.6	1	20%	0	0%	1	20%	1	20%	1	20%	0	0%	4	0%
	463.9	1	20%	0	0%	0	0%	0	0%	1	20%	1	20%	3	20%
	469.9	1	20%	1	20%	2	40%	2	40%	2	40%	1	20%	9	20%
	470	1	20%	1	20%	1	20%	2	40%	3	60%	0	0%	8	0%
	477.5	1	20%	1	20%	3	60%	2	40%	3	60%	1	20%	11	20%
Total		4	20%	3	15%	6	30%	6	30%	9	45%	3	15%	31	15%
Louisville	594	0	0%	2	40%	0	0%	1	20%	1	20%	2	40%	6	40%
	608.7	0	0%	1	20%	1	20%	2	40%	1	20%	1	20%	6	20%
	619.3	0	0%	3	60%	2	40%	2	40%	2	33%	3	60%	12	60%
Total		4	5%	9	34%	9	23%	11	33%	13	30%	9	34%	55	34%
Evansville	791.5	1	20%	0	0%	0	0%	1	20%	1	20%	1	20%	4	20%
	793.7	2	40%	1	20%	2	40%	2	40%	2	40%	1	20%	10	20%
	797.3	1	20%	0	0%	1	20%	2	40%	1	20%	1	20%	6	20%

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	05-May-05	266	8	
1.4R	PITTSBURGH	10-May-05	80	24	
1.4R	PITTSBURGH	17-May-05	800	280	EXCEEDS
1.4R	PITTSBURGH	24-May-05	8,300	4,200	EXCEEDS
1.4R	PITTSBURGH	26-May-05	240	196	
		GEOMETRIC MEAN	508	135	EXCEEDS
1.4M	PITTSBURGH	05-May-05	370	44	
1.4M	PITTSBURGH	10-May-05	600	16	EXCEEDS
1.4M	PITTSBURGH	17-May-05	580	110	EXCEEDS
1.4M	PITTSBURGH	24-May-05	3,500	1,000	EXCEEDS
1.4M	PITTSBURGH	26-May-05	171	226	
		GEOMETRIC MEAN	599	112	EXCEEDS
1.4L	PITTSBURGH	05-May-05	250	63	
1.4L	PITTSBURGH	10-May-05	369	16	
1.4L	PITTSBURGH	17-May-05	881	184	EXCEEDS
1.4L	PITTSBURGH	24-May-05	2,000	1,700	EXCEEDS
1.4L	PITTSBURGH	26-May-05	400	410	EXCEEDS
		GEOMETRIC MEAN	579	167	EXCEEDS
4.3	PITTSBURGH	05-May-05	120	43	
4.3	PITTSBURGH	10-May-05	230	16	
4.3	PITTSBURGH	17-May-05	1,000	132	EXCEEDS
4.3	PITTSBURGH	24-May-05	673	300	EXCEEDS
4.3	PITTSBURGH	26-May-05	180	194	
		GEOMETRIC MEAN	320	88	EXCEEDS
1.4R	PITTSBURGH	09-Jun-05	420	57	EXCEEDS
1.4R	PITTSBURGH	14-Jun-05	670	191	EXCEEDS
1.4R	PITTSBURGH	21-Jun-05	100	124	
1.4R	PITTSBURGH	23-Jun-05	69	64	
1.4R	PITTSBURGH	28-Jun-05	270	209	
		GEOMETRIC MEAN	221	113	EXCEEDS
1.4M	PITTSBURGH	09-Jun-05	400	250	EXCEEDS
1.4M	PITTSBURGH	14-Jun-05	340	74	
1.4M	PITTSBURGH	21-Jun-05	112	92	
1.4M	PITTSBURGH	23-Jun-05	116	104	
1.4M	PITTSBURGH	28-Jun-05	132	88	
		GEOMETRIC MEAN	188	109	
1.4L	PITTSBURGH	09-Jun-05	230	124	
1.4L	PITTSBURGH	14-Jun-05	440	691	EXCEEDS
1.4L	PITTSBURGH	21-Jun-05	150	100	
1.4L	PITTSBURGH	23-Jun-05	104	80	
1.4L	PITTSBURGH	28-Jun-05	150	49	
		GEOMETRIC MEAN	188	127	
4.3	PITTSBURGH	09-Jun-05	310	104	
4.3	PITTSBURGH	14-Jun-05	214	900	EXCEEDS
4.3	PITTSBURGH	21-Jun-05	86	94	
4.3	PITTSBURGH	23-Jun-05	69	46	
4.3	PITTSBURGH	28-Jun-05	80	49	
		GEOMETRIC MEAN	126	115	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	05-Jul-05	50	67	
1.4R	PITTSBURGH	12-Jul-05	550	150	EXCEEDS
1.4R	PITTSBURGH	19-Jul-05	2,000	882	EXCEEDS
1.4R	PITTSBURGH	21-Jul-05	450	128	EXCEEDS
1.4R	PITTSBURGH	26-Jul-05	6,900	8,600	EXCEEDS
		GEOMETRIC MEAN	702	396	EXCEEDS
1.4M	PITTSBURGH	05-Jul-05	500	144	EXCEEDS
1.4M	PITTSBURGH	12-Jul-05	71	40	
1.4M	PITTSBURGH	19-Jul-05	2,400	4,600	EXCEEDS
1.4M	PITTSBURGH	21-Jul-05	410	184	EXCEEDS
1.4M	PITTSBURGH	26-Jul-05	6,700	5,400	EXCEEDS
		GEOMETRIC MEAN	748	483	EXCEEDS
1.4L	PITTSBURGH	05-Jul-05	90	40	
1.4L	PITTSBURGH	12-Jul-05	96	80	
1.4L	PITTSBURGH	19-Jul-05	1,700	991	EXCEEDS
1.4L	PITTSBURGH	21-Jul-05	330	168	
1.4L	PITTSBURGH	26-Jul-05	5,600	6,500	EXCEEDS
		GEOMETRIC MEAN	486	322	EXCEEDS
4.3	PITTSBURGH	05-Jul-05	150	71	
4.3	PITTSBURGH	12-Jul-05	260	166	
4.3	PITTSBURGH	19-Jul-05	682	472	EXCEEDS
4.3	PITTSBURGH	21-Jul-05	250	80	
4.3	PITTSBURGH	26-Jul-05	2,700	3,200	EXCEEDS
		GEOMETRIC MEAN	448	270	EXCEEDS
1.4R	PITTSBURGH	02-Aug-05	189	191	
1.4R	PITTSBURGH	09-Aug-05	3,200	4,200	EXCEEDS
1.4R	PITTSBURGH	16-Aug-05	330	100	
1.4R	PITTSBURGH	23-Aug-05	550	460	EXCEEDS
1.4R	PITTSBURGH	30-Aug-05	6,500	300	EXCEEDS
		GEOMETRIC MEAN	935	406	EXCEEDS
1.4M	PITTSBURGH	02-Aug-05	88	150	
1.4M	PITTSBURGH	09-Aug-05	1,300	3,300	EXCEEDS
1.4M	PITTSBURGH	16-Aug-05	300	104	
1.4M	PITTSBURGH	23-Aug-05	2,200	460	EXCEEDS
1.4M	PITTSBURGH	30-Aug-05	12,800	5,100	EXCEEDS
		GEOMETRIC MEAN	993	655	EXCEEDS
1.4L	PITTSBURGH	02-Aug-05	156	200	
1.4L	PITTSBURGH	09-Aug-05	2,100	627	EXCEEDS
1.4L	PITTSBURGH	16-Aug-05	550	124	EXCEEDS
1.4L	PITTSBURGH	23-Aug-05	1,500	600	EXCEEDS
1.4L	PITTSBURGH	30-Aug-05	11,300	9,100	EXCEEDS
		GEOMETRIC MEAN	1,250	611	EXCEEDS
4.3	PITTSBURGH	02-Aug-05	156	94	
4.3	PITTSBURGH	09-Aug-05	700	370	EXCEEDS
4.3	PITTSBURGH	16-Aug-05	250	51	
4.3	PITTSBURGH	23-Aug-05	600	450	EXCEEDS
4.3	PITTSBURGH	30-Aug-05	2,900	2,500	EXCEEDS
		GEOMETRIC MEAN	544	288	EXCEEDS

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	08-Sep-05	250	210	
1.4R	PITTSBURGH	13-Sep-05	69	146	
1.4R	PITTSBURGH	20-Sep-05	232	160	
1.4R	PITTSBURGH	22-Sep-05	111	182	
1.4R	PITTSBURGH	27-Sep-05	718	220	EXCEEDS
		GEOMETRIC MEAN	200	181	EXCEEDS
1.4M	PITTSBURGH	08-Sep-05	140	230	
1.4M	PITTSBURGH	13-Sep-05	60	83	
1.4M	PITTSBURGH	20-Sep-05	251	32	
1.4M	PITTSBURGH	22-Sep-05	172	43	
1.4M	PITTSBURGH	27-Sep-05	955	550	EXCEEDS
		GEOMETRIC MEAN	203	108	EXCEEDS
1.4L	PITTSBURGH	08-Sep-05	180	80	
1.4L	PITTSBURGH	13-Sep-05	16	100	
1.4L	PITTSBURGH	20-Sep-05	240	80	
1.4L	PITTSBURGH	22-Sep-05	80	74	
1.4L	PITTSBURGH	27-Sep-05	580	280	EXCEEDS
		GEOMETRIC MEAN	126	106	
4.3	PITTSBURGH	08-Sep-05	500	100	EXCEEDS
4.3	PITTSBURGH	13-Sep-05	196	280	EXCEEDS
4.3	PITTSBURGH	20-Sep-05	330	86	
4.3	PITTSBURGH	22-Sep-05	128	84	
4.3	PITTSBURGH	27-Sep-05	2,600	1,300	EXCEEDS
		GEOMETRIC MEAN	404	192	EXCEEDS
1.4R	PITTSBURGH	04-Oct-05	340	188	
1.4R	PITTSBURGH	11-Oct-05	300	240	
1.4R	PITTSBURGH	18-Oct-05	140	100	
1.4R	PITTSBURGH	20-Oct-05	246	216	
1.4R	PITTSBURGH	25-Oct-05	4,300	60,000	EXCEEDS
		GEOMETRIC MEAN	432	567	EXCEEDS
1.4M	PITTSBURGH	04-Oct-05	290	49	
1.4M	PITTSBURGH	11-Oct-05	245	200	
1.4M	PITTSBURGH	18-Oct-05	310	134	
1.4M	PITTSBURGH	20-Oct-05	460	320	EXCEEDS
1.4M	PITTSBURGH	25-Oct-05	60,000	12,500	EXCEEDS
		GEOMETRIC MEAN	905	350	EXCEEDS
1.4L	PITTSBURGH	04-Oct-05	270	189	
1.4L	PITTSBURGH	11-Oct-05	350	220	
1.4L	PITTSBURGH	18-Oct-05	196	180	
1.4L	PITTSBURGH	20-Oct-05	520	370	EXCEEDS
1.4L	PITTSBURGH	25-Oct-05	200	5,900	EXCEEDS
		GEOMETRIC MEAN	286	439	EXCEEDS
4.3	PITTSBURGH	04-Oct-05	560	100	EXCEEDS
4.3	PITTSBURGH	11-Oct-05	1,400	1,200	EXCEEDS
4.3	PITTSBURGH	18-Oct-05	71	80	
4.3	PITTSBURGH	20-Oct-05	46	16	
4.3	PITTSBURGH	25-Oct-05	10,300	7,800	EXCEEDS
		GEOMETRIC MEAN	483	260	EXCEEDS

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
86.8	WHEELING	03-May-05	197	48	
86.8	WHEELING	10-May-05	37	12	
86.8	WHEELING	17-May-05	144	36	
86.8	WHEELING	19-May-05	132	32	
86.8	WHEELING	24-May-05	40	36	
		GEOMETRIC MEAN	89	30	
91.4	WHEELING	03-May-05	132	40	
91.4	WHEELING	10-May-05	28	8	
91.4	WHEELING	17-May-05	154	40	
91.4	WHEELING	19-May-05	20	28	
91.4	WHEELING	24-May-05	92	48	
		GEOMETRIC MEAN	64	28	
92.8	WHEELING	03-May-05	132	32	
92.8	WHEELING	10-May-05	96	26	
92.8	WHEELING	17-May-05	229	128	
92.8	WHEELING	19-May-05	209	74	
92.8	WHEELING	24-May-05	486	188	EXCEEDS
		GEOMETRIC MEAN	197	68	
86.8	WHEELING	07-Jun-05	40	20	
86.8	WHEELING	14-Jun-05	57	56	
86.8	WHEELING	21-Jun-05	92	16	
86.8	WHEELING	23-Jun-05	32	20	
86.8	WHEELING	28-Jun-05	350	12	
		GEOMETRIC MEAN	75	21	
91.4	WHEELING	07-Jun-05	34	32	
91.4	WHEELING	14-Jun-05	100	71	
91.4	WHEELING	21-Jun-05	16	12	
91.4	WHEELING	23-Jun-05	40	4	
91.4	WHEELING	28-Jun-05	51	136	
		GEOMETRIC MEAN	41	27	
92.8	WHEELING	07-Jun-05	340	520	EXCEEDS
92.8	WHEELING	14-Jun-05	214	71	
92.8	WHEELING	21-Jun-05	204	56	
92.8	WHEELING	23-Jun-05	500	310	EXCEEDS
92.8	WHEELING	28-Jun-05	86	78	
		GEOMETRIC MEAN	230	138	EXCEEDS
86.8	WHEELING	05-Jul-05	32	4	
86.8	WHEELING	12-Jul-05	24	4	
86.8	WHEELING	19-Jul-05	40	20	
86.8	WHEELING	21-Jul-05	20	8	
86.8	WHEELING	26-Jul-05	240	31	
		GEOMETRIC MEAN	43	10	
91.4	WHEELING	05-Jul-05	8	8	
91.4	WHEELING	12-Jul-05	864	450	EXCEEDS
91.4	WHEELING	19-Jul-05	228	64	
91.4	WHEELING	21-Jul-05	1,591	709	EXCEEDS
91.4	WHEELING	26-Jul-05	840	180	EXCEEDS
		GEOMETRIC MEAN	292	124	EXCEEDS
92.8	WHEELING	05-Jul-05	20	16	
92.8	WHEELING	12-Jul-05	132	20	
92.8	WHEELING	19-Jul-05	168	88	
92.8	WHEELING	21-Jul-05	991	128	EXCEEDS
92.8	WHEELING	26-Jul-05	6,800	1,600	EXCEEDS
		GEOMETRIC MEAN	313	90	EXCEEDS

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
86.8	WHEELING	02-Aug-05	16	8	
86.8	WHEELING	09-Aug-05	46	128	
86.8	WHEELING	16-Aug-05	152	104	
86.8	WHEELING	23-Aug-05	4	4	
86.8	WHEELING	30-Aug-05	20	210	
		GEOMETRIC MEAN	25	39	
91.4	WHEELING	02-Aug-05	8	4	
91.4	WHEELING	09-Aug-05	77	63	
91.4	WHEELING	16-Aug-05	309	176	
91.4	WHEELING	23-Aug-05	4	24	
91.4	WHEELING	30-Aug-05	108	136	
		GEOMETRIC MEAN	38	43	
92.8	WHEELING	02-Aug-05	12	8	
92.8	WHEELING	09-Aug-05	350	230	
92.8	WHEELING	16-Aug-05	6,000	6,000	EXCEEDS
92.8	WHEELING	23-Aug-05	46	12	
92.8	WHEELING	30-Aug-05	1,691	1,036	EXCEEDS
		GEOMETRIC MEAN	287	169	EXCEEDS
86.8	WHEELING	06-Sep-05	188	136	
86.8	WHEELING	13-Sep-05	30	16	
86.8	WHEELING	20-Sep-05	8	4	
86.8	WHEELING	22-Sep-05	136	4	
86.8	WHEELING	27-Sep-05	4	4	
		GEOMETRIC MEAN	30	11	
91.4	WHEELING	06-Sep-05	84	32	
91.4	WHEELING	13-Sep-05	24	12	
91.4	WHEELING	20-Sep-05	36	20	
91.4	WHEELING	22-Sep-05	20	8	
91.4	WHEELING	27-Sep-05	24	12	
		GEOMETRIC MEAN	32	15	
92.8	WHEELING	06-Sep-05	160	92	
92.8	WHEELING	13-Sep-05	71	34	
92.8	WHEELING	20-Sep-05	74	310	EXCEEDS
92.8	WHEELING	22-Sep-05	260	8	
92.8	WHEELING	27-Sep-05	43	28	
		GEOMETRIC MEAN	99	46	
86.8	WHEELING	04-Oct-05	56	20	
86.8	WHEELING	11-Oct-05	510	77	EXCEEDS
86.8	WHEELING	18-Oct-05	32	8	
86.8	WHEELING	20-Oct-05	4	4	
86.8	WHEELING	25-Oct-05	228	140	
		GEOMETRIC MEAN	66	26	
91.4	WHEELING	04-Oct-05	32	4	
91.4	WHEELING	11-Oct-05	86	44	
91.4	WHEELING	18-Oct-05	137	43	
91.4	WHEELING	20-Oct-05	12	56	
91.4	WHEELING	25-Oct-05	237	57	
		GEOMETRIC MEAN	64	29	
92.8	WHEELING	04-Oct-05	48	20	
92.8	WHEELING	11-Oct-05	57	24	
92.8	WHEELING	18-Oct-05	60	60	
92.8	WHEELING	20-Oct-05	32	12	
92.8	WHEELING	25-Oct-05	1,755	709	EXCEEDS
		GEOMETRIC MEAN	92	44	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	HUNTINGTON	03-May-05	320	151	
305.1	HUNTINGTON	10-May-05	104	80	
305.1	HUNTINGTON	17-May-05	52	28	
305.1	HUNTINGTON	19-May-05	8	8	
305.1	HUNTINGTON	24-May-05	231	89	
			GEOMETRIC MEAN 80	47	
308.1	HUNTINGTON	03-May-05	590	480	EXCEEDS
308.1	HUNTINGTON	10-May-05	84	24	
308.1	HUNTINGTON	17-May-05	88	52	
308.1	HUNTINGTON	19-May-05	84	24	
308.1	HUNTINGTON	24-May-05	234	132	
			GEOMETRIC MEAN 154	72	
314.8	HUNTINGTON	03-May-05	380	152	
314.8	HUNTINGTON	10-May-05	140	80	
314.8	HUNTINGTON	17-May-05	140	109	
314.8	HUNTINGTON	19-May-05	132	108	
314.8	HUNTINGTON	24-May-05	194	160	
			GEOMETRIC MEAN 180	118	
305.1	HUNTINGTON	07-Jun-05	8	8	
305.1	HUNTINGTON	14-Jun-05	20	16	
305.1	HUNTINGTON	21-Jun-05	4	4	
305.1	HUNTINGTON	23-Jun-05	4	4	
305.1	HUNTINGTON	28-Jun-05	4	4	
			GEOMETRIC MEAN 6	6	
308.1	HUNTINGTON	07-Jun-05	246	171	
308.1	HUNTINGTON	14-Jun-05	69	43	
308.1	HUNTINGTON	21-Jun-05	51	9	
308.1	HUNTINGTON	23-Jun-05	1,300	1,100	EXCEEDS
308.1	HUNTINGTON	28-Jun-05	40	20	
			GEOMETRIC MEAN 135	68	
314.8	HUNTINGTON	07-Jun-05	116	74	
314.8	HUNTINGTON	14-Jun-05	290	217	
314.8	HUNTINGTON	21-Jun-05	194	97	
314.8	HUNTINGTON	23-Jun-05	224	36	
314.8	HUNTINGTON	28-Jun-05	20	16	
			GEOMETRIC MEAN 124	62	
305.1	HUNTINGTON	05-Jul-05	4	4	
305.1	HUNTINGTON	12-Jul-05	124	66	
305.1	HUNTINGTON	19-Jul-05	583	420	EXCEEDS
305.1	HUNTINGTON	21-Jul-05	580	300	EXCEEDS
305.1	HUNTINGTON	26-Jul-05	12	12	
			GEOMETRIC MEAN 73	53	
308.1	HUNTINGTON	05-Jul-05	96	96	
308.1	HUNTINGTON	12-Jul-05	100	60	
308.1	HUNTINGTON	19-Jul-05	600	500	EXCEEDS
308.1	HUNTINGTON	21-Jul-05	817	520	EXCEEDS
308.1	HUNTINGTON	26-Jul-05	40	20	
			GEOMETRIC MEAN 180	125	
314.8	HUNTINGTON	05-Jul-05	214	134	
314.8	HUNTINGTON	12-Jul-05	140	80	
314.8	HUNTINGTON	19-Jul-05	580	410	EXCEEDS
314.8	HUNTINGTON	21-Jul-05	2,400	873	EXCEEDS
314.8	HUNTINGTON	26-Jul-05	380	96	
			GEOMETRIC MEAN 437	206	EXCEEDS

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	HUNTINGTON	02-Aug-05	40	24	
305.1	HUNTINGTON	09-Aug-05	174	92	
305.1	HUNTINGTON	16-Aug-05	8	4	
305.1	HUNTINGTON	23-Aug-05	60	64	
305.1	HUNTINGTON	30-Aug-05	410	220	EXCEEDS
			GEOMETRIC MEAN 67	42	
308.1	HUNTINGTON	02-Aug-05	160	80	
308.1	HUNTINGTON	09-Aug-05	108	108	
308.1	HUNTINGTON	16-Aug-05	48	20	
308.1	HUNTINGTON	23-Aug-05	180	112	
308.1	HUNTINGTON	30-Aug-05	882	464	EXCEEDS
			GEOMETRIC MEAN 167	98	
314.8	HUNTINGTON	02-Aug-05	510	211	EXCEEDS
314.8	HUNTINGTON	09-Aug-05	108	71	
314.8	HUNTINGTON	16-Aug-05	36	24	
314.8	HUNTINGTON	23-Aug-05	96	74	
314.8	HUNTINGTON	30-Aug-05	560	480	EXCEEDS
			GEOMETRIC MEAN 161	105	
305.1	HUNTINGTON	06-Sep-05	176	124	
305.1	HUNTINGTON	13-Sep-05	320	172	
305.1	HUNTINGTON	20-Sep-05	243	191	
305.1	HUNTINGTON	22-Sep-05	380	137	
305.1	HUNTINGTON	27-Sep-05	430	350	EXCEEDS
			GEOMETRIC MEAN 295	181	EXCEEDS
308.1	HUNTINGTON	06-Sep-05	148	92	
308.1	HUNTINGTON	13-Sep-05	320	191	
308.1	HUNTINGTON	20-Sep-05	100	60	
308.1	HUNTINGTON	22-Sep-05	229	96	
308.1	HUNTINGTON	27-Sep-05	132	80	
			GEOMETRIC MEAN 170	96	
314.8	HUNTINGTON	06-Sep-05	209	108	
314.8	HUNTINGTON	13-Sep-05	237	112	
314.8	HUNTINGTON	20-Sep-05	77	46	
314.8	HUNTINGTON	22-Sep-05	100	63	
314.8	HUNTINGTON	27-Sep-05	410	330	EXCEEDS
			GEOMETRIC MEAN 173	103	
305.1	HUNTINGTON	04-Oct-05	136	112	
305.1	HUNTINGTON	11-Oct-05	54	8	
305.1	HUNTINGTON	18-Oct-05	20	4	
305.1	HUNTINGTON	20-Oct-05	57	40	
305.1	HUNTINGTON	25-Oct-05	217	128	
			GEOMETRIC MEAN 71	28	
308.1	HUNTINGTON	04-Oct-05	12	51	
308.1	HUNTINGTON	11-Oct-05	189	32	
308.1	HUNTINGTON	18-Oct-05	3,200	2,500	EXCEEDS
308.1	HUNTINGTON	20-Oct-05	92	51	
308.1	HUNTINGTON	25-Oct-05	60	20	
			GEOMETRIC MEAN 132	84	
314.8	HUNTINGTON	04-Oct-05	390	156	
314.8	HUNTINGTON	11-Oct-05	57	24	
314.8	HUNTINGTON	18-Oct-05	51	12	
314.8	HUNTINGTON	20-Oct-05	77	43	
314.8	HUNTINGTON	25-Oct-05	231	128	
			GEOMETRIC MEAN 115	48	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	CINCINNATI	03-May-05	480	430	EXCEEDS
462.6	CINCINNATI	10-May-05	32	20	
462.6	CINCINNATI	17-May-05	56	52	
462.6	CINCINNATI	19-May-05	31	12	
462.6	CINCINNATI	24-May-05	80	37	
			GEOMETRIC MEAN 73	46	
470	CINCINNATI	03-May-05	580	570	EXCEEDS
470	CINCINNATI	10-May-05	137	112	
470	CINCINNATI	17-May-05	84	48	
470	CINCINNATI	19-May-05	210	144	
470	CINCINNATI	24-May-05	112	37	
			GEOMETRIC MEAN 173	110	
477.5	CINCINNATI	03-May-05	540	500	EXCEEDS
477.5	CINCINNATI	10-May-05	43	32	
477.5	CINCINNATI	17-May-05	400	77	
477.5	CINCINNATI	19-May-05	108	44	
477.5	CINCINNATI	24-May-05	64	40	
			GEOMETRIC MEAN 145	74	
462.6	CINCINNATI	07-Jun-05	36	36	
462.6	CINCINNATI	14-Jun-05	220	180	
462.6	CINCINNATI	21-Jun-05	96	40	
462.6	CINCINNATI	23-Jun-05	12	12	
462.6	CINCINNATI	28-Jun-05	410	211	EXCEEDS
			GEOMETRIC MEAN 82	58	
470	CINCINNATI	07-Jun-05	40	28	
470	CINCINNATI	14-Jun-05	250	200	
470	CINCINNATI	21-Jun-05	60	40	
470	CINCINNATI	23-Jun-05	20	16	
470	CINCINNATI	28-Jun-05	46	44	
			GEOMETRIC MEAN 56	44	
477.5	CINCINNATI	07-Jun-05	28	16	
477.5	CINCINNATI	14-Jun-05	840	560	EXCEEDS
477.5	CINCINNATI	21-Jun-05	36	4	
477.5	CINCINNATI	23-Jun-05	112	72	
477.5	CINCINNATI	28-Jun-05	20	20	
			GEOMETRIC MEAN 72	35	
462.6	CINCINNATI	05-Jul-05	20	8	
462.6	CINCINNATI	12-Jul-05	36	28	
462.6	CINCINNATI	19-Jul-05	88	24	
462.6	CINCINNATI	21-Jul-05	71	16	
462.6	CINCINNATI	26-Jul-05	16	8	
			GEOMETRIC MEAN 37	15	
470	CINCINNATI	05-Jul-05	40	52	
470	CINCINNATI	12-Jul-05	40	12	
470	CINCINNATI	19-Jul-05	891	520	EXCEEDS
470	CINCINNATI	21-Jul-05	764	290	EXCEEDS
470	CINCINNATI	26-Jul-05	28	10	
			GEOMETRIC MEAN 125	62	
477.5	CINCINNATI	05-Jul-05	152	148	
477.5	CINCINNATI	12-Jul-05	12	32	
477.5	CINCINNATI	19-Jul-05	300	128	
477.5	CINCINNATI	21-Jul-05	809	540	EXCEEDS
477.5	CINCINNATI	26-Jul-05	24	24	
			GEOMETRIC MEAN 101	95	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	CINCINNATI	02-Aug-05	148	84	
462.6	CINCINNATI	09-Aug-05	8	4	
462.6	CINCINNATI	17-Aug-05	37	4	
462.6	CINCINNATI	23-Aug-05	4	4	
462.6	CINCINNATI	30-Aug-05	6,500	1,300	EXCEEDS
		GEOMETRIC MEAN	65	23	
470	CINCINNATI	02-Aug-05	12	8	
470	CINCINNATI	09-Aug-05	12	12	
470	CINCINNATI	17-Aug-05	645	28	EXCEEDS
470	CINCINNATI	23-Aug-05	48	40	
470	CINCINNATI	30-Aug-05	8,200	4,800	EXCEEDS
		GEOMETRIC MEAN	130	55	
477.5	CINCINNATI	02-Aug-05	490	36	EXCEEDS
477.5	CINCINNATI	09-Aug-05	84	60	
477.5	CINCINNATI	17-Aug-05	237	100	
477.5	CINCINNATI	23-Aug-05	40	36	
477.5	CINCINNATI	30-Aug-05	160	32	
		GEOMETRIC MEAN	144	48	
462.6	CINCINNATI	13-Sep-05	84	64	
462.6	CINCINNATI	15-Sep-05	280	144	
462.6	CINCINNATI	20-Sep-05	177	160	
462.6	CINCINNATI	22-Sep-05	12	4	
462.6	CINCINNATI	27-Sep-05	8	4	
		GEOMETRIC MEAN	53	30	
470	CINCINNATI	13-Sep-05	28	12	
470	CINCINNATI	15-Sep-05	290	170	
470	CINCINNATI	20-Sep-05	530	310	EXCEEDS
470	CINCINNATI	22-Sep-05	63	48	
470	CINCINNATI	27-Sep-05	136	100	
		GEOMETRIC MEAN	130	79	
477.5	CINCINNATI	13-Sep-05	80	48	
477.5	CINCINNATI	15-Sep-05	52	8	
477.5	CINCINNATI	20-Sep-05	140	49	
477.5	CINCINNATI	22-Sep-05	230	152	
477.5	CINCINNATI	27-Sep-05	450	220	EXCEEDS
		GEOMETRIC MEAN	143	58	
462.6	CINCINNATI	04-Oct-05	4	4	
462.6	CINCINNATI	11-Oct-05	108	20	
462.6	CINCINNATI	18-Oct-05	20	4	
462.6	CINCINNATI	20-Oct-05	28	4	
462.6	CINCINNATI	25-Oct-05	219	12	
		GEOMETRIC MEAN	35	7	
470	CINCINNATI	04-Oct-05	12	16	
470	CINCINNATI	11-Oct-05	10	8	
470	CINCINNATI	18-Oct-05	8	8	
470	CINCINNATI	20-Oct-05	20	8	
470	CINCINNATI	25-Oct-05	108	46	
		GEOMETRIC MEAN	18	13	
477.5	CINCINNATI	04-Oct-05	32	12	
477.5	CINCINNATI	11-Oct-05	28	4	
477.5	CINCINNATI	18-Oct-05	54	16	
477.5	CINCINNATI	20-Oct-05	57	12	
477.5	CINCINNATI	25-Oct-05	681	290	EXCEEDS
		GEOMETRIC MEAN	72	19	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	LOUISVILLE	03-May-05	209	214	
594	LOUISVILLE	10-May-05	40	40	
594	LOUISVILLE	16-May-05	74	69	
594	LOUISVILLE	19-May-05	40	17	
594	LOUISVILLE	24-May-05	223	214	
		GEOMETRIC MEAN	89	74	
608.7	LOUISVILLE	03-May-05	217	166	
608.7	LOUISVILLE	10-May-05	40	9	
608.7	LOUISVILLE	16-May-05	77	60	
608.7	LOUISVILLE	19-May-05	8	17	
608.7	LOUISVILLE	24-May-05	100	136	
		GEOMETRIC MEAN	56	46	
619.3	LOUISVILLE	03-May-05	430	251	EXCEEDS
619.3	LOUISVILLE	10-May-05	60	14	
619.3	LOUISVILLE	16-May-05	4,200	3,500	EXCEEDS
619.3	LOUISVILLE	19-May-05	266	220	
619.3	LOUISVILLE	24-May-05	750	640	EXCEEDS
		GEOMETRIC MEAN	464	280	EXCEEDS
594	LOUISVILLE	07-Jun-05	56	24	
594	LOUISVILLE	14-Jun-05	174	80	
594	LOUISVILLE	21-Jun-05	80	52	
594	LOUISVILLE	23-Jun-05	400	189	
594	LOUISVILLE	28-Jun-05	350	57	
		GEOMETRIC MEAN	161	64	
608.7	LOUISVILLE	07-Jun-05	2,100	260	EXCEEDS
608.7	LOUISVILLE	14-Jun-05	88	71	
608.7	LOUISVILLE	21-Jun-05	37	20	
608.7	LOUISVILLE	23-Jun-05	80	12	
608.7	LOUISVILLE	28-Jun-05	2,600	40	EXCEEDS
		GEOMETRIC MEAN	270	45	EXCEEDS
619.3	LOUISVILLE	07-Jun-05	4,200	591	EXCEEDS
619.3	LOUISVILLE	14-Jun-05	4,500	3,100	EXCEEDS
619.3	LOUISVILLE	21-Jun-05	157	112	
619.3	LOUISVILLE	23-Jun-05	52	50	
619.3	LOUISVILLE	28-Jun-05	237	6	
		GEOMETRIC MEAN	516	144	EXCEEDS
594	LOUISVILLE	06-Jul-05	8	16	
594	LOUISVILLE	12-Jul-05	200	14	
594	LOUISVILLE	19-Jul-05	69	16	
594	LOUISVILLE	21-Jul-05	66	44	
594	LOUISVILLE	26-Jul-05	140	112	
		GEOMETRIC MEAN	63	28	
608.7	LOUISVILLE	06-Jul-05	24	16	
608.7	LOUISVILLE	12-Jul-05	186	46	
608.7	LOUISVILLE	19-Jul-05	60	16	
608.7	LOUISVILLE	21-Jul-05	71	50	
608.7	LOUISVILLE	26-Jul-05	43	8	
		GEOMETRIC MEAN	61	22	
619.3	LOUISVILLE	06-Jul-05	186	169	
619.3	LOUISVILLE	12-Jul-05	200	68	
619.3	LOUISVILLE	19-Jul-05	194	124	
619.3	LOUISVILLE	21-Jul-05	184	71	
619.3	LOUISVILLE	26-Jul-05	192	60	
		GEOMETRIC MEAN	191	90	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	LOUISVILLE	02-Aug-05	160	20	
594	LOUISVILLE	09-Aug-05	200	124	
594	LOUISVILLE	16-Aug-05	251	184	
594	LOUISVILLE	24-Aug-05	20	40	
594	LOUISVILLE	30-Aug-05	545	43	EXCEEDS
		GEOMETRIC MEAN	154	60	
608.7	LOUISVILLE	02-Aug-05	266	34	
608.7	LOUISVILLE	09-Aug-05	148	54	
608.7	LOUISVILLE	16-Aug-05	136	12	
608.7	LOUISVILLE	24-Aug-05	128	204	
608.7	LOUISVILLE	30-Aug-05	6,000	400	EXCEEDS
		GEOMETRIC MEAN	333	71	EXCEEDS
619.3	LOUISVILLE	02-Aug-05	500	309	EXCEEDS
619.3	LOUISVILLE	09-Aug-05	20	20	
619.3	LOUISVILLE	16-Aug-05	237	52	
619.3	LOUISVILLE	24-Aug-05	94	69	
619.3	LOUISVILLE	30-Aug-05	8,500	2,500	EXCEEDS
		GEOMETRIC MEAN	285	141	EXCEEDS
594	LOUISVILLE	07-Sep-05	500	280	EXCEEDS
594	LOUISVILLE	13-Sep-05	24	6	
594	LOUISVILLE	20-Sep-05	80	20	
594	LOUISVILLE	22-Sep-05	150	80	
594	LOUISVILLE	27-Sep-05	206	120	
		GEOMETRIC MEAN	124	50	
608.7	LOUISVILLE	07-Sep-05	330	40	
608.7	LOUISVILLE	13-Sep-05	140	128	
608.7	LOUISVILLE	20-Sep-05	157	49	
608.7	LOUISVILLE	22-Sep-05	290	154	
608.7	LOUISVILLE	27-Sep-05	3,000	2,800	EXCEEDS
		GEOMETRIC MEAN	363	161	EXCEEDS
619.3	LOUISVILLE	07-Sep-05	104	24	
619.3	LOUISVILLE	13-Sep-05	92	72	
619.3	LOUISVILLE	20-Sep-05	74	16	
619.3	LOUISVILLE	22-Sep-05	3,300	1,200	EXCEEDS
619.3	LOUISVILLE	27-Sep-05	736	300	EXCEEDS
		GEOMETRIC MEAN	280	100	EXCEEDS
594	LOUISVILLE	04-Oct-05	580	66	EXCEEDS
594	LOUISVILLE	11-Oct-05	108	29	
594	LOUISVILLE	18-Oct-05	4	4	
594	LOUISVILLE	20-Oct-05	12	4	
594	LOUISVILLE	25-Oct-05	16	4	
		GEOMETRIC MEAN	34	10	
608.7	LOUISVILLE	04-Oct-05	140	43	
608.7	LOUISVILLE	11-Oct-05	43	10	
608.7	LOUISVILLE	18-Oct-05	4	8	
608.7	LOUISVILLE	20-Oct-05	12	6	
608.7	LOUISVILLE	25-Oct-05	16	12	
		GEOMETRIC MEAN	22	12	
619.3	LOUISVILLE	04-Oct-05	140	80	
619.3	LOUISVILLE	11-Oct-05	80	11	
619.3	LOUISVILLE	18-Oct-05	116	148	
619.3	LOUISVILLE	25-Oct-05	370	197	
		GEOMETRIC MEAN	148	71	

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	EVANSVILLE	03-May-05	410	350	EXCEEDS
791.5	EVANSVILLE	10-May-05	172	60	
791.5	EVANSVILLE	17-May-05	390	172	
791.5	EVANSVILLE	19-May-05	164	60	
791.5	EVANSVILLE	24-May-05	156	44	
			GEOMETRIC MEAN 234	99	EXCEEDS
793.7	EVANSVILLE	03-May-05	124	132	
793.7	EVANSVILLE	10-May-05	310	152	
793.7	EVANSVILLE	17-May-05	223	84	
793.7	EVANSVILLE	19-May-05	220	84	
793.7	EVANSVILLE	24-May-05	208	76	
			GEOMETRIC MEAN 208	101	EXCEEDS
797.3	EVANSVILLE	03-May-05	330	390	EXCEEDS
797.3	EVANSVILLE	10-May-05	580	370	EXCEEDS
797.3	EVANSVILLE	17-May-05	530	340	EXCEEDS
797.3	EVANSVILLE	19-May-05	350	104	
797.3	EVANSVILLE	24-May-05	380	197	
			GEOMETRIC MEAN 423	251	EXCEEDS
791.5	EVANSVILLE	07-Jun-05	214	92	
791.5	EVANSVILLE	14-Jun-05	290	164	
791.5	EVANSVILLE	21-Jun-05	240	112	
791.5	EVANSVILLE	23-Jun-05	310	180	
791.5	EVANSVILLE	28-Jun-05	460	300	EXCEEDS
			GEOMETRIC MEAN 292	156	EXCEEDS
793.7	EVANSVILLE	07-Jun-05	330	124	
793.7	EVANSVILLE	14-Jun-05	260	112	
793.7	EVANSVILLE	21-Jun-05	116	92	
793.7	EVANSVILLE	23-Jun-05	3,600	1,300	EXCEEDS
793.7	EVANSVILLE	28-Jun-05	440	280	EXCEEDS
			GEOMETRIC MEAN 436	216	EXCEEDS
797.3	EVANSVILLE	07-Jun-05	164	92	
797.3	EVANSVILLE	14-Jun-05	840	560	EXCEEDS
797.3	EVANSVILLE	21-Jun-05	410	260	EXCEEDS
797.3	EVANSVILLE	23-Jun-05	2,200	560	EXCEEDS
797.3	EVANSVILLE	28-Jun-05	350	112	
			GEOMETRIC MEAN 534	243	EXCEEDS
791.5	EVANSVILLE	05-Jul-05	990	645	EXCEEDS
791.5	EVANSVILLE	12-Jul-05	300	152	
791.5	EVANSVILLE	19-Jul-05	330	196	
791.5	EVANSVILLE	21-Jul-05	176	88	
791.5	EVANSVILLE	26-Jul-05	350	96	
			GEOMETRIC MEAN 360	175	EXCEEDS
793.7	EVANSVILLE	05-Jul-05	745	600	EXCEEDS
793.7	EVANSVILLE	12-Jul-05	280	92	
793.7	EVANSVILLE	19-Jul-05	229	100	
793.7	EVANSVILLE	21-Jul-05	168	69	
793.7	EVANSVILLE	26-Jul-05	204	152	
			GEOMETRIC MEAN 277	142	EXCEEDS
797.3	EVANSVILLE	05-Jul-05	1,100	900	EXCEEDS
797.3	EVANSVILLE	12-Jul-05	520	290	EXCEEDS
797.3	EVANSVILLE	19-Jul-05	520	370	EXCEEDS
797.3	EVANSVILLE	21-Jul-05	711	230	EXCEEDS
797.3	EVANSVILLE	26-Jul-05	2,500	611	EXCEEDS
			GEOMETRIC MEAN 880	423	EXCEEDS

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	EVANSVILLE	02-Aug-05		2,200	410	EXCEEDS
791.5	EVANSVILLE	09-Aug-05		280	160	
791.5	EVANSVILLE	16-Aug-05		280	172	
791.5	EVANSVILLE	23-Aug-05		2,300	845	EXCEEDS
791.5	EVANSVILLE	30-Aug-05		3,800	2,500	EXCEEDS
			GEOMETRIC MEAN	1,086	474	EXCEEDS
793.7	EVANSVILLE	02-Aug-05		590	280	EXCEEDS
793.7	EVANSVILLE	09-Aug-05		460	231	EXCEEDS
793.7	EVANSVILLE	16-Aug-05		370	176	
793.7	EVANSVILLE	23-Aug-05		744	390	EXCEEDS
793.7	EVANSVILLE	30-Aug-05		2,200	845	EXCEEDS
			GEOMETRIC MEAN	697	327	EXCEEDS
797.3	EVANSVILLE	02-Aug-05		3,700	2,200	EXCEEDS
797.3	EVANSVILLE	02-Aug-05		2,200	520	EXCEEDS
797.3	EVANSVILLE	16-Aug-05		480	290	EXCEEDS
797.3	EVANSVILLE	23-Aug-05		3,100	656	EXCEEDS
797.3	EVANSVILLE	30-Aug-05		5,700	2,400	EXCEEDS
			GEOMETRIC MEAN	2,332	878	EXCEEDS
791.5	EVANSVILLE	06-Sep-05		647	310	EXCEEDS
791.5	EVANSVILLE	13-Sep-05		410	232	EXCEEDS
791.5	EVANSVILLE	20-Sep-05		380	92	
791.5	EVANSVILLE	22-Sep-05		229	54	
791.5	EVANSVILLE	27-Sep-05		168	104	
			GEOMETRIC MEAN	329	130	EXCEEDS
793.7	EVANSVILLE	06-Sep-05		3,100	747	EXCEEDS
793.7	EVANSVILLE	13-Sep-05		3,300	873	EXCEEDS
793.7	EVANSVILLE	20-Sep-05		136	44	
793.7	EVANSVILLE	22-Sep-05		208	140	
793.7	EVANSVILLE	27-Sep-05		194	46	
			GEOMETRIC MEAN	562	179	EXCEEDS
797.3	EVANSVILLE	06-Sep-05		4,800	1,264	EXCEEDS
797.3	EVANSVILLE	13-Sep-05		744	186	EXCEEDS
797.3	EVANSVILLE	20-Sep-05		840	186	EXCEEDS
797.3	EVANSVILLE	22-Sep-05		619	144	EXCEEDS
797.3	EVANSVILLE	27-Sep-05		1,282	755	EXCEEDS
			GEOMETRIC MEAN	1,189	343	EXCEEDS
791.5	EVANSVILLE	04-Oct-05		330	124	
791.5	EVANSVILLE	11-Oct-05		144	57	
791.5	EVANSVILLE	18-Oct-05		420	160	EXCEEDS
791.5	EVANSVILLE	20-Oct-05		152	57	
791.5	EVANSVILLE	25-Oct-05		203	92	
			GEOMETRIC MEAN	228	90	EXCEEDS
793.7	EVANSVILLE	04-Oct-05		420	226	EXCEEDS
793.7	EVANSVILLE	11-Oct-05		310	120	
793.7	EVANSVILLE	18-Oct-05		580	320	EXCEEDS
793.7	EVANSVILLE	20-Oct-05		280	100	
793.7	EVANSVILLE	25-Oct-05		92	32	
			GEOMETRIC MEAN	287	123	EXCEEDS
797.3	EVANSVILLE	04-Oct-05		480	290	EXCEEDS
797.3	EVANSVILLE	11-Oct-05		490	136	EXCEEDS
797.3	EVANSVILLE	18-Oct-05		310	168	
797.3	EVANSVILLE	20-Oct-05		420	186	EXCEEDS
797.3	EVANSVILLE	25-Oct-05		152	84	
			GEOMETRIC MEAN	342	160	EXCEEDS

FECAL- Not to exceed 400 in more than 10% of samples taken during month
Not to exceed 200 as a monthly geometric mean (at least 5 samples required)
E.COLI- Not to exceed 240 in any single sample

Appendix G: Ohio River Bacteria Sampling 2005

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	

Not to exceed 130 as a monthly geometric mean (at least 5 samples required)

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	03-May-06	260	246	EXCEEDS
1.4R	PITTSBURGH	09-May-06	718	709	EXCEEDS
1.4R	PITTSBURGH	16-May-06	4,900	509	EXCEEDS
1.4R	PITTSBURGH	23-May-06	420	460	EXCEEDS
1.4R	PITTSBURGH	30-May-06	250	71	
		GEOMETRIC MEAN	626	311	EXCEEDS
1.4M	PITTSBURGH	03-May-06	290	226	
1.4M	PITTSBURGH	09-May-06	470	310	EXCEEDS
1.4M	PITTSBURGH	16-May-06	1,700	1,400	EXCEEDS
1.4M	PITTSBURGH	23-May-06	223	61	
1.4M	PITTSBURGH	30-May-06	320	63	
		GEOMETRIC MEAN	440	207	EXCEEDS
1.4L	PITTSBURGH	03-May-06	210	234	
1.4L	PITTSBURGH	09-May-06	745	300	EXCEEDS
1.4L	PITTSBURGH	16-May-06	6,000	2,000	EXCEEDS
1.4L	PITTSBURGH	23-May-06	430	246	EXCEEDS
1.4L	PITTSBURGH	30-May-06	180	60	
		GEOMETRIC MEAN	592	291	EXCEEDS
4.3	PITTSBURGH	03-May-06	188	223	
4.3	PITTSBURGH	09-May-06	420	310	EXCEEDS
4.3	PITTSBURGH	16-May-06	3,900	292	EXCEEDS
4.3	PITTSBURGH	23-May-06	270	166	
4.3	PITTSBURGH	30-May-06	151	51	
		GEOMETRIC MEAN	417	176	EXCEEDS
1.4R	PITTSBURGH	06-Jun-06	745	560	EXCEEDS
1.4R	PITTSBURGH	13-Jun-06	350	280	EXCEEDS
1.4R	PITTSBURGH	20-Jun-06	7,100	700	EXCEEDS
1.4R	PITTSBURGH	22-Jun-06	2,100	40	EXCEEDS
1.4R	PITTSBURGH	27-Jun-06	13,400	6,600	
		GEOMETRIC MEAN	2,205	493	EXCEEDS
1.4M	PITTSBURGH	06-Jun-06	1,300	600	EXCEEDS
1.4M	PITTSBURGH	13-Jun-06	200	128	
1.4M	PITTSBURGH	20-Jun-06	6,900	500	EXCEEDS
1.4M	PITTSBURGH	22-Jun-06	2,300	1,200	EXCEEDS
1.4M	PITTSBURGH	27-Jun-06	600	264	EXCEEDS
		GEOMETRIC MEAN	1,199	414	EXCEEDS
1.4L	PITTSBURGH	06-Jun-06	2,200	1,400	EXCEEDS
1.4L	PITTSBURGH	13-Jun-06	410	500	EXCEEDS
1.4L	PITTSBURGH	20-Jun-06	5,800	1,500	EXCEEDS
1.4L	PITTSBURGH	22-Jun-06	2,900	400	EXCEEDS
1.4L	PITTSBURGH	27-Jun-06	1,100	430	EXCEEDS
		GEOMETRIC MEAN	1,756	710	EXCEEDS
4.3	PITTSBURGH	06-Jun-06	1,000	245	EXCEEDS
4.3	PITTSBURGH	13-Jun-06	250	196	
4.3	PITTSBURGH	20-Jun-06	6,600	132	EXCEEDS
4.3	PITTSBURGH	22-Jun-06	1,500	60	EXCEEDS
4.3	PITTSBURGH	27-Jun-06	1,000	290	EXCEEDS
		GEOMETRIC MEAN	1,199	162	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	06-Jul-06	2,900	1,200	EXCEEDS
1.4R	PITTSBURGH	11-Jul-06	271	24	
1.4R	PITTSBURGH	18-Jul-06	410	127	EXCEEDS
1.4R	PITTSBURGH	20-Jul-06	200	50	
1.4R	PITTSBURGH	25-Jul-06	250	700	EXCEEDS
			GEOMETRIC MEAN 438	167	EXCEEDS
1.4M	PITTSBURGH	06-Jul-06	4,800	1,300	EXCEEDS
1.4M	PITTSBURGH	11-Jul-06	100	140	
1.4M	PITTSBURGH	18-Jul-06	229	127	
1.4M	PITTSBURGH	20-Jul-06	116	60	
1.4M	PITTSBURGH	25-Jul-06	328	400	EXCEEDS
			GEOMETRIC MEAN 334	223	EXCEEDS
1.4L	PITTSBURGH	06-Jul-06	5,200	300	EXCEEDS
1.4L	PITTSBURGH	11-Jul-06	84	100	
1.4L	PITTSBURGH	18-Jul-06	280	230	
1.4L	PITTSBURGH	20-Jul-06	1,000	70	EXCEEDS
1.4L	PITTSBURGH	25-Jul-06	270	800	EXCEEDS
			GEOMETRIC MEAN 506	208	EXCEEDS
4.3	PITTSBURGH	06-Jul-06	5,200	2,300	EXCEEDS
4.3	PITTSBURGH	11-Jul-06	100	600	EXCEEDS
4.3	PITTSBURGH	18-Jul-06	230	63	
4.3	PITTSBURGH	20-Jul-06	1,000	4	EXCEEDS
4.3	PITTSBURGH	25-Jul-06	484	1,200	EXCEEDS
			GEOMETRIC MEAN 566	211	EXCEEDS
1.4R	PITTSBURGH	01-Aug-06	1,491	1,500	EXCEEDS
1.4R	PITTSBURGH	08-Aug-06	500	40	EXCEEDS
1.4R	PITTSBURGH	15-Aug-06	157	100	
1.4R	PITTSBURGH	22-Aug-06	240	112	
1.4R	PITTSBURGH	29-Aug-06	2,200	12,000	EXCEEDS
			GEOMETRIC MEAN 573	381	EXCEEDS
1.4M	PITTSBURGH	01-Aug-06	1,200	700	EXCEEDS
1.4M	PITTSBURGH	08-Aug-06	260	15	
1.4M	PITTSBURGH	15-Aug-06	108	72	
1.4M	PITTSBURGH	22-Aug-06	192	200	
1.4M	PITTSBURGH	29-Aug-06	1,200	1,500	EXCEEDS
			GEOMETRIC MEAN 378	188	EXCEEDS
1.4L	PITTSBURGH	01-Aug-06	900	ND	EXCEEDS
1.4L	PITTSBURGH	08-Aug-06	627	60	EXCEEDS
1.4L	PITTSBURGH	15-Aug-06	72	66	
1.4L	PITTSBURGH	22-Aug-06	90	77	
1.4L	PITTSBURGH	29-Aug-06	3,100	1,100	EXCEEDS
			GEOMETRIC MEAN 408	NA	EXCEEDS
4.3	PITTSBURGH	01-Aug-06	1,100	ND	EXCEEDS
4.3	PITTSBURGH	08-Aug-06	382	300	EXCEEDS
4.3	PITTSBURGH	15-Aug-06	509	1,900	EXCEEDS
4.3	PITTSBURGH	22-Aug-06	110	108	
4.3	PITTSBURGH	29-Aug-06	1,400	2,300	EXCEEDS
			GEOMETRIC MEAN 505	NA	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	PITTSBURGH	05-Sep-06	700	60	EXCEEDS
1.4R	PITTSBURGH	12-Sep-06	96	64	
1.4M	PITTSBURGH	05-Sep-06	1,100	300	EXCEEDS
1.4M	PITTSBURGH	12-Sep-06	36	49	
1.4L	PITTSBURGH	05-Sep-06	600	400	EXCEEDS
1.4L	PITTSBURGH	12-Sep-06	22	68	
4.3	PITTSBURGH	05-Sep-06	1,600	20	EXCEEDS
4.3	PITTSBURGH	12-Sep-06	57	110	
1.4R	PITTSBURGH	02-Oct-06	60	80	
1.4R	PITTSBURGH	09-Oct-06	60		
1.4R	PITTSBURGH	18-Oct-06	1,900	700	EXCEEDS
1.4R	PITTSBURGH	24-Oct-06	140	120	
1.4R	PITTSBURGH	31-Oct-06	800	800	EXCEEDS
		GEOMETRIC MEAN	238	271	EXCEEDS
1.4M	PITTSBURGH	02-Oct-06		40	
1.4M	PITTSBURGH	09-Oct-06	60		
1.4M	PITTSBURGH	18-Oct-06	2,063	1,400	EXCEEDS
1.4M	PITTSBURGH	24-Oct-06	96	124	
1.4M	PITTSBURGH	31-Oct-06	300	510	EXCEEDS
		GEOMETRIC MEAN	244	244	EXCEEDS
1.4L	PITTSBURGH	02-Oct-06	200	400	EXCEEDS
1.4L	PITTSBURGH	09-Oct-06	69	190	
1.4L	PITTSBURGH	18-Oct-06	1,100		EXCEEDS
1.4L	PITTSBURGH	24-Oct-06	191	70	
1.4L	PITTSBURGH	31-Oct-06	390	210	
		GEOMETRIC MEAN	257	183	EXCEEDS
4.3	PITTSBURGH	02-Oct-06	16	164	
4.3	PITTSBURGH	09-Oct-06	52	170	
4.3	PITTSBURGH	18-Oct-06	3,500	60	EXCEEDS
4.3	PITTSBURGH	24-Oct-06	200	177	
4.3	PITTSBURGH	31-Oct-06	440	809	EXCEEDS
		GEOMETRIC MEAN	191	189	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	WHEELING	02-May-06	16	4	
84.2	WHEELING	08-May-06	20	4	
84.2	WHEELING	16-May-06	69	32	
84.2	WHEELING	23-May-06	900	250	EXCEEDS
84.2	WHEELING	30-May-06	2,600	500	EXCEEDS
			GEOMETRIC MEAN 139	36	
86.8	WHEELING	02-May-06	40	4	
86.8	WHEELING	08-May-06	8	4	
86.8	WHEELING	16-May-06	92	36	
86.8	WHEELING	23-May-06	270	40	
86.8	WHEELING	30-May-06	37	20	
			GEOMETRIC MEAN 49	14	
91.4	WHEELING	02-May-06	28	4	
91.4	WHEELING	08-May-06	4	4	
91.4	WHEELING	16-May-06	176	80	
91.4	WHEELING	23-May-06	80	54	
91.4	WHEELING	30-May-06	40	16	
			GEOMETRIC MEAN 36	16	
92.8	WHEELING	02-May-06	108	54	
92.8	WHEELING	08-May-06	92	76	
92.8	WHEELING	16-May-06	450	600	EXCEEDS
92.8	WHEELING	23-May-06	136	96	
92.8	WHEELING	30-May-06	223	49	
			GEOMETRIC MEAN 168	103	
84.2	WHEELING	06-Jun-06	940	510	EXCEEDS
84.2	WHEELING	19-Jun-06	132	84	
84.2	WHEELING	22-Jun-06	1,900	271	EXCEEDS
84.2	WHEELING	27-Jun-06	870	236	EXCEEDS
84.2	WHEELING	29-Jun-06	184	66	
			GEOMETRIC MEAN 519	178	EXCEEDS
86.8	WHEELING	06-Jun-06	60	24	
86.8	WHEELING	19-Jun-06	16	28	
86.8	WHEELING	22-Jun-06	1,600	530	EXCEEDS
86.8	WHEELING	27-Jun-06	400	128	
86.8	WHEELING	29-Jun-06	211	66	
			GEOMETRIC MEAN 167	79	
91.4	WHEELING	06-Jun-06	24	36	
91.4	WHEELING	19-Jun-06	83	96	
91.4	WHEELING	22-Jun-06	1,300	864	EXCEEDS
91.4	WHEELING	27-Jun-06	160	177	
91.4	WHEELING	29-Jun-06	240	120	
			GEOMETRIC MEAN 158	145	EXCEEDS
92.8	WHEELING	06-Jun-06	108	80	
92.8	WHEELING	19-Jun-06	850	350	EXCEEDS
92.8	WHEELING	22-Jun-06	25,300	18,000	EXCEEDS
92.8	WHEELING	27-Jun-06	19,500	19,200	EXCEEDS
92.8	WHEELING	29-Jun-06	223	77	
			GEOMETRIC MEAN 1,588	943	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	WHEELING	06-Jul-06	176	136	
84.2	WHEELING	11-Jul-06	72	54	
84.2	WHEELING	18-Jul-06	52	16	
84.2	WHEELING	20-Jul-06	120	30	
84.2	WHEELING	25-Jul-06	100	88	
			GEOMETRIC MEAN 95	50	
86.8	WHEELING	06-Jul-06	90	16	
86.8	WHEELING	11-Jul-06	28	12	
86.8	WHEELING	18-Jul-06	20	20	
86.8	WHEELING	20-Jul-06	44	50	
86.8	WHEELING	25-Jul-06	86	56	
			GEOMETRIC MEAN 45	25	
91.4	WHEELING	06-Jul-06	196	200	
91.4	WHEELING	11-Jul-06	4	4	
91.4	WHEELING	18-Jul-06	68	44	
91.4	WHEELING	20-Jul-06	12	4	
91.4	WHEELING	25-Jul-06	57	104	
			GEOMETRIC MEAN 33	27	
92.8	WHEELING	06-Jul-06	220	277	EXCEEDS
92.8	WHEELING	11-Jul-06	69	20	
92.8	WHEELING	18-Jul-06	60	52	
92.8	WHEELING	20-Jul-06	160	54	
92.8	WHEELING	25-Jul-06	128	94	
			GEOMETRIC MEAN 113	68	
84.2	WHEELING	01-Aug-06	200	12	
84.2	WHEELING	08-Aug-06	92	100	
84.2	WHEELING	15-Aug-06	430	164	EXCEEDS
84.2	WHEELING	22-Aug-06	40	8	
84.2	WHEELING	29-Aug-06	44	32	
			GEOMETRIC MEAN 107	35	
86.8	WHEELING	01-Aug-06	64	54	
86.8	WHEELING	08-Aug-06	188	72	
86.8	WHEELING	15-Aug-06	640	104	EXCEEDS
86.8	WHEELING	22-Aug-06	30	12	
86.8	WHEELING	29-Aug-06	64	52	
			GEOMETRIC MEAN 108	48	
91.4	WHEELING	01-Aug-06	88	54	
91.4	WHEELING	08-Aug-06	380	77	
91.4	WHEELING	15-Aug-06	836	174	EXCEEDS
91.4	WHEELING	22-Aug-06	12	12	
91.4	WHEELING	29-Aug-06	222	80	
			GEOMETRIC MEAN 149	59	
92.8	WHEELING	01-Aug-06	200	104	
92.8	WHEELING	08-Aug-06	112	192	
92.8	WHEELING	15-Aug-06	1,440	350	EXCEEDS
92.8	WHEELING	22-Aug-06	88	40	
92.8	WHEELING	29-Aug-06	420	44	EXCEEDS
			GEOMETRIC MEAN 260	104	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	WHEELING	05-Sep-06		80	68	
84.2	WHEELING	12-Sep-06		40	24	
84.2	WHEELING	19-Sep-06		116	220	
84.2	WHEELING	21-Sep-06		880	40	EXCEEDS
84.2	WHEELING	26-Sep-06		160	40	
			GEOMETRIC MEAN	139	56	
86.8	WHEELING	05-Sep-06		128	44	
86.8	WHEELING	12-Sep-06		14	23	
86.8	WHEELING	19-Sep-06		211	63	
86.8	WHEELING	21-Sep-06		580	40	EXCEEDS
86.8	WHEELING	26-Sep-06		92	20	
			GEOMETRIC MEAN	115	35	
91.4	WHEELING	05-Sep-06		216	54	
91.4	WHEELING	12-Sep-06		57	40	
91.4	WHEELING	19-Sep-06		320	88	
91.4	WHEELING	21-Sep-06		210	56	
91.4	WHEELING	26-Sep-06		156	24	
			GEOMETRIC MEAN	167	48	
92.8	WHEELING	05-Sep-06		500	124	EXCEEDS
92.8	WHEELING	12-Sep-06		80	20	
92.8	WHEELING	19-Sep-06		873	100	EXCEEDS
92.8	WHEELING	21-Sep-06		226	60	
92.8	WHEELING	26-Sep-06		148	104	
			GEOMETRIC MEAN	259	69	EXCEEDS
84.2	WHEELING	03-Oct-06		1,000	727	EXCEEDS
84.2	WHEELING	10-Oct-06		224	60	
84.2	WHEELING	17-Oct-06		1,027	1,300	EXCEEDS
84.2	WHEELING	24-Oct-06		770	176	EXCEEDS
84.2	WHEELING	30-Oct-06		1,900	1,200	EXCEEDS
			GEOMETRIC MEAN	804	413	EXCEEDS
86.8	WHEELING	03-Oct-06		580	140	EXCEEDS
86.8	WHEELING	10-Oct-06		64	64	
86.8	WHEELING	17-Oct-06		140	220	
86.8	WHEELING	24-Oct-06		900	243	EXCEEDS
86.8	WHEELING	31-Oct-06		3,000	1,354	EXCEEDS
			GEOMETRIC MEAN	426	230	EXCEEDS
91.4	WHEELING	03-Oct-06		283	168	
91.4	WHEELING	10-Oct-06		74	28	
91.4	WHEELING	17-Oct-06		2,800	2,000	EXCEEDS
91.4	WHEELING	24-Oct-06		1,160	290	EXCEEDS
91.4	WHEELING	31-Oct-06		3,300	1,281	EXCEEDS
			GEOMETRIC MEAN	742	323	EXCEEDS
92.8	WHEELING	03-Oct-06		580	540	EXCEEDS
92.8	WHEELING	10-Oct-06		174	68	
92.8	WHEELING	17-Oct-06		6,000	6,000	EXCEEDS
92.8	WHEELING	24-Oct-06		1,082	280	EXCEEDS
92.8	WHEELING	31-Oct-06		2,300	1,072	EXCEEDS
			GEOMETRIC MEAN	1,085	581	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	HUNTINGTON	02-May-06	36	16	
305.1	HUNTINGTON	09-May-06	400	420	EXCEEDS
305.1	HUNTINGTON	16-May-06	28	4	
305.1	HUNTINGTON	23-May-06	8	8	
305.1	HUNTINGTON	30-May-06	4	8	
			GEOMETRIC MEAN 26	18	
308.1	HUNTINGTON	02-May-06	100	40	
308.1	HUNTINGTON	09-May-06	49	32	
308.1	HUNTINGTON	16-May-06	34	28	
308.1	HUNTINGTON	23-May-06	330	169	
308.1	HUNTINGTON	30-May-06	200	120	
			GEOMETRIC MEAN 102	59	
314.8	HUNTINGTON	02-May-06	151	77	
314.8	HUNTINGTON	09-May-06	88	48	
314.8	HUNTINGTON	16-May-06	84	63	
314.8	HUNTINGTON	23-May-06	63	16	
314.8	HUNTINGTON	30-May-06	116	69	
			GEOMETRIC MEAN 96	48	
305.1	HUNTINGTON	06-Jun-06	28	20	
305.1	HUNTINGTON	13-Jun-06	43	4	
305.1	HUNTINGTON	20-Jun-06	370	410	EXCEEDS
305.1	HUNTINGTON	22-Jun-06	197	112	
308.1	HUNTINGTON	06-Jun-06	46	32	
308.1	HUNTINGTON	13-Jun-06	209	24	
308.1	HUNTINGTON	20-Jun-06	189	132	
308.1	HUNTINGTON	22-Jun-06	1,000	460	EXCEEDS
314.8	HUNTINGTON	06-Jun-06	120	60	
314.8	HUNTINGTON	13-Jun-06	69	8	
314.8	HUNTINGTON	20-Jun-06	370	380	EXCEEDS
314.8	HUNTINGTON	22-Jun-06	112	44	
305.1	HUNTINGTON	06-Jul-06	171	160	
305.1	HUNTINGTON	11-Jul-06	52	20	
305.1	HUNTINGTON	18-Jul-06	200	112	
305.1	HUNTINGTON	20-Jul-06	410	200	EXCEEDS
305.1	HUNTINGTON	25-Jul-06	32	12	
			GEOMETRIC MEAN 118	61	
308.1	HUNTINGTON	06-Jul-06	657	560	EXCEEDS
308.1	HUNTINGTON	11-Jul-06	430	430	EXCEEDS
308.1	HUNTINGTON	18-Jul-06	176	144	
308.1	HUNTINGTON	20-Jul-06	92	108	
308.1	HUNTINGTON	25-Jul-06	243	116	
			GEOMETRIC MEAN 257	213	EXCEEDS
314.8	HUNTINGTON	06-Jul-06	600	614	EXCEEDS
314.8	HUNTINGTON	11-Jul-06	80	40	
314.8	HUNTINGTON	18-Jul-06	164	108	
314.8	HUNTINGTON	20-Jul-06	1,272	470	EXCEEDS
314.8	HUNTINGTON	25-Jul-06	112	80	
			GEOMETRIC MEAN 257	158	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	HUNTINGTON	01-Aug-06	16	12	
305.1	HUNTINGTON	08-Aug-06	16	12	
305.1	HUNTINGTON	15-Aug-06	12	4	
305.1	HUNTINGTON	22-Aug-06	4	4	
305.1	HUNTINGTON	29-Aug-06	8	8	
		GEOMETRIC MEAN	10	7	
308.1	HUNTINGTON	01-Aug-06	574	510	EXCEEDS
308.1	HUNTINGTON	08-Aug-06	540	231	EXCEEDS
308.1	HUNTINGTON	15-Aug-06	186	88	
308.1	HUNTINGTON	22-Aug-06	116	80	
308.1	HUNTINGTON	29-Aug-06	320	217	
		GEOMETRIC MEAN	292	178	EXCEEDS
314.8	HUNTINGTON	01-Aug-06	32	24	
314.8	HUNTINGTON	08-Aug-06	188	77	
314.8	HUNTINGTON	15-Aug-06	51	20	
314.8	HUNTINGTON	22-Aug-06	20	16	
314.8	HUNTINGTON	29-Aug-06	60	36	
		GEOMETRIC MEAN	52	29	
305.1	HUNTINGTON	05-Sep-06	186	96	
305.1	HUNTINGTON	12-Sep-06	40	51	
305.1	HUNTINGTON	19-Sep-06	71	44	
305.1	HUNTINGTON	21-Sep-06	20	12	
305.1	HUNTINGTON	26-Sep-06	120	112	
		GEOMETRIC MEAN	66	49	
308.1	HUNTINGTON	05-Sep-06	270	124	
308.1	HUNTINGTON	12-Sep-06	176	84	
308.1	HUNTINGTON	19-Sep-06	1,300	600	EXCEEDS
308.1	HUNTINGTON	21-Sep-06	249	86	
308.1	HUNTINGTON	26-Sep-06	180	157	
		GEOMETRIC MEAN	308	153	EXCEEDS
314.8	HUNTINGTON	05-Sep-06	591	440	EXCEEDS
314.8	HUNTINGTON	12-Sep-06	229	100	
314.8	HUNTINGTON	19-Sep-06	955	630	EXCEEDS
314.8	HUNTINGTON	21-Sep-06	136	77	
314.8	HUNTINGTON	26-Sep-06	380	209	
		GEOMETRIC MEAN	367	214	EXCEEDS
305.1	HUNTINGTON	03-Oct-06	56	20	
305.1	HUNTINGTON	10-Oct-06	246	136	
305.1	HUNTINGTON	17-Oct-06	540	470	EXCEEDS
305.1	HUNTINGTON	24-Oct-06	794	470	EXCEEDS
305.1	HUNTINGTON	31-Oct-06	440	330	EXCEEDS
		GEOMETRIC MEAN	304	182	EXCEEDS
308.1	HUNTINGTON	03-Oct-06	330	174	
308.1	HUNTINGTON	10-Oct-06	192	4	
308.1	HUNTINGTON	17-Oct-06	1,118	1,009	EXCEEDS
308.1	HUNTINGTON	24-Oct-06	216	317	EXCEEDS
308.1	HUNTINGTON	31-Oct-06	294	231	
		GEOMETRIC MEAN	339	139	EXCEEDS
314.8	HUNTINGTON	03-Oct-06	112	66	
314.8	HUNTINGTON	10-Oct-06	249	152	
314.8	HUNTINGTON	17-Oct-06	1,000	700	EXCEEDS
314.8	HUNTINGTON	24-Oct-06	260	206	
314.8	HUNTINGTON	31-Oct-06	226	217	
		GEOMETRIC MEAN	277	199	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	CINCINNATI	02-May-06	92	108	
462.6	CINCINNATI	09-May-06	4	4	
462.6	CINCINNATI	16-May-06	32	12	
462.6	CINCINNATI	23-May-06	52	24	
462.6	CINCINNATI	30-May-06	28	12	
		GEOMETRIC MEAN	28	17	
470	CINCINNATI	02-May-06	172	68	
470	CINCINNATI	09-May-06	16	8	
470	CINCINNATI	16-May-06	60	43	
470	CINCINNATI	23-May-06	43	36	
470	CINCINNATI	30-May-06	28	16	
		GEOMETRIC MEAN	46	27	
477.5	CINCINNATI	02-May-06	124	40	
477.5	CINCINNATI	09-May-06	206	96	
477.5	CINCINNATI	16-May-06	32	60	
477.5	CINCINNATI	23-May-06	48	20	
477.5	CINCINNATI	30-May-06	16	12	
		GEOMETRIC MEAN	57	35	
462.6	CINCINNATI	06-Jun-06	34	40	
462.6	CINCINNATI	13-Jun-06	16	8	
462.6	CINCINNATI	20-Jun-06	68	84	
462.6	CINCINNATI	22-Jun-06	72	40	
462.6	CINCINNATI	27-Jun-06	160	128	
		GEOMETRIC MEAN	53	42	
470	CINCINNATI	06-Jun-06	74	36	
470	CINCINNATI	13-Jun-06	52	37	
470	CINCINNATI	20-Jun-06	550	260	EXCEEDS
470	CINCINNATI	22-Jun-06	580	450	EXCEEDS
470	CINCINNATI	27-Jun-06	152	66	
		GEOMETRIC MEAN	180	101	
477.5	CINCINNATI	06-Jun-06	40	28	
477.5	CINCINNATI	13-Jun-06	92	46	
477.5	CINCINNATI	20-Jun-06	28,000	12,300	EXCEEDS
477.5	CINCINNATI	22-Jun-06	44	12	
477.5	CINCINNATI	27-Jun-06	300	84	
		GEOMETRIC MEAN	267	110	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	CINCINNATI	06-Jul-06	188	132	
462.6	CINCINNATI	11-Jul-06	50	28	
462.6	CINCINNATI	18-Jul-06	156	88	
462.6	CINCINNATI	20-Jul-06	180	132	
462.6	CINCINNATI	27-Jul-06	84	68	
			GEOMETRIC MEAN 117	78	
470	CINCINNATI	06-Jul-06	71	80	
470	CINCINNATI	11-Jul-06	520	200	EXCEEDS
470	CINCINNATI	18-Jul-06	176	71	
470	CINCINNATI	20-Jul-06	403	176	EXCEEDS
470	CINCINNATI	27-Jul-06	1,190	530	EXCEEDS
			GEOMETRIC MEAN 315	160	EXCEEDS
477.5	CINCINNATI	06-Jul-06	63	20	
477.5	CINCINNATI	11-Jul-06	24	12	
477.5	CINCINNATI	18-Jul-06	100	48	
477.5	CINCINNATI	20-Jul-06	430	92	EXCEEDS
477.5	CINCINNATI	27-Jul-06	1,682	709	EXCEEDS
			GEOMETRIC MEAN 161	60	
462.6	CINCINNATI	01-Aug-06	56	60	
462.6	CINCINNATI	08-Aug-06	128	28	
462.6	CINCINNATI	15-Aug-06	72	11	
462.6	CINCINNATI	22-Aug-06	24	8	
462.6	CINCINNATI	29-Aug-06	11,900	9,000	EXCEEDS
			GEOMETRIC MEAN 171	67	
470	CINCINNATI	01-Aug-06	1,136	466	EXCEEDS
470	CINCINNATI	08-Aug-06	116	16	
470	CINCINNATI	15-Aug-06	80	44	
470	CINCINNATI	22-Aug-06	57	32	
470	CINCINNATI	29-Aug-06	2,700	1,000	EXCEEDS
			GEOMETRIC MEAN 277	101	EXCEEDS
477.5	CINCINNATI	01-Aug-06	330	176	
477.5	CINCINNATI	08-Aug-06	108	24	
477.5	CINCINNATI	15-Aug-06	128	108	
477.5	CINCINNATI	22-Aug-06	20	8	
477.5	CINCINNATI	29-Aug-06	196	108	
			GEOMETRIC MEAN 112	52	
462.6	CINCINNATI	05-Sep-06	104	28	
462.6	CINCINNATI	12-Sep-06	1,800	991	EXCEEDS
462.6	CINCINNATI	19-Sep-06	864	530	EXCEEDS
462.6	CINCINNATI	21-Sep-06	116	60	
462.6	CINCINNATI	26-Sep-06	836	440	EXCEEDS
			GEOMETRIC MEAN 436	208	EXCEEDS
470	CINCINNATI	05-Sep-06	120	24	
470	CINCINNATI	12-Sep-06	2,700	2,100	EXCEEDS
470	CINCINNATI	19-Sep-06	3,500	570	EXCEEDS
470	CINCINNATI	21-Sep-06	136	66	
470	CINCINNATI	26-Sep-06	718	510	EXCEEDS
			GEOMETRIC MEAN 644	250	EXCEEDS
477.5	CINCINNATI	05-Sep-06	88	44	
477.5	CINCINNATI	12-Sep-06	1,600	964	EXCEEDS
477.5	CINCINNATI	19-Sep-06	627	210	EXCEEDS
477.5	CINCINNATI	21-Sep-06	390	140	
477.5	CINCINNATI	26-Sep-06	718	420	EXCEEDS
			GEOMETRIC MEAN 477	221	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	CINCINNATI	03-Oct-06	96	60	
462.6	CINCINNATI	10-Oct-06	180	96	
462.6	CINCINNATI	17-Oct-06	5,700	2,200	EXCEEDS
462.6	CINCINNATI	24-Oct-06	1,300	900	EXCEEDS
462.6	CINCINNATI	31-Oct-06	654	510	EXCEEDS
		GEOMETRIC MEAN	609	357	EXCEEDS
470	CINCINNATI	03-Oct-06	84	80	
470	CINCINNATI	10-Oct-06	330	144	
470	CINCINNATI	17-Oct-06	2,600	954	EXCEEDS
470	CINCINNATI	24-Oct-06	480	400	EXCEEDS
470	CINCINNATI	31-Oct-06	673	360	EXCEEDS
		GEOMETRIC MEAN	471	275	EXCEEDS
477.5	CINCINNATI	03-Oct-06	100	60	
477.5	CINCINNATI	10-Oct-06	171	104	
477.5	CINCINNATI	17-Oct-06	8,900	3,700	EXCEEDS
477.5	CINCINNATI	24-Oct-06	330	310	EXCEEDS
477.5	CINCINNATI	31-Oct-06	480	400	EXCEEDS
		GEOMETRIC MEAN	475	310	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	LOUISVILLE	02-May-06		24	12	
594	LOUISVILLE	09-May-06		20	20	
594	LOUISVILLE	16-May-06		400	330	EXCEEDS
594	LOUISVILLE	23-May-06		20	12	
594	LOUISVILLE	30-May-06		52	24	
			GEOMETRIC MEAN	46	30	
608.7	LOUISVILLE	02-May-06		20	24	
608.7	LOUISVILLE	09-May-06		12	4	
608.7	LOUISVILLE	16-May-06		40	20	
608.7	LOUISVILLE	23-May-06		48	48	
608.7	LOUISVILLE	30-May-06		240	54	
			GEOMETRIC MEAN	41	22	
619.3	LOUISVILLE	02-May-06		500	320	EXCEEDS
619.3	LOUISVILLE	09-May-06		68	28	
619.3	LOUISVILLE	16-May-06		450	211	EXCEEDS
619.3	LOUISVILLE	23-May-06		88	40	
619.3	LOUISVILLE	30-May-06		745	590	EXCEEDS
			GEOMETRIC MEAN	251	135	EXCEEDS
594	LOUISVILLE	06-Jun-06		100	64	
594	LOUISVILLE	13-Jun-06		192	54	
594	LOUISVILLE	20-Jun-06		20	4	
594	LOUISVILLE	27-Jun-06		80	60	
594	LOUISVILLE	29-Jun-06		54	28	
			GEOMETRIC MEAN	70	30	
608.7	LOUISVILLE	06-Jun-06		51	49	
608.7	LOUISVILLE	13-Jun-06		314	410	EXCEEDS
608.7	LOUISVILLE	20-Jun-06		100	69	
608.7	LOUISVILLE	27-Jun-06		64	43	
608.7	LOUISVILLE	29-Jun-06		71	32	
			GEOMETRIC MEAN	94	72	
619.3	LOUISVILLE	06-Jun-06		470	380	EXCEEDS
619.3	LOUISVILLE	13-Jun-06		1,030	500	EXCEEDS
619.3	LOUISVILLE	20-Jun-06		6,000	390	EXCEEDS
619.3	LOUISVILLE	27-Jun-06		964	709	EXCEEDS
619.3	LOUISVILLE	29-Jun-06		340	140	
			GEOMETRIC MEAN	990	374	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	LOUISVILLE	06-Jul-06	88	44	
594	LOUISVILLE	18-Jul-06	145	108	
594	LOUISVILLE	20-Jul-06	32	12	
594	LOUISVILLE	25-Jul-06	100	20	
594	LOUISVILLE	27-Jul-06	180	49	
			GEOMETRIC MEAN 94	35	
608.7	LOUISVILLE	06-Jul-06	128	96	
608.7	LOUISVILLE	18-Jul-06	620	727	EXCEEDS
608.7	LOUISVILLE	20-Jul-06	108	60	
608.7	LOUISVILLE	25-Jul-06	177	4	
608.7	LOUISVILLE	27-Jul-06	64	12	
			GEOMETRIC MEAN 158	46	
619.3	LOUISVILLE	06-Jul-06	35,400	29,800	EXCEEDS
619.3	LOUISVILLE	18-Jul-06	4,000	3,300	EXCEEDS
619.3	LOUISVILLE	20-Jul-06	266	186	
619.3	LOUISVILLE	25-Jul-06	400	92	
619.3	LOUISVILLE	27-Jul-06	3,000	100	EXCEEDS
			GEOMETRIC MEAN 2,143	700	EXCEEDS
594	LOUISVILLE	01-Aug-06	71	20	
594	LOUISVILLE	08-Aug-06	28	30	
594	LOUISVILLE	15-Aug-06	92	24	
594	LOUISVILLE	23-Aug-06	180	43	
594	LOUISVILLE	29-Aug-06	270	110	
			GEOMETRIC MEAN 98	37	
608.7	LOUISVILLE	01-Aug-06	88	16	
608.7	LOUISVILLE	08-Aug-06	46	16	
608.7	LOUISVILLE	15-Aug-06	100	60	
608.7	LOUISVILLE	23-Aug-06	400	200	
608.7	LOUISVILLE	29-Aug-06	900	764	EXCEEDS
			GEOMETRIC MEAN 171	75	
619.3	LOUISVILLE	01-Aug-06	194	108	
619.3	LOUISVILLE	08-Aug-06	48	56	
619.3	LOUISVILLE	15-Aug-06	530	182	EXCEEDS
619.3	LOUISVILLE	23-Aug-06	280	48	
619.3	LOUISVILLE	29-Aug-06	6,700	5,300	EXCEEDS
			GEOMETRIC MEAN 392	195	EXCEEDS
594	LOUISVILLE	06-Sep-06	60	16	
594	LOUISVILLE	12-Sep-06	80	71	
594	LOUISVILLE	19-Sep-06	20	20	
594	LOUISVILLE	21-Sep-06	63	24	
594	LOUISVILLE	26-Sep-06	2,600	1,500	EXCEEDS
			GEOMETRIC MEAN 109	61	
608.7	LOUISVILLE	06-Sep-06	108	83	
608.7	LOUISVILLE	12-Sep-06	2,000	800	EXCEEDS
608.7	LOUISVILLE	19-Sep-06	32	20	
608.7	LOUISVILLE	21-Sep-06	68	74	
608.7	LOUISVILLE	26-Sep-06	3,900	3,900	EXCEEDS
			GEOMETRIC MEAN 284	207	EXCEEDS
619.3	LOUISVILLE	06-Sep-06	84	20	
619.3	LOUISVILLE	12-Sep-06	3,100	800	EXCEEDS
619.3	LOUISVILLE	19-Sep-06	450	100	EXCEEDS
619.3	LOUISVILLE	21-Sep-06	108	88	
619.3	LOUISVILLE	26-Sep-06	4,700	2,500	EXCEEDS
			GEOMETRIC MEAN 569	204	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	LOUISVILLE	03-Oct-06		132	88	
594	LOUISVILLE	12-Oct-06		60	24	
594	LOUISVILLE	18-Oct-06		300	80	
594	LOUISVILLE	25-Oct-06		242	100	
594	LOUISVILLE	31-Oct-06		100	110	
			GEOMETRIC MEAN	142	71	
608.7	LOUISVILLE	03-Oct-06		112	72	
608.7	LOUISVILLE	12-Oct-06		80	48	
608.7	LOUISVILLE	18-Oct-06		290	186	
608.7	LOUISVILLE	25-Oct-06		194	200	
608.7	LOUISVILLE	31-Oct-06		130	60	
			GEOMETRIC MEAN	146	95	
619.3	LOUISVILLE	03-Oct-06		580	300	EXCEEDS
619.3	LOUISVILLE	12-Oct-06		214	100	
619.3	LOUISVILLE	18-Oct-06		60,000	60,000	EXCEEDS
619.3	LOUISVILLE	25-Oct-06		2,000	450	EXCEEDS
619.3	LOUISVILLE	31-Oct-06		210	90	
			GEOMETRIC MEAN	1,256	592	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	EVANSVILLE	02-May-06	211	216	
791.5	EVANSVILLE	09-May-06	48	180	
791.5	EVANSVILLE	16-May-06	390	16	
791.5	EVANSVILLE	23-May-06	580	32	EXCEEDS
791.5	EVANSVILLE	30-May-06	11,700	250	EXCEEDS
		GEOMETRIC MEAN	485	87	EXCEEDS
793.7	EVANSVILLE	02-May-06	900	160	EXCEEDS
793.7	EVANSVILLE	09-May-06	16	700	EXCEEDS
793.7	EVANSVILLE	16-May-06	5,900	60	EXCEEDS
793.7	EVANSVILLE	23-May-06	1,220	20	EXCEEDS
793.7	EVANSVILLE	30-May-06	12,080	260	EXCEEDS
		GEOMETRIC MEAN	1,046	128	EXCEEDS
797.3	EVANSVILLE	02-May-06	600	430	EXCEEDS
797.3	EVANSVILLE	09-May-06	80	430	EXCEEDS
797.3	EVANSVILLE	16-May-06	500	32	EXCEEDS
797.3	EVANSVILLE	23-May-06	650	16	EXCEEDS
797.3	EVANSVILLE	30-May-06	550	124	EXCEEDS
		GEOMETRIC MEAN	386	103	EXCEEDS
791.5	EVANSVILLE	06-Jun-06	5,900	63	EXCEEDS
791.5	EVANSVILLE	13-Jun-06	69	51	
791.5	EVANSVILLE	20-Jun-06	20	37	
791.5	EVANSVILLE	22-Jun-06	32	54	
791.5	EVANSVILLE	27-Jun-06	60	8	
		GEOMETRIC MEAN	109	35	
793.7	EVANSVILLE	06-Jun-06	2,800	71	EXCEEDS
793.7	EVANSVILLE	13-Jun-06	51	54	
793.7	EVANSVILLE	20-Jun-06	864	250	EXCEEDS
793.7	EVANSVILLE	22-Jun-06	4,900	7,000	EXCEEDS
793.7	EVANSVILLE	27-Jun-06	231	48	
		GEOMETRIC MEAN	675	200	EXCEEDS
797.3	EVANSVILLE	06-Jun-06	3,000	60	EXCEEDS
797.3	EVANSVILLE	13-Jun-06	56	43	
797.3	EVANSVILLE	20-Jun-06	24	43	
797.3	EVANSVILLE	22-Jun-06	80	190	
797.3	EVANSVILLE	27-Jun-06	80	16	
		GEOMETRIC MEAN	121	51	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	EVANSVILLE	06-Jul-06	36	4	
791.5	EVANSVILLE	11-Jul-06	68	4	
791.5	EVANSVILLE	18-Jul-06	120	48	
791.5	EVANSVILLE	20-Jul-06	57	12	
791.5	EVANSVILLE	25-Jul-06	500	4	EXCEEDS
		GEOMETRIC MEAN	97	8	
793.7	EVANSVILLE	06-Jul-06	88	24	
793.7	EVANSVILLE	11-Jul-06	176	8	
793.7	EVANSVILLE	18-Jul-06	310	4	
793.7	EVANSVILLE	20-Jul-06	128	40	
793.7	EVANSVILLE	25-Jul-06	490	8	EXCEEDS
		GEOMETRIC MEAN	198	12	
797.3	EVANSVILLE	06-Jul-06	80	24	
797.3	EVANSVILLE	11-Jul-06	66	16	
797.3	EVANSVILLE	18-Jul-06	370	54	
797.3	EVANSVILLE	20-Jul-06	166	40	
797.3	EVANSVILLE	25-Jul-06	270	8	
		GEOMETRIC MEAN	154	23	
791.5	EVANSVILLE	01-Aug-06	96	4	
791.5	EVANSVILLE	08-Aug-06	320	11	
791.5	EVANSVILLE	15-Aug-06	1,281	184	EXCEEDS
791.5	EVANSVILLE	22-Aug-06	4	8	
791.5	EVANSVILLE	29-Aug-06	40	24	
		GEOMETRIC MEAN	91	17	
793.7	EVANSVILLE	01-Aug-06	108	12	
793.7	EVANSVILLE	08-Aug-06	754	350	EXCEEDS
793.7	EVANSVILLE	15-Aug-06	9,000	3,800	EXCEEDS
793.7	EVANSVILLE	22-Aug-06	360	60	
793.7	EVANSVILLE	29-Aug-06	736	203	EXCEEDS
		GEOMETRIC MEAN	721	181	EXCEEDS
797.3	EVANSVILLE	01-Aug-06	128	20	
797.3	EVANSVILLE	08-Aug-06	210	16	
797.3	EVANSVILLE	15-Aug-06	224	71	
797.3	EVANSVILLE	22-Aug-06	150	24	
797.3	EVANSVILLE	29-Aug-06	680	100	EXCEEDS
		GEOMETRIC MEAN	228	35	EXCEEDS
791.5	EVANSVILLE	05-Sep-06	60	12	
791.5	EVANSVILLE	12-Sep-06	2,800	200	EXCEEDS
791.5	EVANSVILLE	19-Sep-06	530	104	EXCEEDS
791.5	EVANSVILLE	21-Sep-06	34	40	
791.5	EVANSVILLE	26-Sep-06	1,100	200	EXCEEDS
		GEOMETRIC MEAN	320	72	EXCEEDS
793.7	EVANSVILLE	05-Sep-06	80	28	
793.7	EVANSVILLE	12-Sep-06	13,700	3,100	EXCEEDS
793.7	EVANSVILLE	19-Sep-06	1,100	340	EXCEEDS
793.7	EVANSVILLE	21-Sep-06	196	36	
793.7	EVANSVILLE	26-Sep-06	2,300	2,000	EXCEEDS
		GEOMETRIC MEAN	885	292	EXCEEDS
797.3	EVANSVILLE	05-Sep-06	66	16	
797.3	EVANSVILLE	12-Sep-06	10,000	1,200	EXCEEDS
797.3	EVANSVILLE	19-Sep-06	1,045	290	EXCEEDS
797.3	EVANSVILLE	21-Sep-06	92	4	
797.3	EVANSVILLE	26-Sep-06	2,000	100	EXCEEDS
		GEOMETRIC MEAN	662	74	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2006

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	EVANSVILLE	03-Oct-06	290	50	
791.5	EVANSVILLE	10-Oct-06	300	84	
791.5	EVANSVILLE	17-Oct-06	2,700	500	EXCEEDS
791.5	EVANSVILLE	24-Oct-06	240	92	
791.5	EVANSVILLE	31-Oct-06	580	400	EXCEEDS
		GEOMETRIC MEAN	505	151	EXCEEDS
793.7	EVANSVILLE	03-Oct-06	6,000	320	EXCEEDS
793.7	EVANSVILLE	10-Oct-06	490	190	EXCEEDS
793.7	EVANSVILLE	17-Oct-06	3,200	1,009	EXCEEDS
793.7	EVANSVILLE	24-Oct-06	224	140	
793.7	EVANSVILLE	31-Oct-06	380	130	
		GEOMETRIC MEAN	957	257	EXCEEDS
797.3	EVANSVILLE	03-Oct-06	1,100	290	EXCEEDS
797.3	EVANSVILLE	10-Oct-06	800	210	EXCEEDS
797.3	EVANSVILLE	17-Oct-06	3,000	982	EXCEEDS
797.3	EVANSVILLE	24-Oct-06	257	116	
797.3	EVANSVILLE	31-Oct-06	680	236	EXCEEDS
		GEOMETRIC MEAN	857	277	EXCEEDS

FECAL- Not to exceed 400 in more than 10% of samples taken during month
Not to exceed 200 as a monthly geometric mean (at least 5 samples required)

E.COLI- Not to exceed 240 in any single sample
Not to exceed 130 as a monthly geometric mean (at least 5 samples required)

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	Pittsburgh	15-May-07		60	8	
1.4R	Pittsburgh	22-May-07		130	90	
1.4R	Pittsburgh	24-May-07		40	32	
1.4R	Pittsburgh	29-May-07		128	51	
1.4R	Pittsburgh	31-May-07		69	31	
			Geometric Mean	77	33	
1.4M	Pittsburgh	15-May-07		20	8	
1.4M	Pittsburgh	22-May-07		100	74	
1.4M	Pittsburgh	24-May-07		57	40	
1.4M	Pittsburgh	29-May-07		68	80	
1.4M	Pittsburgh	31-May-07		51	24	
			Geometric Mean	52	34	
1.4L	Pittsburgh	15-May-07		56	20	
1.4L	Pittsburgh	22-May-07		120	210	
1.4L	Pittsburgh	24-May-07		71	37	
1.4L	Pittsburgh	29-May-07		116	52	
1.4L	Pittsburgh	31-May-07		108	96	
			Geometric Mean	90	60	
4.3	Pittsburgh	15-May-07		76	20	
4.3	Pittsburgh	22-May-07		43	48	
4.3	Pittsburgh	24-May-07		52	37	
4.3	Pittsburgh	29-May-07		188	16	
4.3	Pittsburgh	31-May-07		84	32	
			Geometric Mean	77	28	
1.4R	Pittsburgh	12-Jun-07		132	80	
1.4R	Pittsburgh	19-Jun-07		48	40	
1.4R	Pittsburgh	21-Jun-07		450	180	**EXCEEDS**
1.4R	Pittsburgh	26-Jun-07		80	84	
1.4M	Pittsburgh	12-Jun-07		84	100	
1.4M	Pittsburgh	19-Jun-07		50	31	
1.4M	Pittsburgh	21-Jun-07		800	600	**EXCEEDS**
1.4M	Pittsburgh	26-Jun-07		51	34	
1.4L	Pittsburgh	12-Jun-07		108	70	
1.4L	Pittsburgh	19-Jun-07		80	36	
1.4L	Pittsburgh	21-Jun-07		580	270	**EXCEEDS**
1.4L	Pittsburgh	26-Jun-07		57	20	
4.3	Pittsburgh	12-Jun-07		176	88	
4.3	Pittsburgh	19-Jun-07		51	40	
4.3	Pittsburgh	21-Jun-07		700	500	**EXCEEDS**
4.3	Pittsburgh	26-Jun-07		330	209	
1.4R	Pittsburgh	02-Jul-07		118	80	
1.4R	Pittsburgh	19-Jul-07		188	118	
1.4R	Pittsburgh	24-Jul-07		70	8	
1.4R	Pittsburgh	26-Jul-07		60	20	
1.4R	Pittsburgh	31-Jul-07		116	50	
			Geometric Mean	102	38	
1.4M	Pittsburgh	02-Jul-07		120	90	
1.4M	Pittsburgh	19-Jul-07		180	118	
1.4M	Pittsburgh	24-Jul-07		24	4	
1.4M	Pittsburgh	26-Jul-07		100	150	
1.4M	Pittsburgh	31-Jul-07		92	46	
			Geometric Mean	86	49	
1.4L	Pittsburgh	02-Jul-07		92	60	
1.4L	Pittsburgh	19-Jul-07		500	218	**EXCEEDS**
1.4L	Pittsburgh	24-Jul-07		160	4	
1.4L	Pittsburgh	26-Jul-07		20	4	
1.4L	Pittsburgh	31-Jul-07		66	63	
			Geometric Mean	99	27	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
4.3	Pittsburgh	02-Jul-07		172	120	
4.3	Pittsburgh	19-Jul-07		64	140	
4.3	Pittsburgh	24-Jul-07		69	40	
4.3	Pittsburgh	26-Jul-07		28	4	
4.3	Pittsburgh	31-Jul-07		36	4	
			Geometric Mean	60	25	
1.4R	Pittsburgh	07-Aug-07		2800	1,700	**EXCEEDS**
1.4R	Pittsburgh	16-Aug-07		2800	4,800	**EXCEEDS**
1.4R	Pittsburgh	21-Aug-07		3500	600	**EXCEEDS**
1.4R	Pittsburgh	28-Aug-07		473	236	**EXCEEDS**
1.4R	Pittsburgh	30-Aug-07		300	155	
			Geometric Mean	1,312	709	EXCEEDS
1.4M	Pittsburgh	07-Aug-07		3,800	1,300	**EXCEEDS**
1.4M	Pittsburgh	16-Aug-07		2,900	1,900	**EXCEEDS**
1.4M	Pittsburgh	21-Aug-07		20,000	1,200	**EXCEEDS**
1.4M	Pittsburgh	28-Aug-07		364	1,600	**EXCEEDS**
1.4M	Pittsburgh	30-Aug-07		450	500	**EXCEEDS**
			Geometric Mean	2,049	1,188	EXCEEDS
1.4L	Pittsburgh	07-Aug-07		2,500	800	**EXCEEDS**
1.4L	Pittsburgh	16-Aug-07		2,400	1,300	**EXCEEDS**
1.4L	Pittsburgh	21-Aug-07		3,500	6,000	**EXCEEDS**
1.4L	Pittsburgh	28-Aug-07		210	164	
1.4L	Pittsburgh	30-Aug-07		745	155	**EXCEEDS**
			Geometric Mean	1,269	692	EXCEEDS
4.3	Pittsburgh	07-Aug-07		2,800	800	**EXCEEDS**
4.3	Pittsburgh	16-Aug-07		1,100	2,100	**EXCEEDS**
4.3	Pittsburgh	21-Aug-07		6,000	6,000	**EXCEEDS**
4.3	Pittsburgh	28-Aug-07		490	200	**EXCEEDS**
4.3	Pittsburgh	30-Aug-07		500	200	**EXCEEDS**
			Geometric Mean	1,353	834	EXCEEDS
1.4R	Pittsburgh	04-Sep-07		2000	400	**EXCEEDS**
1.4R	Pittsburgh	18-Sep-07		2200	1,600	**EXCEEDS**
1.4R	Pittsburgh	20-Sep-07		104	44	
1.4R	Pittsburgh	25-Sep-07		40	70	
1.4R	Pittsburgh	27-Sep-07		1700	745	**EXCEEDS**
			Geometric Mean	500	271	EXCEEDS
1.4M	Pittsburgh	04-Sep-07		1,400	300	**EXCEEDS**
1.4M	Pittsburgh	18-Sep-07		2,500	340	**EXCEEDS**
1.4M	Pittsburgh	20-Sep-07		140	54	
1.4M	Pittsburgh	25-Sep-07		80	70	
1.4M	Pittsburgh	27-Sep-07		1,500	280	**EXCEEDS**
			Geometric Mean	567	161	EXCEEDS
1.4L	Pittsburgh	04-Sep-07		1,100	400	**EXCEEDS**
1.4L	Pittsburgh	18-Sep-07		3,900	1,300	**EXCEEDS**
1.4L	Pittsburgh	20-Sep-07		96	74	
1.4L	Pittsburgh	25-Sep-07		36	40	
1.4L	Pittsburgh	27-Sep-07		2,000	727	**EXCEEDS**
			Geometric Mean	495	257	EXCEEDS
4.3	Pittsburgh	04-Sep-07		100	160	
4.3	Pittsburgh	18-Sep-07		450	300	**EXCEEDS**
4.3	Pittsburgh	20-Sep-07		70	74	
4.3	Pittsburgh	25-Sep-07		20	4	
4.3	Pittsburgh	27-Sep-07		1,600	900	**EXCEEDS**
			Geometric Mean	159	105	
1.4R	Pittsburgh	02-Oct-07		100	54	
1.4R	Pittsburgh	09-Oct-07		157	100	
1.4R	Pittsburgh	16-Oct-07		100	210	
1.4R	Pittsburgh	23-Oct-07		168	63	
1.4R	Pittsburgh	30-Oct-07		280	818	**EXCEEDS**
			Geometric Mean	149	142	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4M	Pittsburgh	02-Oct-07		140	40	
1.4M	Pittsburgh	09-Oct-07		92	120	
1.4M	Pittsburgh	16-Oct-07		269	40	
1.4M	Pittsburgh	23-Oct-07		116	100	
1.4M	Pittsburgh	30-Oct-07		3,400	230	**EXCEEDS**
			Geometric Mean	267	85	EXCEEDS
1.4L	Pittsburgh	02-Oct-07		170	63	
1.4L	Pittsburgh	09-Oct-07		260	90	
1.4L	Pittsburgh	16-Oct-07		140	100	
1.4L	Pittsburgh	23-Oct-07		260	124	
1.4L	Pittsburgh	30-Oct-07		520	280	**EXCEEDS**
			Geometric Mean	242	115	EXCEEDS
4.3	Pittsburgh	02-Oct-07		140	136	
4.3	Pittsburgh	09-Oct-07		63	40	
4.3	Pittsburgh	16-Oct-07		243	91	
4.3	Pittsburgh	23-Oct-07		96	68	
4.3	Pittsburgh	30-Oct-07		664	240	**EXCEEDS**
			Geometric Mean	169	96	
84.2	Wheeling	01-May-07		80	40	
84.2	Wheeling	08-May-07		48	20	
84.2	Wheeling	15-May-07		4	8	
84.2	Wheeling	22-May-07		210	152	
84.2	Wheeling	29-May-07		8	4	
			Geometric Mean	30	21	
86.8	Wheeling	01-May-07		54	36	
86.8	Wheeling	08-May-07		28	20	
86.8	Wheeling	15-May-07		4	16	
86.8	Wheeling	22-May-07		24	16	
86.8	Wheeling	29-May-07		20	4	
			Geometric Mean	20	15	
91.4	Wheeling	01-May-07		108	34	
91.4	Wheeling	08-May-07		52	20	
91.4	Wheeling	15-May-07		12	16	
91.4	Wheeling	22-May-07		500	24	**EXCEEDS**
91.4	Wheeling	29-May-07		3,100	20	**EXCEEDS**
			Geometric Mean	160	22	
92.8	Wheeling	01-May-07		96	36	
92.8	Wheeling	08-May-07		200	172	
92.8	Wheeling	15-May-07		57	49	
92.8	Wheeling	22-May-07		156	52	
92.8	Wheeling	29-May-07		890	24	**EXCEEDS**
			Geometric Mean	172	52	
84.2	Wheeling	05-Jun-07		20,000	20,000	**EXCEEDS**
84.2	Wheeling	12-Jun-07		780	96	**EXCEEDS**
84.2	Wheeling	19-Jun-07		148	391	**EXCEEDS**
84.2	Wheeling	20-Jun-07		9,800	20,000	**EXCEEDS**
84.2	Wheeling	21-Jun-07		20,000	180	**EXCEEDS**
84.2	Wheeling	26-Jun-07		132	60	
			Geometric Mean	1,977	738	EXCEEDS
86.8	Wheeling	05-Jun-07		184	20,000	**EXCEEDS**
86.8	Wheeling	12-Jun-07		116	28	
86.8	Wheeling	19-Jun-07		300	280	**EXCEEDS**
86.8	Wheeling	20-Jun-07		204	64	
86.8	Wheeling	21-Jun-07		4,600	32	**EXCEEDS**
86.8	Wheeling	26-Jun-07		1,000	103	**EXCEEDS**
			Geometric Mean	426	179	EXCEEDS
91.4	Wheeling	05-Jun-07		200	20,000	**EXCEEDS**
91.4	Wheeling	12-Jun-07		308	20	
91.4	Wheeling	19-Jun-07		1,400	246	**EXCEEDS**
91.4	Wheeling	20-Jun-07		10,300	57	**EXCEEDS**
91.4	Wheeling	21-Jun-07		20,000	20,000	**EXCEEDS**
91.4	Wheeling	26-Jun-07		100	54	
			Geometric Mean	1,101	427	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
92.8	Wheeling	05-Jun-07		20,000	20,000	**EXCEEDS**
92.8	Wheeling	12-Jun-07		152	40	
92.8	Wheeling	19-Jun-07		580	250	**EXCEEDS**
92.8	Wheeling	20-Jun-07		20,000	540	**EXCEEDS**
92.8	Wheeling	21-Jun-07		20,000	20,000	**EXCEEDS**
92.8	Wheeling	26-Jun-07		500	320	**EXCEEDS**
			Geometric Mean	2,658	940	EXCEEDS
84.2	Wheeling	02-Jul-07		28	16	
84.2	Wheeling	10-Jul-07		60	20	
84.2	Wheeling	17-Jul-07		308	4	
84.2	Wheeling	24-Jul-07		1	66	
84.2	Wheeling	31-Jul-07		16	12	
			Geometric Mean	24	16	
86.8	Wheeling	02-Jul-07		20	12	
86.8	Wheeling	10-Jul-07		16	4	
86.8	Wheeling	17-Jul-07		48	4	
86.8	Wheeling	24-Jul-07		4	32	
86.8	Wheeling	31-Jul-07		4	4	
			Geometric Mean	12	8	
91.4	Wheeling	02-Jul-07		48	16	
91.4	Wheeling	10-Jul-07		72	28	
91.4	Wheeling	17-Jul-07		8	4	
91.4	Wheeling	24-Jul-07		56	40	
91.4	Wheeling	31-Jul-07		46	24	
			Geometric Mean	37	18	
92.8	Wheeling	02-Jul-07		80	136	
92.8	Wheeling	10-Jul-07		66	28	
92.8	Wheeling	17-Jul-07		240	44	
92.8	Wheeling	24-Jul-07		100	86	
92.8	Wheeling	31-Jul-07		180	32	
			Geometric Mean	118	54	
84.2	Wheeling	07-Aug-07		148	54	
84.2	Wheeling	14-Aug-07		1,000	360	**EXCEEDS**
84.2	Wheeling	21-Aug-07		670	290	**EXCEEDS**
84.2	Wheeling	23-Aug-07		470	390	**EXCEEDS**
84.2	Wheeling	28-Aug-07		236	242	**EXCEEDS**
			Geometric Mean	406	221	EXCEEDS
86.8	Wheeling	07-Aug-07		4	4	
86.8	Wheeling	14-Aug-07		30	10	
86.8	Wheeling	21-Aug-07		310	200	
86.8	Wheeling	23-Aug-07		580	390	**EXCEEDS**
86.8	Wheeling	28-Aug-07		84	84	
			Geometric Mean	71	48	
91.4	Wheeling	07-Aug-07		28	36	
91.4	Wheeling	14-Aug-07		124	36	
91.4	Wheeling	21-Aug-07		480	128	**EXCEEDS**
91.4	Wheeling	23-Aug-07		1,100	228	**EXCEEDS**
91.4	Wheeling	28-Aug-07		52	88	
			Geometric Mean	157	80	
92.8	Wheeling	07-Aug-07		280	84	
92.8	Wheeling	14-Aug-07		280	92	
92.8	Wheeling	21-Aug-07		1,600	440	**EXCEEDS**
92.8	Wheeling	23-Aug-07		1,200	570	**EXCEEDS**
92.8	Wheeling	28-Aug-07		540	350	**EXCEEDS**
			Geometric Mean	605	232	EXCEEDS
84.2	Wheeling	04-Sep-07		490	450	**EXCEEDS**
84.2	Wheeling	11-Sep-07		144	36	
84.2	Wheeling	18-Sep-07		250	64	
84.2	Wheeling	20-Sep-07		92	76	
84.2	Wheeling	25-Sep-07		12	52	
			Geometric Mean	114	84	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
86.8	Wheeling	04-Sep-07		24	32	
86.8	Wheeling	11-Sep-07		12	4	
86.8	Wheeling	18-Sep-07		69	4	
86.8	Wheeling	20-Sep-07		32	16	
86.8	Wheeling	25-Sep-07		12	24	
			Geometric Mean	24	11	
91.4	Wheeling	04-Sep-07		182	84	
91.4	Wheeling	11-Sep-07		700	4,500	**EXCEEDS**
91.4	Wheeling	18-Sep-07		12	4	
91.4	Wheeling	20-Sep-07		12	4	
91.4	Wheeling	25-Sep-07		4	10	
			Geometric Mean	37	36	
92.8	Wheeling	04-Sep-07		36	96	
92.8	Wheeling	11-Sep-07		1,410	709	**EXCEEDS**
92.8	Wheeling	18-Sep-07		216	92	
92.8	Wheeling	20-Sep-07		28	88	
92.8	Wheeling	25-Sep-07		20	12	
			Geometric Mean	91	92	
84.2	Wheeling	02-Oct-07		230	116	
84.2	Wheeling	09-Oct-07		800	340	**EXCEEDS**
84.2	Wheeling	16-Oct-07		20,000	572	**EXCEEDS**
84.2	Wheeling	23-Oct-07		474	1,000	**EXCEEDS**
84.2	Wheeling	30-Oct-07		52	54	
			Geometric Mean	619	261	**EXCEEDS**
86.8	Wheeling	02-Oct-07		170	56	
86.8	Wheeling	09-Oct-07		46	24	
86.8	Wheeling	16-Oct-07		211	20	
86.8	Wheeling	23-Oct-07		252	16	
86.8	Wheeling	30-Oct-07		240	50	
			Geometric Mean	158	29	
91.4	Wheeling	02-Oct-07		60	32	
91.4	Wheeling	09-Oct-07		108	8	
91.4	Wheeling	16-Oct-07		96	148	
91.4	Wheeling	23-Oct-07		282	52	
91.4	Wheeling	30-Oct-07		128	44	
			Geometric Mean	118	39	
92.8	Wheeling	02-Oct-07		71	180	
92.8	Wheeling	09-Oct-07		2,000	260	**EXCEEDS**
92.8	Wheeling	16-Oct-07		76	2,200	**EXCEEDS**
92.8	Wheeling	23-Oct-07		370	104	
92.8	Wheeling	30-Oct-07		1,180	49	**EXCEEDS**
			Geometric Mean	342	221	**EXCEEDS**

Ohio River Bacteria levels were unusually elevated in Wheeling during the month of June. The samples taken on June 19, 20, and 21 showed signs of "confluent growth" (CG) on the plates. Duplicate samples were taken on June 26 and were analyzed by TraDet Laboratories in Wheeling, WV and Cardinal Environmental Laboratories in Youngstown, OH to eliminate the possibility of laboratory error. Wheeling Water Pollution Control Division also had a set of samples they took on June 26 analyzed to help figure out what might be going on. All three laboratories showed similar results, including CG for June 26. One possibility for the CG may be due to the low flow on the Ohio River, We are still investingating the cause of the unusual levels detected, but it appears to be surface water related.

305.1	Huntington	01-May-07		5,000	3,300	**EXCEEDS**
305.1	Huntington	08-May-07		28	36	
305.1	Huntington	15-May-07		16	4	
305.1	Huntington	22-May-07		8	4	
305.1	Huntington	29-May-07		4	8	
			Geometric Mean	37	27	
308.1	Huntington	01-May-07		86	63	
308.1	Huntington	08-May-07		489	450	**EXCEEDS**
308.1	Huntington	15-May-07		3,200	1,055	**EXCEEDS**
308.1	Huntington	22-May-07		84	74	
308.1	Huntington	29-May-07		40	32	
			Geometric Mean	214	148	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
314.8	Huntington	01-May-07	149	103	
314.8	Huntington	08-May-07	420	310	**EXCEEDS**
314.8	Huntington	15-May-07	156	80	
314.8	Huntington	22-May-07	104	69	
314.8	Huntington	29-May-07	36	36	
		Geometric Mean	130	91	
305.1	Huntington	05-Jun-07	266	191	
305.1	Huntington	12-Jun-07	12	4	
305.1	Huntington	19-Jun-07	20	20	
305.1	Huntington	21-Jun-07	4	4	
305.1	Huntington	26-Jun-07	12	4	
		Geometric Mean	20	12	
308.1	Huntington	05-Jun-07	114	60	
308.1	Huntington	12-Jun-07	192	140	
308.1	Huntington	19-Jun-07	100	69	
308.1	Huntington	21-Jun-07	49	4	
308.1	Huntington	26-Jun-07	410	84	**EXCEEDS**
		Geometric Mean	134	45	
314.8	Huntington	05-Jun-07	220	217	
314.8	Huntington	12-Jun-07	68	28	
314.8	Huntington	19-Jun-07	77	4	
314.8	Huntington	21-Jun-07	108	12	
314.8	Huntington	26-Jun-07	108	20	
		Geometric Mean	106	23	
305.1	Huntington	02-Jul-07	4	4	
305.1	Huntington	10-Jul-07	4	4	
305.1	Huntington	17-Jul-07	4	4	
305.1	Huntington	24-Jul-07	4	8	
305.1	Huntington	31-Jul-07	4	4	
		Geometric Mean	4	5	
308.1	Huntington	02-Jul-07	88	24	
308.1	Huntington	10-Jul-07	96	28	
308.1	Huntington	17-Jul-07	440	420	**EXCEEDS**
308.1	Huntington	24-Jul-07	370	132	
308.1	Huntington	31-Jul-07	570	257	**EXCEEDS**
		Geometric Mean	239	99	EXCEEDS
314.8	Huntington	02-Jul-07	180	80	
314.8	Huntington	10-Jul-07	191	77	
314.8	Huntington	17-Jul-07	66	36	
314.8	Huntington	24-Jul-07	136	60	
314.8	Huntington	31-Jul-07	380	12	
		Geometric Mean	164	44	
305.1	Huntington	07-Aug-07	20	12	
305.1	Huntington	14-Aug-07	8	4	
305.1	Huntington	21-Aug-07	12	12	
305.1	Huntington	23-Aug-07	80	32	
305.1	Huntington	28-Aug-07	16	8	
		Geometric Mean	19	11	
308.1	Huntington	07-Aug-07	623	540	**EXCEEDS**
308.1	Huntington	14-Aug-07	1,455	590	**EXCEEDS**
308.1	Huntington	21-Aug-07	5,400	1,409	**EXCEEDS**
308.1	Huntington	23-Aug-07	3,200	1,064	**EXCEEDS**
308.1	Huntington	28-Aug-07	40	40	
		Geometric Mean	911	453	EXCEEDS
314.8	Huntington	07-Aug-07	230	66	
314.8	Huntington	14-Aug-07	203	83	
314.8	Huntington	21-Aug-07	420	104	**EXCEEDS**
314.8	Huntington	23-Aug-07	88	66	
314.8	Huntington	28-Aug-07	240	114	
		Geometric Mean	211	84	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	Huntington	04-Sep-07		8	8	
305.1	Huntington	11-Sep-07		16	4	
305.1	Huntington	18-Sep-07		4	4	
305.1	Huntington	20-Sep-07		4	4	
305.1	Huntington	25-Sep-07		4	4	
			Geometric Mean	6	5	
308.1	Huntington	04-Sep-07		136	92	
308.1	Huntington	11-Sep-07		2,000	470	**EXCEEDS**
308.1	Huntington	18-Sep-07		180	106	
308.1	Huntington	20-Sep-07		32	24	
308.1	Huntington	25-Sep-07		68	32	
			Geometric Mean	161	81	
314.8	Huntington	04-Sep-07		77	32	
314.8	Huntington	11-Sep-07		120	40	
314.8	Huntington	18-Sep-07		37	20	
314.8	Huntington	20-Sep-07		51	32	
314.8	Huntington	25-Sep-07		68	16	
			Geometric Mean	65	27	
305.1	Huntington	02-Oct-07		20	16	
305.1	Huntington	09-Oct-07		20	4	
305.1	Huntington	16-Oct-07		4	4	
305.1	Huntington	23-Oct-07		4	4	
305.1	Huntington	30-Oct-07		12	4	
			Geometric Mean	9	5	
308.1	Huntington	02-Oct-07		16	12	
308.1	Huntington	09-Oct-07		32	12	
308.1	Huntington	16-Oct-07		28	8	
308.1	Huntington	23-Oct-07		116	69	
308.1	Huntington	30-Oct-07		40	20	
			Geometric Mean	37	17	
314.8	Huntington	02-Oct-07		74	28	
314.8	Huntington	09-Oct-07		77	4	
314.8	Huntington	16-Oct-07		100	60	
314.8	Huntington	23-Oct-07		66	63	
314.8	Huntington	30-Oct-07		176	69	
			Geometric Mean	92	31	
462.6	Cincinnati	01-May-07		56	56	
462.6	Cincinnati	08-May-07		20	24	
462.6	Cincinnati	15-May-07		20	4	
462.6	Cincinnati	22-May-07		16	20	
462.6	Cincinnati	29-May-07		28	28	
			Geometric Mean	25	20	
463.9	Cincinnati AquaRamp	01-May-07		92	46	
463.9	Cincinnati AquaRamp	08-May-07		16	8	
463.9	Cincinnati AquaRamp	15-May-07		4	12	
463.9	Cincinnati AquaRamp	22-May-07		4	8	
463.9	Cincinnati AquaRamp	29-May-07		4	4	
			Geometric Mean	10	11	
469.9	Cincinnati Who-Day Dock	01-May-07		63	57	
469.9	Cincinnati Who-Day Dock	08-May-07		24	24	
469.9	Cincinnati Who-Day Dock	15-May-07		90	12	
469.9	Cincinnati Who-Day Dock	22-May-07		43	28	
469.9	Cincinnati Who-Day Dock	29-May-07		20	34	
			Geometric Mean	41	27	
470	Cincinnati	01-May-07		129	86	
470	Cincinnati	08-May-07		97	74	
470	Cincinnati	15-May-07		12	10	
470	Cincinnati	22-May-07		40	8	
470	Cincinnati	29-May-07		46	32	
			Geometric Mean	49	28	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
477.5	Cincinnati	01-May-07	92	92	
477.5	Cincinnati	08-May-07	20	40	
477.5	Cincinnati	15-May-07	164	16	
477.5	Cincinnati	22-May-07	16	8	
477.5	Cincinnati	29-May-07	16	16	
		Geometric Mean	38	24	
462.6	Cincinnati	05-Jun-07	76	50	
462.6	Cincinnati	12-Jun-07	20	10	
462.6	Cincinnati	19-Jun-07	24	16	
462.6	Cincinnati	21-Jun-07	40	12	
462.6	Cincinnati	26-Jun-07	791	764	**EXCEEDS**
		Geometric Mean	65	37	
463.9	Cincinnati AquaRamp	05-Jun-07	24	4	
463.9	Cincinnati AquaRamp	12-Jun-07	10	4	
463.9	Cincinnati AquaRamp	19-Jun-07	4	4	
463.9	Cincinnati AquaRamp	21-Jun-07	4	4	
463.9	Cincinnati AquaRamp	26-Jun-07	46	16	
		Geometric Mean	11	5	
469.9	Cincinnati Who-Day Dock	05-Jun-07	150	66	
469.9	Cincinnati Who-Day Dock	12-Jun-07	52	8	
469.9	Cincinnati Who-Day Dock	19-Jun-07	12	20	
469.9	Cincinnati Who-Day Dock	21-Jun-07	32	24	
469.9	Cincinnati Who-Day Dock	26-Jun-07	160	56	
		Geometric Mean	54	27	
470	Cincinnati	05-Jun-07	288	112	
470	Cincinnati	12-Jun-07	38	29	
470	Cincinnati	19-Jun-07	168	96	
470	Cincinnati	21-Jun-07	69	57	
470	Cincinnati	26-Jun-07	223	63	
		Geometric Mean	123	65	
477.5	Cincinnati	05-Jun-07	1,327	670	**EXCEEDS**
477.5	Cincinnati	12-Jun-07	53	38	
477.5	Cincinnati	19-Jun-07	28	16	
477.5	Cincinnati	21-Jun-07	71	28	
477.5	Cincinnati	26-Jun-07	71	8	
		Geometric Mean	100	39	
462.6	Cincinnati	02-Jul-07	24	8	
462.6	Cincinnati	10-Jul-07	16	4	
462.6	Cincinnati	17-Jul-07	44	28	
462.6	Cincinnati	24-Jul-07	4	8	
462.6	Cincinnati	31-Jul-07	32	8	
		Geometric Mean	18	9	
463.9	Cincinnati AquaRamp	02-Jul-07	32	16	
463.9	Cincinnati AquaRamp	10-Jul-07	4	4	
463.9	Cincinnati AquaRamp	17-Jul-07	24	4	
463.9	Cincinnati AquaRamp	24-Jul-07	4	4	
463.9	Cincinnati AquaRamp	31-Jul-07	12	4	
		Geometric Mean	11	5	
469.9	Cincinnati Who-Day Dock	02-Jul-07	96	48	
469.9	Cincinnati Who-Day Dock	10-Jul-07	20	16	
469.9	Cincinnati Who-Day Dock	17-Jul-07	92	44	
469.9	Cincinnati Who-Day Dock	24-Jul-07	54	4	
469.9	Cincinnati Who-Day Dock	31-Jul-07	20	12	
		Geometric Mean	45	17	
470	Cincinnati	02-Jul-07	32	12	
470	Cincinnati	10-Jul-07	217	117	
470	Cincinnati	17-Jul-07	40	28	
470	Cincinnati	24-Jul-07	28	4	
470	Cincinnati	31-Jul-07	32	31	
		Geometric Mean	48	22	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
477.5	Cincinnati	02-Jul-07	104	44	
477.5	Cincinnati	10-Jul-07	183	77	
477.5	Cincinnati	17-Jul-07	168	60	
477.5	Cincinnati	24-Jul-07	52	12	
477.5	Cincinnati	31-Jul-07	84	16	
		Geometric Mean	107	33	
462.6	Cincinnati	07-Aug-07	240	108	
462.6	Cincinnati	14-Aug-07	16	12	
462.6	Cincinnati	21-Aug-07	152	148	
462.6	Cincinnati	23-Aug-07	290	150	
462.6	Cincinnati	28-Aug-07	36	12	
		Geometric Mean	91	51	
463.9	Cincinnati AquaRamp	07-Aug-07	8	4	
463.9	Cincinnati AquaRamp	14-Aug-07	4	4	
463.9	Cincinnati AquaRamp	21-Aug-07	24	16	
463.9	Cincinnati AquaRamp	23-Aug-07	60	44	
463.9	Cincinnati AquaRamp	28-Aug-07	4	4	
		Geometric Mean	11	9	
469.9	Cincinnati Who-Day Dock	07-Aug-07	290	172	
469.9	Cincinnati Who-Day Dock	14-Aug-07	32	20	
469.9	Cincinnati Who-Day Dock	21-Aug-07	24	16	
469.9	Cincinnati Who-Day Dock	23-Aug-07	163	104	
469.9	Cincinnati Who-Day Dock	28-Aug-07	16	8	
		Geometric Mean	57	34	
470	Cincinnati	07-Aug-07	280	116	
470	Cincinnati	14-Aug-07	20	8	
470	Cincinnati	21-Aug-07	3,000	150	**EXCEEDS**
470	Cincinnati	23-Aug-07	92	44	
470	Cincinnati	28-Aug-07	40	56	
		Geometric Mean	144	51	
477.5	Cincinnati	07-Aug-07	54	36	
477.5	Cincinnati	14-Aug-07	76	12	
477.5	Cincinnati	21-Aug-07	164	80	
477.5	Cincinnati	23-Aug-07	44	24	
477.5	Cincinnati	28-Aug-07	4	12	
		Geometric Mean	41	25	
462.6	Cincinnati	04-Sep-07	20	8	
462.6	Cincinnati	11-Sep-07	28	12	
462.6	Cincinnati	18-Sep-07	12	4	
462.6	Cincinnati	20-Sep-07	12	4	
462.6	Cincinnati	26-Sep-07	28	4	
		Geometric Mean	19	6	
463.9	Cincinnati AquaRamp	04-Sep-07	4	4	
463.9	Cincinnati AquaRamp	11-Sep-07	4	4	
463.9	Cincinnati AquaRamp	18-Sep-07	4	4	
463.9	Cincinnati AquaRamp	20-Sep-07	4	4	
463.9	Cincinnati AquaRamp	26-Sep-07	4	4	
		Geometric Mean	4	4	
469.9	Cincinnati Who-Day Dock	04-Sep-07	8	16	
469.9	Cincinnati Who-Day Dock	11-Sep-07	2,100	1,200	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	18-Sep-07	48	36	
469.9	Cincinnati Who-Day Dock	20-Sep-07	56	4	
469.9	Cincinnati Who-Day Dock	26-Sep-07	148	88	
		Geometric Mean	92	48	
470	Cincinnati	04-Sep-07	77	28	
470	Cincinnati	11-Sep-07	2,200	973	**EXCEEDS**
470	Cincinnati	18-Sep-07	52	12	
470	Cincinnati	20-Sep-07	96	80	
470	Cincinnati	26-Sep-07	49	330	**EXCEEDS**
		Geometric Mean	133	97	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
477.5	Cincinnati	04-Sep-07	4	20	
477.5	Cincinnati	11-Sep-07	254	112	
477.5	Cincinnati	18-Sep-07	8	20	
477.5	Cincinnati	20-Sep-07	44	4	
477.5	Cincinnati	26-Sep-07	8	8	
		Geometric Mean	20	17	
462.6	Cincinnati	02-Oct-07	16	8	
462.6	Cincinnati	09-Oct-07	8	12	
462.6	Cincinnati	16-Oct-07	124	100	
462.6	Cincinnati	23-Oct-07	460	400	**EXCEEDS**
462.6	Cincinnati	30-Oct-07	120	50	
		Geometric Mean	61	45	
463.9	Cincinnati AquaRamp	02-Oct-07	4	4	
463.9	Cincinnati AquaRamp	09-Oct-07	4	4	
463.9	Cincinnati AquaRamp	16-Oct-07	4	8	
463.9	Cincinnati AquaRamp	23-Oct-07	700	410	**EXCEEDS**
463.9	Cincinnati AquaRamp	30-Oct-07	63	20	
		Geometric Mean	20	16	
469.9	Cincinnati Who-Day Dock	02-Oct-07	34	24	
469.9	Cincinnati Who-Day Dock	09-Oct-07	60	34	
469.9	Cincinnati Who-Day Dock	16-Oct-07	8,700	4,800	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	23-Oct-07	6,200	2,700	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	30-Oct-07	4	8	
		Geometric Mean	213	153	EXCEEDS
470	Cincinnati	02-Oct-07	60	24	
470	Cincinnati	09-Oct-07	24	16	
470	Cincinnati	16-Oct-07	350	836	**EXCEEDS**
470	Cincinnati	23-Oct-07	6,400	5,100	**EXCEEDS**
470	Cincinnati	30-Oct-07	56	12	
		Geometric Mean	178	114	
477.5	Cincinnati	02-Oct-07	71	64	
477.5	Cincinnati	09-Oct-07	171	16	
477.5	Cincinnati	16-Oct-07	132	71	
477.5	Cincinnati	23-Oct-07	10,800	5,700	**EXCEEDS**
477.5	Cincinnati	30-Oct-07	96	24	
		Geometric Mean	278	100	EXCEEDS
594	Louisville	01-May-07	54	31	
594	Louisville	08-May-07	52	4	
594	Louisville	15-May-07	20	4	
594	Louisville	23-May-07	100	108	
594	Louisville	30-May-07	40	20	
		Geometric Mean	47	16	
608.7	Louisville	01-May-07	69	49	
608.7	Louisville	08-May-07	12	4	
608.7	Louisville	15-May-07	20	12	
608.7	Louisville	23-May-07	183	20	
608.7	Louisville	30-May-07	17	8	
		Geometric Mean	35	13	
619.3	Louisville	01-May-07	2,000	129	**EXCEEDS**
619.3	Louisville	08-May-07	3,900	3,000	**EXCEEDS**
619.3	Louisville	15-May-07	2,400	80	**EXCEEDS**
619.3	Louisville	23-May-07	3,100	2,900	**EXCEEDS**
619.3	Louisville	30-May-07	63	40	
		Geometric Mean	1,296	324	EXCEEDS
594	Louisville	05-Jun-07	125	12	
594	Louisville	12-Jun-07	330	8	
594	Louisville	14-Jun-07	54	28	
594	Louisville	19-Jun-07	8	12	
594	Louisville	21-Jun-07	32	20	
		Geometric Mean	56	15	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
608.7	Louisville	05-Jun-07		280	28	
608.7	Louisville	12-Jun-07		283	4	
608.7	Louisville	14-Jun-07		229	183	
608.7	Louisville	19-Jun-07		120	60	
608.7	Louisville	21-Jun-07		24	9	
			Geometric Mean	139	26	
619.3	Louisville	05-Jun-07		845	112	**EXCEEDS**
619.3	Louisville	12-Jun-07		764	20	**EXCEEDS**
619.3	Louisville	14-Jun-07		16	30	
619.3	Louisville	19-Jun-07		80	4	
619.3	Louisville	21-Jun-07		2,700	250	**EXCEEDS**
			Geometric Mean	295	37	EXCEEDS
594	Louisville	02-Jul-07		96	24	
594	Louisville	10-Jul-07		91	20	
594	Louisville	18-Jul-07		51	28	
594	Louisville	24-Jul-07		28	24	
594	Louisville	31-Jul-07		80	12	
			Geometric Mean	63	21	
608.7	Louisville	02-Jul-07		66	32	
608.7	Louisville	10-Jul-07		32	4	
608.7	Louisville	18-Jul-07		32	8	
608.7	Louisville	24-Jul-07		37	16	
608.7	Louisville	31-Jul-07		700	40	**EXCEEDS**
			Geometric Mean	71	15	
619.3	Louisville	02-Jul-07		48	16	
619.3	Louisville	10-Jul-07		36	8	
619.3	Louisville	18-Jul-07		4,900	4,400	**EXCEEDS**
619.3	Louisville	24-Jul-07		88	74	
619.3	Louisville	31-Jul-07		192	51	
			Geometric Mean	170	73	
594	Louisville	07-Aug-07		54	4	
594	Louisville	14-Aug-07		37	4	
594	Louisville	21-Aug-07		2,100	200	**EXCEEDS**
594	Louisville	23-Aug-07		148	32	
594	Louisville	28-Aug-07		24	8	
			Geometric Mean	108	15	
608.7	Louisville	07-Aug-07		257	28	
608.7	Louisville	14-Aug-07		16	4	
608.7	Louisville	21-Aug-07		709	63	**EXCEEDS**
608.7	Louisville	23-Aug-07		745	360	**EXCEEDS**
608.7	Louisville	28-Aug-07		166	16	
			Geometric Mean	205	33	EXCEEDS
619.3	Louisville	07-Aug-07		590	84	**EXCEEDS**
619.3	Louisville	14-Aug-07		200	32	
619.3	Louisville	21-Aug-07		1,100	600	**EXCEEDS**
619.3	Louisville	23-Aug-07		1,330	240	**EXCEEDS**
619.3	Louisville	28-Aug-07		203	92	
			Geometric Mean	512	129	EXCEEDS
594	Louisville	04-Sep-07		12	4	
594	Louisville	11-Sep-07		12	4	
594	Louisville	18-Sep-07		4	4	
594	Louisville	25-Sep-07		8	8	
594	Louisville	27-Sep-07		80	44	
			Geometric Mean	13	7	
608.7	Louisville	04-Sep-07		8	12	
608.7	Louisville	11-Sep-07		148	83	
608.7	Louisville	18-Sep-07		48	8	
608.7	Louisville	25-Sep-07		194	116	
608.7	Louisville	27-Sep-07		370	80	
			Geometric Mean	84	37	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
619.3	Louisville	04-Sep-07	12	12	
619.3	Louisville	11-Sep-07	350	340	**EXCEEDS**
619.3	Louisville	18-Sep-07	32	16	
619.3	Louisville	25-Sep-07	32	8	
619.3	Louisville	27-Sep-07	520	400	**EXCEEDS**
		Geometric Mean	74	46	
594	Louisville	02-Oct-07	4	4	
594	Louisville	09-Oct-07	71	16	
594	Louisville	16-Oct-07	460	330	**EXCEEDS**
594	Louisville	22-Oct-07	8	12	
594	Louisville	30-Oct-07	460	340	**EXCEEDS**
		Geometric Mean	54	39	
608.7	Louisville	02-Oct-07	48	12	
608.7	Louisville	09-Oct-07	63	32	
608.7	Louisville	16-Oct-07	320	60	
608.7	Louisville	22-Oct-07	171	49	
608.7	Louisville	30-Oct-07	63	16	
		Geometric Mean	101	28	
619.3	Louisville	02-Oct-07	217	211	
619.3	Louisville	09-Oct-07	460	69	**EXCEEDS**
619.3	Louisville	16-Oct-07	80	104	
619.3	Louisville	22-Oct-07	186	320	**EXCEEDS**
619.3	Louisville	30-Oct-07	68	32	
		Geometric Mean	159	109	
791.5	Evansville	01-May-07	136	52	
791.5	Evansville	08-May-07	70	16	
791.5	Evansville	15-May-07	12	4	
791.5	Evansville	22-May-07	40	10	
791.5	Evansville	29-May-07	44	17	
		Geometric Mean	46	14	
793.7	Evansville	01-May-07	137	4	
793.7	Evansville	08-May-07	800	300	**EXCEEDS**
793.7	Evansville	15-May-07	43	30	
793.7	Evansville	22-May-07	74	28	
793.7	Evansville	29-May-07	340	234	
		Geometric Mean	164	47	
797.3	Evansville	01-May-07	112	30	
797.3	Evansville	08-May-07	156	48	
797.3	Evansville	15-May-07	80	40	
797.3	Evansville	22-May-07	24	28	
797.3	Evansville	29-May-07	20	12	
		Geometric Mean	58	29	
791.5	Evansville	05-Jun-07	16	4	
791.5	Evansville	12-Jun-07	28	8	
791.5	Evansville	19-Jun-07	12	4	
791.5	Evansville	21-Jun-07	88	100	
791.5	Evansville	26-Jun-07	40	4	
		Geometric Mean	29	9	
793.7	Evansville	05-Jun-07	240	40	
793.7	Evansville	12-Jun-07	216	34	
793.7	Evansville	19-Jun-07	650	51	**EXCEEDS**
793.7	Evansville	21-Jun-07	68	12	
793.7	Evansville	26-Jun-07	460	183	**EXCEEDS**
		Geometric Mean	254	43	EXCEEDS
797.3	Evansville	05-Jun-07	310	32	
797.3	Evansville	12-Jun-07	16	12	
797.3	Evansville	19-Jun-07	66	16	
797.3	Evansville	21-Jun-07	30	4	
797.3	Evansville	26-Jun-07	88	20	
		Geometric Mean	61	14	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE		FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	Evansville	02-Jul-07		8	4	
791.5	Evansville	10-Jul-07		12	8	
791.5	Evansville	17-Jul-07		8	4	
791.5	Evansville	24-Jul-07		20	8	
791.5	Evansville	31-Jul-07		16	12	
			Geometric Mean	12	7	
793.7	Evansville	02-Jul-07		300	80	
793.7	Evansville	10-Jul-07		28	12	
793.7	Evansville	17-Jul-07		4	4	
793.7	Evansville	24-Jul-07		470	224	**EXCEEDS**
793.7	Evansville	31-Jul-07		410	144	**EXCEEDS**
			Geometric Mean	92	42	
797.3	Evansville	02-Jul-07		100	30	
797.3	Evansville	10-Jul-07		16	16	
797.3	Evansville	17-Jul-07		44	8	
797.3	Evansville	24-Jul-07		12	4	
797.3	Evansville	31-Jul-07		40	28	
			Geometric Mean	32	13	
791.5	Evansville	07-Aug-07		8	4	
791.5	Evansville	14-Aug-07		7	4	
791.5	Evansville	21-Aug-07		4	4	
791.5	Evansville	23-Aug-07		470	24	**EXCEEDS**
791.5	Evansville	28-Aug-07		500	71	**EXCEEDS**
			Geometric Mean	35	10	
793.7	Evansville	07-Aug-07		600	191	**EXCEEDS**
793.7	Evansville	14-Aug-07		230	180	
793.7	Evansville	21-Aug-07		650	280	**EXCEEDS**
793.7	Evansville	23-Aug-07		1,040	92	**EXCEEDS**
793.7	Evansville	28-Aug-07		457	136	**EXCEEDS**
			Geometric Mean	532	164	**EXCEEDS**
797.3	Evansville	07-Aug-07		28	8	
797.3	Evansville	14-Aug-07		12	4	
797.3	Evansville	21-Aug-07		390	24	
797.3	Evansville	23-Aug-07		230	37	
797.3	Evansville	28-Aug-07		210	36	
			Geometric Mean	91	16	
791.5	Evansville	04-Sep-07		10	28	
791.5	Evansville	11-Sep-07		24	4	
791.5	Evansville	18-Sep-07		4	10	
791.5	Evansville	20-Sep-07		4	4	
791.5	Evansville	25-Sep-07		20	4	
			Geometric Mean	9	7	
793.7	Evansville	04-Sep-07		520	160	**EXCEEDS**
793.7	Evansville	11-Sep-07		470	191	**EXCEEDS**
793.7	Evansville	18-Sep-07		300	108	
793.7	Evansville	20-Sep-07		216	120	
793.7	Evansville	25-Sep-07		10,100	84	**EXCEEDS**
			Geometric Mean	693	127	**EXCEEDS**
797.3	Evansville	04-Sep-07		92	12	
797.3	Evansville	11-Sep-07		60	40	
797.3	Evansville	18-Sep-07		32	4	
797.3	Evansville	20-Sep-07		4	8	
797.3	Evansville	25-Sep-07		6,200	16	**EXCEEDS**
			Geometric Mean	85	12	
791.5	Evansville	02-Oct-07		12	8	
791.5	Evansville	09-Oct-07		24	10	
791.5	Evansville	16-Oct-07		8	4	
791.5	Evansville	23-Oct-07		192	60	
791.5	Evansville	30-Oct-07		130	24	
			Geometric Mean	36	14	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2007

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
793.7	Evansville	02-Oct-07	600	560	**EXCEEDS**
793.7	Evansville	09-Oct-07	192	84	
793.7	Evansville	16-Oct-07	500	223	**EXCEEDS**
793.7	Evansville	23-Oct-07	12,400	7,500	**EXCEEDS**
793.7	Evansville	30-Oct-07	156	57	
		Geometric Mean	645	339	EXCEEDS
797.3	Evansville	02-Oct-07	52	20	
797.3	Evansville	09-Oct-07	56	20	
797.3	Evansville	16-Oct-07	60	50	
797.3	Evansville	23-Oct-07	80	32	
797.3	Evansville	30-Oct-07	136	57	
		Geometric Mean	72	33	

FECAL- Not to exceed 400 in more than 10% of samples taken during month
Not to exceed 200 as a monthly geometric mean (at least 5 samples required)
E.COLI- Not to exceed 240 in any single sample
Not to exceed 130 as a monthly geometric mean (at least 5 samples required)

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	Pittsburgh	06-May-08	120	30	
1.4R	Pittsburgh	13-May-08	2300	1,000	**EXCEEDS**
1.4R	Pittsburgh	20-May-08	1000	350	**EXCEEDS**
1.4R	Pittsburgh	22-May-08	1300	300	**EXCEEDS**
1.4R	Pittsburgh	27-May-08	270	100	
			Geometric Mean 627	199	EXCEEDS
1.4M	Pittsburgh	06-May-08	450	60	**EXCEEDS**
1.4M	Pittsburgh	13-May-08	1,800	1,900	**EXCEEDS**
1.4M	Pittsburgh	20-May-08	1,000	400	**EXCEEDS**
1.4M	Pittsburgh	22-May-08	709	500	**EXCEEDS**
1.4M	Pittsburgh	27-May-08	673	90	**EXCEEDS**
			Geometric Mean 827	290	EXCEEDS
1.4L	Pittsburgh	06-May-08	240	92	
1.4L	Pittsburgh	13-May-08	2,800	1,100	**EXCEEDS**
1.4L	Pittsburgh	20-May-08	1,273	300	**EXCEEDS**
1.4L	Pittsburgh	22-May-08	400	400	**EXCEEDS**
1.4L	Pittsburgh	27-May-08	300	88	
			Geometric Mean 634	255	EXCEEDS
4.3	Pittsburgh	06-May-08	430	60	**EXCEEDS**
4.3	Pittsburgh	13-May-08	3,300	1,100	**EXCEEDS**
4.3	Pittsburgh	20-May-08	800	200	**EXCEEDS**
4.3	Pittsburgh	22-May-08	750	80	**EXCEEDS**
4.3	Pittsburgh	27-May-08	230	71	
			Geometric Mean 722	150	EXCEEDS
1.4R	Pittsburgh	03-Jun-08	1136	400	**EXCEEDS**
1.4R	Pittsburgh	10-Jun-08	570	300	**EXCEEDS**
1.4R	Pittsburgh	17-Jun-08	1500	700	**EXCEEDS**
1.4R	Pittsburgh	19-Jun-08	900	60	**EXCEEDS**
1.4R	Pittsburgh	24-Jun-08	3300	1,700	**EXCEEDS**
			Geometric Mean 1236	386	EXCEEDS
1.4M	Pittsburgh	03-Jun-08	1,091	400	**EXCEEDS**
1.4M	Pittsburgh	10-Jun-08	400	140	
1.4M	Pittsburgh	17-Jun-08	2,100	900	**EXCEEDS**
1.4M	Pittsburgh	19-Jun-08	1,000	340	**EXCEEDS**
1.4M	Pittsburgh	24-Jun-08	2,900	500	**EXCEEDS**
			Geometric Mean 1216	386	EXCEEDS
1.4L	Pittsburgh	03-Jun-08	1,000	800	**EXCEEDS**
1.4L	Pittsburgh	10-Jun-08	550	260	**EXCEEDS**
1.4L	Pittsburgh	17-Jun-08	1,800	1,100	**EXCEEDS**
1.4L	Pittsburgh	19-Jun-08	1,000	360	**EXCEEDS**
1.4L	Pittsburgh	24-Jun-08	3,100	1,200	**EXCEEDS**
			Geometric Mean 1251	629	EXCEEDS
4.3	Pittsburgh	03-Jun-08	973	600	**EXCEEDS**
4.3	Pittsburgh	10-Jun-08	500	130	**EXCEEDS**
4.3	Pittsburgh	17-Jun-08	2,300	1,300	**EXCEEDS**
4.3	Pittsburgh	19-Jun-08	1,500	450	**EXCEEDS**
4.3	Pittsburgh	24-Jun-08	3,500	900	**EXCEEDS**
			Geometric Mean 1425	528	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	Pittsburgh	01-Jul-08	6500	800	**EXCEEDS**
1.4R	Pittsburgh	08-Jul-08	7400	1,300	**EXCEEDS**
1.4R	Pittsburgh	15-Jul-08	310	200	
1.4R	Pittsburgh	22-Jul-08	3500	800	**EXCEEDS**
1.4R	Pittsburgh	29-Jul-08	210	40	
			Geometric Mean 1614	367	EXCEEDS
1.4M	Pittsburgh	01-Jul-08	3,500	700	**EXCEEDS**
1.4M	Pittsburgh	08-Jul-08	8,300	1,200	**EXCEEDS**
1.4M	Pittsburgh	15-Jul-08	236	82	
1.4M	Pittsburgh	22-Jul-08	2,600	600	**EXCEEDS**
1.4M	Pittsburgh	29-Jul-08	230	30	
			Geometric Mean 1326	262	EXCEEDS
1.4L	Pittsburgh	01-Jul-08	5,600	500	**EXCEEDS**
1.4L	Pittsburgh	08-Jul-08	8,900	1,200	**EXCEEDS**
1.4L	Pittsburgh	15-Jul-08	170	73	
1.4L	Pittsburgh	22-Jul-08	4,500	600	**EXCEEDS**
1.4L	Pittsburgh	29-Jul-08	191	50	
			Geometric Mean 1487	265	EXCEEDS
4.3	Pittsburgh	01-Jul-08	5,000	500	**EXCEEDS**
4.3	Pittsburgh	08-Jul-08	7,000	1,000	**EXCEEDS**
4.3	Pittsburgh	15-Jul-08	200	600	**EXCEEDS**
4.3	Pittsburgh	22-Jul-08	3,800	1,100	**EXCEEDS**
4.3	Pittsburgh	29-Jul-08	130	4	
			Geometric Mean 1282	266	EXCEEDS
1.4R	Pittsburgh	05-Aug-08	1200	400	**EXCEEDS**
1.4R	Pittsburgh	12-Aug-08	270	90	
1.4R	Pittsburgh	21-Aug-08	189	40	
1.4R	Pittsburgh	26-Aug-08	270	80	
1.4R	Pittsburgh	28-Aug-08	4500	1700	**EXCEEDS**
			Geometric Mean 595	181	EXCEEDS
1.4M	Pittsburgh	05-Aug-08	5900	1000	**EXCEEDS**
1.4M	Pittsburgh	12-Aug-08	220	60	
1.4M	Pittsburgh	21-Aug-08	171	80	
1.4M	Pittsburgh	26-Aug-08	152	60	
1.4M	Pittsburgh	28-Aug-08	4600	1600	**EXCEEDS**
			Geometric Mean 689	215	EXCEEDS
1.4L	Pittsburgh	05-Aug-08	500	200	**EXCEEDS**
1.4L	Pittsburgh	12-Aug-08	190	70	
1.4L	Pittsburgh	21-Aug-08	420	100	**EXCEEDS**
1.4L	Pittsburgh	26-Aug-08	150	80	
1.4L	Pittsburgh	28-Aug-08	2000	700	**EXCEEDS**
			Geometric Mean 413	151	EXCEEDS
4.3	Pittsburgh	05-Aug-08	209	60	
4.3	Pittsburgh	12-Aug-08	210	100	
4.3	Pittsburgh	21-Aug-08	92	30	
4.3	Pittsburgh	26-Aug-08	190	80	
4.3	Pittsburgh	28-Aug-08	2200	500	**EXCEEDS**
			Geometric Mean 279	94	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	Pittsburgh	02-Sep-08	3600	600	**EXCEEDS**
1.4R	Pittsburgh	09-Sep-08	174	4	
1.4R	Pittsburgh	16-Sep-08	800	250	**EXCEEDS**
1.4R	Pittsburgh	23-Sep-08	269	60	
1.4R	Pittsburgh	30-Sep-08	270	30	
			Geometric Mean 515	64	EXCEEDS
1.4M	Pittsburgh	02-Sep-08	2400	1000	**EXCEEDS**
1.4M	Pittsburgh	09-Sep-08	163	4	
1.4M	Pittsburgh	16-Sep-08	680	220	**EXCEEDS**
1.4M	Pittsburgh	23-Sep-08	217	80	
1.4M	Pittsburgh	30-Sep-08	270	4	
			Geometric Mean 435	49	EXCEEDS
1.4L	Pittsburgh	02-Sep-08	3500	500	**EXCEEDS**
1.4L	Pittsburgh	09-Sep-08	152	4	
1.4L	Pittsburgh	16-Sep-08	818	200	**EXCEEDS**
1.4L	Pittsburgh	23-Sep-08	205	100	
1.4L	Pittsburgh	30-Sep-08	230	30	
			Geometric Mean 460	65	EXCEEDS
4.3	Pittsburgh	02-Sep-08	110	4	
4.3	Pittsburgh	09-Sep-08	92	16	
4.3	Pittsburgh	16-Sep-08	618	50	**EXCEEDS**
4.3	Pittsburgh	23-Sep-08	190	80	
4.3	Pittsburgh	30-Sep-08	120	80	
			Geometric Mean 170	29	
1.4R	Pittsburgh	07-Oct-08	160	70	
1.4R	Pittsburgh	14-Oct-08	140	71	
1.4R	Pittsburgh	21-Oct-08	164	71	
1.4R	Pittsburgh	23-Oct-08	189	40	
1.4R	Pittsburgh	28-Oct-08	4000	1800	**EXCEEDS**
			Geometric Mean 308	121	EXCEEDS
1.4M	Pittsburgh	07-Oct-08	200	31	
1.4M	Pittsburgh	14-Oct-08	140	81	
1.4M	Pittsburgh	21-Oct-08	530	170	**EXCEEDS**
1.4M	Pittsburgh	23-Oct-08	228	254	**EXCEEDS**
1.4M	Pittsburgh	28-Oct-08	3200	1600	**EXCEEDS**
			Geometric Mean 404	177	EXCEEDS
1.4L	Pittsburgh	07-Oct-08	250	43	
1.4L	Pittsburgh	14-Oct-08	240	129	
1.4L	Pittsburgh	21-Oct-08	570	186	**EXCEEDS**
1.4L	Pittsburgh	23-Oct-08	88	46	
1.4L	Pittsburgh	28-Oct-08	1900	900	**EXCEEDS**
			Geometric Mean 356	134	EXCEEDS
4.3	Pittsburgh	07-Oct-08	223	46	
4.3	Pittsburgh	14-Oct-08	63	37	
4.3	Pittsburgh	21-Oct-08	420	190	**EXCEEDS**
4.3	Pittsburgh	23-Oct-08	96	110	
4.3	Pittsburgh	28-Oct-08	3400	800	**EXCEEDS**
			Geometric Mean 286	123	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	Wheeling	06-May-08	112	16	
84.2	Wheeling	13-May-08	2,100	1,800	**EXCEEDS**
84.2	Wheeling	20-May-08	1,245	570	**EXCEEDS**
84.2	Wheeling	22-May-08	681	168	**EXCEEDS**
84.2	Wheeling	27-May-08	203	80	
			Geometric Mean 527	186	EXCEEDS
86.8	Wheeling	06-May-08	40	8	
86.8	Wheeling	13-May-08	5,100	2,500	**EXCEEDS**
86.8	Wheeling	20-May-08	3,500	1,030	**EXCEEDS**
86.8	Wheeling	22-May-08	468	437	**EXCEEDS**
86.8	Wheeling	27-May-08	60	20	
			Geometric Mean 458	178	EXCEEDS
91.4	Wheeling	06-May-08	80	4	
91.4	Wheeling	13-May-08	3,000	1,000	**EXCEEDS**
91.4	Wheeling	20-May-08	4,100	990	**EXCEEDS**
91.4	Wheeling	22-May-08	972	230	**EXCEEDS**
91.4	Wheeling	27-May-08	177	32	
			Geometric Mean 701	124	EXCEEDS
92.8	Wheeling	06-May-08	146	76	
92.8	Wheeling	13-May-08	3,400	980	**EXCEEDS**
92.8	Wheeling	20-May-08	10,100	6,600	**EXCEEDS**
92.8	Wheeling	22-May-08	570	450	**EXCEEDS**
92.8	Wheeling	27-May-08	200	216	
			Geometric Mean 894	544	EXCEEDS
84.2	Wheeling	03-Jun-08	40	20	
84.2	Wheeling	10-Jun-08	72	10,200	**EXCEEDS**
84.2	Wheeling	17-Jun-08	306	232	
84.2	Wheeling	19-Jun-08	144	2,000	**EXCEEDS**
84.2	Wheeling	24-Jun-08	7	20	
			Geometric Mean 62	285	EXCEEDS
86.8	Wheeling	03-Jun-08	32	4	
86.8	Wheeling	10-Jun-08	210	491	**EXCEEDS**
86.8	Wheeling	17-Jun-08	140	80	
86.8	Wheeling	19-Jun-08	72	460	**EXCEEDS**
86.8	Wheeling	24-Jun-08	36	40	
			Geometric Mean 75	78	
91.4	Wheeling	03-Jun-08	1,820	36	**EXCEEDS**
91.4	Wheeling	10-Jun-08	5,400	3,100	**EXCEEDS**
91.4	Wheeling	17-Jun-08	76	92	
91.4	Wheeling	19-Jun-08	44	1,045	**EXCEEDS**
91.4	Wheeling	24-Jun-08	200	76	
			Geometric Mean 366	241	EXCEEDS
92.8	Wheeling	03-Jun-08	132	116	
92.8	Wheeling	10-Jun-08	18,500	20,000	**EXCEEDS**
92.8	Wheeling	17-Jun-08	188	350	**EXCEEDS**
92.8	Wheeling	19-Jun-08	231	3,500	**EXCEEDS**
92.8	Wheeling	24-Jun-08	520	172	**EXCEEDS**
			Geometric Mean 560	867	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	Wheeling	01-Jul-08	1,800	380	**EXCEEDS**
84.2	Wheeling	08-Jul-08	188	92	
84.2	Wheeling	15-Jul-08	36	36	
84.2	Wheeling	22-Jul-08	120	120	
84.2	Wheeling	29-Jul-08	4	28	
			Geometric Mean 90	84	
86.8	Wheeling	01-Jul-08	1,400	709	**EXCEEDS**
86.8	Wheeling	08-Jul-08	208	56	
86.8	Wheeling	15-Jul-08	32	24	
86.8	Wheeling	22-Jul-08	328	36	
86.8	Wheeling	29-Jul-08	4	8	
			Geometric Mean 104	49	
91.4	Wheeling	01-Jul-08	900	681	**EXCEEDS**
91.4	Wheeling	08-Jul-08	460	257	**EXCEEDS**
91.4	Wheeling	15-Jul-08	24	16	
91.4	Wheeling	22-Jul-08	271	84	
91.4	Wheeling	29-Jul-08	8	4	
			Geometric Mean 117	62	
92.8	Wheeling	01-Jul-08	8,600	2,600	**EXCEEDS**
92.8	Wheeling	08-Jul-08	228	310	**EXCEEDS**
92.8	Wheeling	15-Jul-08	80	74	
92.8	Wheeling	22-Jul-08	13,800	4,800	**EXCEEDS**
92.8	Wheeling	29-Jul-08	204	112	
			Geometric Mean 849	503	EXCEEDS
84.2	Wheeling	05-Aug-08	36	32	
84.2	Wheeling	12-Aug-08	28	4	
84.2	Wheeling	19-Aug-08	16	28	
84.2	Wheeling	21-Aug-08	40	4	
84.2	Wheeling	26-Aug-08	4	32	
			Geometric Mean 19	14	
86.8	Wheeling	05-Aug-08	240	88	
86.8	Wheeling	12-Aug-08	4	4	
86.8	Wheeling	19-Aug-08	12	8	
86.8	Wheeling	21-Aug-08	12	4	
86.8	Wheeling	26-Aug-08	4	16	
			Geometric Mean 14	11	
91.4	Wheeling	05-Aug-08	120	64	
91.4	Wheeling	12-Aug-08	12	4	
91.4	Wheeling	19-Aug-08	10	4	
91.4	Wheeling	21-Aug-08	8	10	
91.4	Wheeling	26-Aug-08	4	8	
			Geometric Mean 14	10	
92.8	Wheeling	05-Aug-08	4,000	2,800	**EXCEEDS**
92.8	Wheeling	12-Aug-08	331	36	
92.8	Wheeling	19-Aug-08	52	16	
92.8	Wheeling	21-Aug-08	52	8	
92.8	Wheeling	26-Aug-08	8	8	
			Geometric Mean 123	40	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	Wheeling	02-Sep-08	40	20	
84.2	Wheeling	09-Sep-08	92	176	
84.2	Wheeling	16-Sep-08	320	88	
84.2	Wheeling	23-Sep-08	60	84	
84.2	Wheeling	30-Sep-08	96	12	
			Geometric Mean 93	50	
86.8	Wheeling	02-Sep-08	60	10	
86.8	Wheeling	09-Sep-08	4	8	
86.8	Wheeling	16-Sep-08	160	60	
86.8	Wheeling	23-Sep-08	28	16	
86.8	Wheeling	30-Sep-08	12	8	
			Geometric Mean 26	14	
91.4	Wheeling	02-Sep-08	4	4	
91.4	Wheeling	09-Sep-08	350	100	
91.4	Wheeling	16-Sep-08	128	120	
91.4	Wheeling	23-Sep-08	20	12	
91.4	Wheeling	30-Sep-08	317	16	
			Geometric Mean 65	25	
92.8	Wheeling	02-Sep-08	32	12	
92.8	Wheeling	09-Sep-08	420	208	**EXCEEDS**
92.8	Wheeling	16-Sep-08	420	374	**EXCEEDS**
92.8	Wheeling	23-Sep-08	28	4	
92.8	Wheeling	30-Sep-08	870	20	**EXCEEDS**
			Geometric Mean 169	38	
84.2	Wheeling	07-Oct-08	56	168	
84.2	Wheeling	14-Oct-08	28	32	
84.2	Wheeling	21-Oct-08	32	8	
84.2	Wheeling	23-Oct-08	44	12	
84.2	Wheeling	28-Oct-08	52	12	
			Geometric Mean 41	23	
86.8	Wheeling	07-Oct-08	28	40	
86.8	Wheeling	14-Oct-08	12	8	
86.8	Wheeling	21-Oct-08	20	12	
86.8	Wheeling	23-Oct-08	36	8	
86.8	Wheeling	28-Oct-08	16	8	
			Geometric Mean 21	12	
91.4	Wheeling	07-Oct-08	470	7,300	**EXCEEDS**
91.4	Wheeling	14-Oct-08	24	8	
91.4	Wheeling	21-Oct-08	16	8	
91.4	Wheeling	23-Oct-08	8	4	
91.4	Wheeling	28-Oct-08	8	4	
			Geometric Mean 26	24	
92.8	Wheeling	07-Oct-08	44	710	**EXCEEDS**
92.8	Wheeling	14-Oct-08	8	4	
92.8	Wheeling	21-Oct-08	40	20	
92.8	Wheeling	23-Oct-08	32	16	
92.8	Wheeling	28-Oct-08	20	20	
			Geometric Mean 25	28	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	Huntington	06-May-08	240	30	
305.1	Huntington	13-May-08	600	553	**EXCEEDS**
305.1	Huntington	20-May-08	176	104	
305.1	Huntington	22-May-08	330	220	
305.1	Huntington	27-May-08	48	32	
			Geometric Mean 209	104	EXCEEDS
308.1	Huntington	06-May-08	200	36	
308.1	Huntington	13-May-08	664	510	**EXCEEDS**
308.1	Huntington	20-May-08	782	520	**EXCEEDS**
308.1	Huntington	22-May-08	283	237	
308.1	Huntington	27-May-08	96	44	
			Geometric Mean 309	158	EXCEEDS
314.8	Huntington	06-May-08	310	66	
314.8	Huntington	13-May-08	370	310	**EXCEEDS**
314.8	Huntington	20-May-08	673	480	**EXCEEDS**
314.8	Huntington	22-May-08	430	410	**EXCEEDS**
314.8	Huntington	27-May-08	251	220	
			Geometric Mean 384	245	EXCEEDS
305.1	Huntington	03-Jun-08	234	174	
305.1	Huntington	10-Jun-08	440	226	**EXCEEDS**
305.1	Huntington	17-Jun-08	88	71	
305.1	Huntington	19-Jun-08	112	46	
305.1	Huntington	24-Jun-08	177	63	
			Geometric Mean 178	96	
308.1	Huntington	03-Jun-08	152	76	
308.1	Huntington	10-Jun-08	220	164	
308.1	Huntington	17-Jun-08	290	156	
308.1	Huntington	19-Jun-08	152	28	
308.1	Huntington	24-Jun-08	189	94	
			Geometric Mean 195	87	
314.8	Huntington	03-Jun-08	540	243	**EXCEEDS**
314.8	Huntington	10-Jun-08	818	550	**EXCEEDS**
314.8	Huntington	17-Jun-08	320	120	
314.8	Huntington	19-Jun-08	189	88	
314.8	Huntington	24-Jun-08	154	60	
			Geometric Mean 333	153	EXCEEDS
305.1	Huntington	01-Jul-08	820	420	**EXCEEDS**
305.1	Huntington	08-Jul-08	120	52	
305.1	Huntington	15-Jul-08	32	16	
305.1	Huntington	22-Jul-08	8	4	
305.1	Huntington	29-Jul-08	8	4	
			Geometric Mean 46	22	
308.1	Huntington	01-Jul-08	12,100	9,200	**EXCEEDS**
308.1	Huntington	08-Jul-08	570	231	**EXCEEDS**
308.1	Huntington	15-Jul-08	540	237	**EXCEEDS**
308.1	Huntington	22-Jul-08	1,445	773	**EXCEEDS**
308.1	Huntington	29-Jul-08	52	24	
			Geometric Mean 775	393	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
314.8	Huntington	01-Jul-08	214	128	
314.8	Huntington	08-Jul-08	144	116	
314.8	Huntington	15-Jul-08	186	54	
314.8	Huntington	22-Jul-08	143	48	
314.8	Huntington	29-Jul-08	32	8	
			Geometric Mean 121	50	
305.1	Huntington	05-Aug-08	32	4	
305.1	Huntington	12-Aug-08	4	4	
305.1	Huntington	19-Aug-08	4	4	
305.1	Huntington	21-Aug-08	4	4	
305.1	Huntington	26-Aug-08	4	4	
			Geometric Mean 6	4	
308.1	Huntington	05-Aug-08	991	645	**EXCEEDS**
308.1	Huntington	12-Aug-08	1,600	243	**EXCEEDS**
308.1	Huntington	19-Aug-08	183	80	
308.1	Huntington	21-Aug-08	126	114	
308.1	Huntington	26-Aug-08	149	86	
			Geometric Mean 353	165	EXCEEDS
314.8	Huntington	05-Aug-08	12	4	
314.8	Huntington	12-Aug-08	20	16	
314.8	Huntington	19-Aug-08	57	20	
314.8	Huntington	21-Aug-08	32	4	
314.8	Huntington	26-Aug-08	12	4	
			Geometric Mean 22	7	
305.1	Huntington	02-Sep-08	12	4	
305.1	Huntington	09-Sep-08	4	4	
305.1	Huntington	16-Sep-08	4	4	
305.1	Huntington	23-Sep-08	20	8	
305.1	Huntington	30-Sep-08	4	4	
			Geometric Mean 7	5	
308.1	Huntington	02-Sep-08	84	63	
308.1	Huntington	09-Sep-08	350	186	
308.1	Huntington	16-Sep-08	16	4	
308.1	Huntington	23-Sep-08	57	40	
308.1	Huntington	30-Sep-08	86	100	
			Geometric Mean 75	45	
314.8	Huntington	02-Sep-08	128	80	
314.8	Huntington	09-Sep-08	4	4	
314.8	Huntington	16-Sep-08	48	32	
314.8	Huntington	23-Sep-08	49	40	
314.8	Huntington	30-Sep-08	40	4	
			Geometric Mean 34	17	
305.1	Huntington	07-Oct-08	8	8	
305.1	Huntington	14-Oct-08	4	4	
305.1	Huntington	21-Oct-08	4	4	
305.1	Huntington	23-Oct-08	8	4	
305.1	Huntington	28-Oct-08	4	4	
			Geometric Mean 5	5	
308.1	Huntington	07-Oct-08	54	20	
308.1	Huntington	14-Oct-08	103	16	
308.1	Huntington	21-Oct-08	28	20	
308.1	Huntington	23-Oct-08	46	12	
308.1	Huntington	28-Oct-08	24	8	
			Geometric Mean 44	14	
314.8	Huntington	07-Oct-08	100	74	
314.8	Huntington	14-Oct-08	4	4	
314.8	Huntington	21-Oct-08	32	12	
314.8	Huntington	23-Oct-08	12	4	
314.8	Huntington	28-Oct-08	66	20	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 25	12	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	Cincinnati	06-May-08	16	4	
462.6	Cincinnati	13-May-08	188	120	
462.6	Cincinnati	20-May-08	654	460	**EXCEEDS**
462.6	Cincinnati	22-May-08	170	250	**EXCEEDS**
462.6	Cincinnati	27-May-08	56	44	
			Geometric Mean 113	75	
463.9	Cincinnati AquaRamp	06-May-08	4	4	
463.9	Cincinnati AquaRamp	13-May-08	160	116	
463.9	Cincinnati AquaRamp	20-May-08	550	212	**EXCEEDS**
463.9	Cincinnati AquaRamp	22-May-08	480	300	**EXCEEDS**
463.9	Cincinnati AquaRamp	27-May-08	44	44	
			Geometric Mean 94	66	
469.9	Cincinnati Who-Dey Dock	06-May-08	4	4	
469.9	Cincinnati Who-Dey Dock	13-May-08	210	130	
469.9	Cincinnati Who-Dey Dock	20-May-08	500	460	**EXCEEDS**
469.9	Cincinnati Who-Dey Dock	22-May-08	360	290	**EXCEEDS**
469.9	Cincinnati Who-Dey Dock	27-May-08	116	31	
			Geometric Mean 112	74	
470	Cincinnati	06-May-08	100	36	
470	Cincinnati	13-May-08	260	208	
470	Cincinnati	20-May-08	2,000	745	**EXCEEDS**
470	Cincinnati	22-May-08	460	430	**EXCEEDS**
470	Cincinnati	27-May-08	104	80	
			Geometric Mean 301	181	EXCEEDS
477.5	Cincinnati	06-May-08	24	8	
477.5	Cincinnati	13-May-08	470	220	**EXCEEDS**
477.5	Cincinnati	20-May-08	2,200	800	**EXCEEDS**
477.5	Cincinnati	22-May-08	780	580	**EXCEEDS**
477.5	Cincinnati	27-May-08	228	66	
			Geometric Mean 338	140	EXCEEDS
462.6	Cincinnati	03-Jun-08	32	60	
462.6	Cincinnati	10-Jun-08	827	650	**EXCEEDS**
462.6	Cincinnati	17-Jun-08	71	100	
462.6	Cincinnati	19-Jun-08	63	64	
462.6	Cincinnati	24-Jun-08	46	40	
			Geometric Mean 89	100	
463.9	Cincinnati AquaRamp	03-Jun-08	48	12	
463.9	Cincinnati AquaRamp	10-Jun-08	410	380	**EXCEEDS**
463.9	Cincinnati AquaRamp	17-Jun-08	43	60	
463.9	Cincinnati AquaRamp	19-Jun-08	48	24	
463.9	Cincinnati AquaRamp	24-Jun-08	40	20	
			Geometric Mean 70	42	
469.9	Cincinnati Who-Dey Dock	03-Jun-08	20	16	
469.9	Cincinnati Who-Dey Dock	10-Jun-08	274	200	
469.9	Cincinnati Who-Dey Dock	17-Jun-08	80	88	
469.9	Cincinnati Who-Dey Dock	19-Jun-08	71	48	
469.9	Cincinnati Who-Dey Dock	24-Jun-08	112	68	
			Geometric Mean 81	62	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
470	Cincinnati	03-Jun-08	140	52	
470	Cincinnati	10-Jun-08	954	709	**EXCEEDS**
470	Cincinnati	17-Jun-08	84	76	
470	Cincinnati	19-Jun-08	620	270	**EXCEEDS**
470	Cincinnati	24-Jun-08	80	20	
			Geometric Mean 223	109	EXCEEDS
477.5	Cincinnati	03-Jun-08	34	12	
477.5	Cincinnati	10-Jun-08	5,200	400	**EXCEEDS**
477.5	Cincinnati	17-Jun-08	144	124	
477.5	Cincinnati	19-Jun-08	136	80	
477.5	Cincinnati	24-Jun-08	80	40	
			Geometric Mean 194	72	
462.6	Cincinnati	01-Jul-08	120	52	
462.6	Cincinnati	08-Jul-08	60	40	
462.6	Cincinnati	15-Jul-08	36	36	
462.6	Cincinnati	22-Jul-08	140	77	
462.6	Cincinnati	29-Jul-08	24	40	
			Geometric Mean 61	47	
463.9	Cincinnati AquaRamp	01-Jul-08	12	12	
463.9	Cincinnati AquaRamp	08-Jul-08	63	8	
463.9	Cincinnati AquaRamp	18-Jul-08	24	8	
463.9	Cincinnati AquaRamp	22-Jul-08	24	4	
463.9	Cincinnati AquaRamp	29-Jul-08	4	4	
			Geometric Mean 18	7	
469.9	Cincinnati Who-Dey Dock	01-Jul-08	104	34	
469.9	Cincinnati Who-Dey Dock	08-Jul-08	124	48	
469.9	Cincinnati Who-Dey Dock	15-Jul-08	144	112	
469.9	Cincinnati Who-Dey Dock	22-Jul-08	6,400	2,500	**EXCEEDS**
469.9	Cincinnati Who-Dey Dock	29-Jul-08	80	84	
			Geometric Mean 249	131	EXCEEDS
470	Cincinnati	01-Jul-08	108	54	
470	Cincinnati	08-Jul-08	68	44	
470	Cincinnati	15-Jul-08	144	40	
470	Cincinnati	22-Jul-08	736	271	**EXCEEDS**
470	Cincinnati	29-Jul-08	32	16	
			Geometric Mean 120	53	
477.5	Cincinnati	01-Jul-08	64	4	
477.5	Cincinnati	08-Jul-08	112	46	
477.5	Cincinnati	15-Jul-08	56	44	
477.5	Cincinnati	22-Jul-08	1,300	420	**EXCEEDS**
477.5	Cincinnati	29-Jul-08	220	68	
			Geometric Mean 163	47	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	Cincinnati	05-Aug-08	20	16	
462.6	Cincinnati	12-Aug-08	4	8	
462.6	Cincinnati	19-Aug-08	32	24	
462.6	Cincinnati	21-Aug-08	8	4	
462.6	Cincinnati	26-Aug-08	4	8	
			Geometric Mean 10	10	
463.9	Cincinnati AquaRamp	05-Aug-08	8	4	
463.9	Cincinnati AquaRamp	12-Aug-08	4	4	
463.9	Cincinnati AquaRamp	19-Aug-08	180	203	
463.9	Cincinnati AquaRamp	21-Aug-08	12	4	
463.9	Cincinnati AquaRamp	26-Aug-08	31	16	
			Geometric Mean 18	12	
469.9	Cincinnati Who-Dey Dock	05-Aug-08	3,800	1,800	**EXCEEDS**
469.9	Cincinnati Who-Dey Dock	12-Aug-08	4	16	
469.9	Cincinnati Who-Dey Dock	19-Aug-08	4	4	
469.9	Cincinnati Who-Dey Dock	21-Aug-08	4	4	
469.9	Cincinnati Who-Dey Dock	26-Aug-08	8	8	
			Geometric Mean 18	21	
470	Cincinnati	05-Aug-08	7,000	4,700	**EXCEEDS**
470	Cincinnati	12-Aug-08	8	20	
470	Cincinnati	19-Aug-08	8	24	
470	Cincinnati	21-Aug-08	4	4	
470	Cincinnati	26-Aug-08	32	4	
			Geometric Mean 36	32	
477.5	Cincinnati	05-Aug-08	60	12	
477.5	Cincinnati	12-Aug-08	40	24	
477.5	Cincinnati	19-Aug-08	40	12	
477.5	Cincinnati	21-Aug-08	12	8	
477.5	Cincinnati	26-Aug-08	52	4	
			Geometric Mean 36	10	
462.6	Cincinnati	02-Sep-08	4	8	
462.6	Cincinnati	09-Sep-08	4	4	
462.6	Cincinnati	16-Sep-08	4	8	
462.6	Cincinnati	23-Sep-08	12	4	
462.6	Cincinnati	30-Sep-08	8	16	
			Geometric Mean 6	7	
463.9	Cincinnati AquaRamp	02-Sep-08	192	96	
463.9	Cincinnati AquaRamp	09-Sep-08	4	4	
463.9	Cincinnati AquaRamp	16-Sep-08	4	4	
463.9	Cincinnati AquaRamp	23-Sep-08	8	4	
463.9	Cincinnati AquaRamp	30-Sep-08	24	16	
			Geometric Mean 14	10	
469.9	Cincinnati Who-Dey Dock	02-Sep-08	12	16	
469.9	Cincinnati Who-Dey Dock	09-Sep-08	16	12	
469.9	Cincinnati Who-Dey Dock	16-Sep-08	12	12	
469.9	Cincinnati Who-Dey Dock	23-Sep-08	4	12	
469.9	Cincinnati Who-Dey Dock	30-Sep-08	670	300	
			Geometric Mean 23	24	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
470	Cincinnati	02-Sep-08	150	80	
470	Cincinnati	09-Sep-08	28	16	
470	Cincinnati	16-Sep-08	28	12	
470	Cincinnati	23-Sep-08	12	4	
470	Cincinnati	30-Sep-08	3,200	1,020	**EXCEEDS**
			Geometric Mean 85	36	
477.5	Cincinnati	02-Sep-08	188	28	
477.5	Cincinnati	09-Sep-08	56	12	
477.5	Cincinnati	16-Sep-08	6,500	1,200	**EXCEEDS**
477.5	Cincinnati	23-Sep-08	88	4	
477.5	Cincinnati	30-Sep-08	882	320	**EXCEEDS**
			Geometric Mean 351	55	EXCEEDS
462.6	Cincinnati	07-Oct-08	4	4	
462.6	Cincinnati	14-Oct-08	40	8	
462.6	Cincinnati	21-Oct-08	4	12	
462.6	Cincinnati	28-Oct-08	4	4	
462.6	Cincinnati	30-Oct-08	4	4	
			Geometric Mean 6	6	
463.9	Cincinnati AquaRamp	07-Oct-08	4	4	
463.9	Cincinnati AquaRamp	14-Oct-08	4	4	
463.9	Cincinnati AquaRamp	21-Oct-08	4	4	
463.9	Cincinnati AquaRamp	28-Oct-08	4	8	
463.9	Cincinnati AquaRamp	30-Oct-08	4	4	
			Geometric Mean 4	5	
469.9	Cincinnati Who-Dey Dock	07-Oct-08	8	8	
469.9	Cincinnati Who-Dey Dock	14-Oct-08	8	4	
469.9	Cincinnati Who-Dey Dock	21-Oct-08	16	16	
469.9	Cincinnati Who-Dey Dock	28-Oct-08	16	36	
469.9	Cincinnati Who-Dey Dock	30-Oct-08	54	86	
			Geometric Mean 15	17	
470	Cincinnati	07-Oct-08	36	20	
470	Cincinnati	14-Oct-08	48	24	
470	Cincinnati	21-Oct-08	36	8	
470	Cincinnati	28-Oct-08	32	40	
470	Cincinnati	30-Oct-08	20	8	
			Geometric Mean 33	17	
477.5	Cincinnati	07-Oct-08	40	4	
477.5	Cincinnati	14-Oct-08	24	4	
477.5	Cincinnati	21-Oct-08	132	96	
477.5	Cincinnati	28-Oct-08	248	124	
477.5	Cincinnati	30-Oct-08	168	57	
			Geometric Mean 88	26	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	Louisville	06-May-08	530	270	**EXCEEDS**
594	Louisville	13-May-08	136	75	
594	Louisville	20-May-08	390	350	**EXCEEDS**
594	Louisville	27-May-08	80	112	
594	Louisville	29-May-08	28	16	
			Geometric Mean 144	105	
608.7	Louisville	06-May-08	116	54	
608.7	Louisville	13-May-08	220	210	
608.7	Louisville	20-May-08	370	360	**EXCEEDS**
608.7	Louisville	27-May-08	74	60	
608.7	Louisville	29-May-08	48	12	
			Geometric Mean 127	78	
619.3	Louisville	06-May-08	200	36	
619.3	Louisville	13-May-08	200	150	
619.3	Louisville	20-May-08	1,010	1,150	**EXCEEDS**
619.3	Louisville	27-May-08	124	156	
619.3	Louisville	29-May-08	764	182	**EXCEEDS**
			Geometric Mean 329	178	EXCEEDS
594	Louisville	03-Jun-08	4	4	
594	Louisville	10-Jun-08	3,700	2,100	**EXCEEDS**
594	Louisville	12-Jun-08	550	190	**EXCEEDS**
594	Louisville	17-Jun-08	340	244	**EXCEEDS**
594	Louisville	19-Jun-08	183	49	
			Geometric Mean 219	114	EXCEEDS
608.7	Louisville	03-Jun-08	28	4	
608.7	Louisville	10-Jun-08	5,200	4,000	**EXCEEDS**
608.7	Louisville	12-Jun-08	2,000	610	**EXCEEDS**
608.7	Louisville	17-Jun-08	4,200	4,200	**EXCEEDS**
608.7	Louisville	19-Jun-08	92	29	
			Geometric Mean 646	260	EXCEEDS
619.3	Louisville	03-Jun-08	16	8	
619.3	Louisville	10-Jun-08	3,800	2,400	**EXCEEDS**
619.3	Louisville	12-Jun-08	3,200	1,600	**EXCEEDS**
619.3	Louisville	17-Jun-08	194	74	
619.3	Louisville	19-Jun-08	151	80	
			Geometric Mean 356	179	EXCEEDS
594	Louisville	01-Jul-08	16	8	
594	Louisville	09-Jul-08	184	156	
594	Louisville	15-Jul-08	66	32	
594	Louisville	23-Jul-08	8	4	
594	Louisville	29-Jul-08	12	4	
			Geometric Mean 28	14	
608.7	Louisville	01-Jul-08	92	16	
608.7	Louisville	09-Jul-08	226	16	
608.7	Louisville	15-Jul-08	28	20	
608.7	Louisville	23-Jul-08	43	8	
608.7	Louisville	29-Jul-08	20	10	
			Geometric Mean 55	13	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
619.3	Louisville	01-Jul-08	220	40	
619.3	Louisville	09-Jul-08	96	28	
619.3	Louisville	15-Jul-08	6,500	4,000	**EXCEEDS**
619.3	Louisville	23-Jul-08	246	88	
619.3	Louisville	29-Jul-08	317	120	
			Geometric Mean 404	136	EXCEEDS
594	Louisville	05-Aug-08	32	4	
594	Louisville	12-Aug-08	4	4	
594	Louisville	19-Aug-08	4	4	
594	Louisville	26-Aug-08	48	20	
594	Louisville	28-Aug-08	6	4	
			Geometric Mean 11	6	
608.7	Louisville	05-Aug-08	28	4	
608.7	Louisville	12-Aug-08	17	14	
608.7	Louisville	19-Aug-08	8	4	
608.7	Louisville	26-Aug-08	6	12	
608.7	Louisville	28-Aug-08	4	8	
			Geometric Mean 10	7	
619.3	Louisville	05-Aug-08	3,400	200	**EXCEEDS**
619.3	Louisville	12-Aug-08	92	66	
619.3	Louisville	19-Aug-08	20	4	
619.3	Louisville	26-Aug-08	1,700	1,100	**EXCEEDS**
619.3	Louisville	28-Aug-08	154	100	
			Geometric Mean 277	90	EXCEEDS
594	Louisville	02-Sep-08	112	43	
594	Louisville	10-Sep-08	48	4	
594	Louisville	16-Sep-08	8	10	
594	Louisville	23-Sep-08	6	4	
594	Louisville	30-Sep-08	16	4	
			Geometric Mean 21	8	
608.7	Louisville	02-Sep-08	20	16	
608.7	Louisville	10-Sep-08	180	128	
608.7	Louisville	16-Sep-08	40	10	
608.7	Louisville	23-Sep-08	9	9	
608.7	Louisville	30-Sep-08	77	12	
			Geometric Mean 40	19	
619.3	Louisville	02-Sep-08	13,200	10,700	**EXCEEDS**
619.3	Louisville	10-Sep-08	100	71	
619.3	Louisville	16-Sep-08	918	57	**EXCEEDS**
619.3	Louisville	23-Sep-08	11	8	
619.3	Louisville	30-Sep-08	20,000	19,000	**EXCEEDS**
			Geometric Mean 768	366	EXCEEDS
594	Louisville	09-Oct-08	4	12	
594	Louisville	15-Oct-08	71	4	
594	Louisville	21-Oct-08	50	40	
594	Louisville	28-Oct-08	24	4	
594	Louisville	30-Oct-08	22	9	
			Geometric Mean 24	9	
608.7	Louisville	09-Oct-08	8	8	
608.7	Louisville	15-Oct-08	20	4	
608.7	Louisville	21-Oct-08	214	223	
608.7	Louisville	28-Oct-08	132	140	
608.7	Louisville	30-Oct-08	60	20	
			Geometric Mean 49	29	
619.3	Louisville	09-Oct-08	23,000	13,000	**EXCEEDS**
619.3	Louisville	15-Oct-08	168	28	
619.3	Louisville	21-Oct-08	228	217	
619.3	Louisville	28-Oct-08	257	211	
619.3	Louisville	30-Oct-08	410	330	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 622	353	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	Evansville	06-May-08	250	148	
791.5	Evansville	13-May-08	250	68	
791.5	Evansville	20-May-08	480	176	**EXCEEDS**
791.5	Evansville	22-May-08	104	32	
791.5	Evansville	27-May-08	480	150	**EXCEEDS**
			Geometric Mean 272	97	EXCEEDS
793.7	Evansville	06-May-08	310	92	
793.7	Evansville	13-May-08	340	92	
793.7	Evansville	20-May-08	600	211	**EXCEEDS**
793.7	Evansville	22-May-08	144	80	
793.7	Evansville	27-May-08	982	531	**EXCEEDS**
			Geometric Mean 389	150	EXCEEDS
797.3	Evansville	06-May-08	140	104	
797.3	Evansville	13-May-08	230	70	
797.3	Evansville	20-May-08	440	330	**EXCEEDS**
797.3	Evansville	22-May-08	160	20	
797.3	Evansville	27-May-08	1,036	590	**EXCEEDS**
			Geometric Mean 298	123	EXCEEDS
791.5	Evansville	03-Jun-08	104	60	
791.5	Evansville	10-Jun-08	609	200	**EXCEEDS**
791.5	Evansville	17-Jun-08	211	164	
791.5	Evansville	19-Jun-08	112	72	
791.5	Evansville	24-Jun-08	20	36	
			Geometric Mean 125	87	
793.7	Evansville	03-Jun-08	177	60	
793.7	Evansville	10-Jun-08	600	410	**EXCEEDS**
793.7	Evansville	17-Jun-08	220	231	
793.7	Evansville	19-Jun-08	164	80	
793.7	Evansville	24-Jun-08	196	140	
			Geometric Mean 237	145	EXCEEDS
797.3	Evansville	03-Jun-08	480	290	**EXCEEDS**
797.3	Evansville	10-Jun-08	425	470	**EXCEEDS**
797.3	Evansville	17-Jun-08	430	230	**EXCEEDS**
797.3	Evansville	19-Jun-08	180	84	
797.3	Evansville	24-Jun-08	100	57	
			Geometric Mean 275	172	EXCEEDS
791.5	Evansville	01-Jul-08	66	28	
791.5	Evansville	08-Jul-08	180	36	
791.5	Evansville	15-Jul-08	24	16	
791.5	Evansville	22-Jul-08	46	4	
791.5	Evansville	29-Jul-08	88	16	
			Geometric Mean 65	16	
793.7	Evansville	01-Jul-08	745	420	**EXCEEDS**
793.7	Evansville	08-Jul-08	1,000	580	**EXCEEDS**
793.7	Evansville	15-Jul-08	210	124	
793.7	Evansville	22-Jul-08	140	60	
793.7	Evansville	29-Jul-08	12	4	
			Geometric Mean 192	94	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
797.3	Evansville	01-Jul-08	160	28	
797.3	Evansville	08-Jul-08	1,130	420	EXCEEDS
797.3	Evansville	15-Jul-08	72	44	
797.3	Evansville	22-Jul-08	12	4	
797.3	Evansville	29-Jul-08	18	28	
			Geometric Mean 78	36	
791.5	Evansville	05-Aug-08	16	8	
791.5	Evansville	12-Aug-08	4	12	
791.5	Evansville	19-Aug-08	4	4	
791.5	Evansville	21-Aug-08	4	4	
791.5	Evansville	26-Aug-08	4	4	
			Geometric Mean 5	6	
793.7	Evansville	05-Aug-08	48	50	
793.7	Evansville	12-Aug-08	20	10	
793.7	Evansville	19-Aug-08	20	28	
793.7	Evansville	21-Aug-08	148	20	
793.7	Evansville	26-Aug-08	104	64	
			Geometric Mean 49	28	
797.3	Evansville	05-Aug-08	24	4	
797.3	Evansville	12-Aug-08	12	60	
797.3	Evansville	19-Aug-08	4	4	
797.3	Evansville	21-Aug-08	60	8	
797.3	Evansville	26-Aug-08	24	20	
			Geometric Mean 18	11	
791.5	Evansville	02-Sep-08	4	12	
791.5	Evansville	09-Sep-08	4	4	
791.5	Evansville	16-Sep-08	4	12	
791.5	Evansville	23-Sep-08	10	4	
791.5	Evansville	30-Sep-08	4	4	
			Geometric Mean 5	6	
793.7	Evansville	02-Sep-08	84	68	
793.7	Evansville	09-Sep-08	370	80	
793.7	Evansville	16-Sep-08	660	660	EXCEEDS
793.7	Evansville	23-Sep-08	28	28	
793.7	Evansville	30-Sep-08	11,400	9,400	EXCEEDS
			Geometric Mean 366	248	EXCEEDS
797.3	Evansville	02-Sep-08	8	8	
797.3	Evansville	09-Sep-08	20	4	
797.3	Evansville	16-Sep-08	24	24	
797.3	Evansville	23-Sep-08	4	4	
797.3	Evansville	30-Sep-08	24	8	
			Geometric Mean 13	8	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2008

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	Evansville	07-Oct-08	4	20	
791.5	Evansville	14-Oct-08	4	8	
791.5	Evansville	21-Oct-08	4	4	
791.5	Evansville	23-Oct-08	16	24	
791.5	Evansville	28-Oct-08	10	8	
			Geometric Mean 6	10	
793.7	Evansville	07-Oct-08	28	20	
793.7	Evansville	14-Oct-08	48	48	
793.7	Evansville	21-Oct-08	200	260	**EXCEEDS**
793.7	Evansville	23-Oct-08	12	8	
793.7	Evansville	28-Oct-08	12	16	
			Geometric Mean 33	32	
797.3	Evansville	07-Oct-08	4	12	
797.3	Evansville	14-Oct-08	20	4	
797.3	Evansville	21-Oct-08	32	12	
797.3	Evansville	23-Oct-08	4	8	
797.3	Evansville	28-Oct-08	10	4	
			Geometric Mean 10	7	

FECAL- Not to exceed 400 in more than 10% of samples taken during month
Not to exceed 200 as a monthly geometric mean (at least 5 samples required)
E.COLI- Not to exceed 240 in any single sample
Not to exceed 130 as a monthly geometric mean (at least 5 samples required)

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4R	Pittsburgh	12-May-09	1100	500	**EXCEEDS**
1.4R	Pittsburgh	19-May-09	257	89	
1.4R	Pittsburgh	21-May-09	80	45	
1.4R	Pittsburgh	26-May-09	600	300	**EXCEEDS**
1.4R	Pittsburgh	28-May-09	520	220	**EXCEEDS**
			Geometric Mean 371	168	EXCEEDS
1.4M	Pittsburgh	12-May-09	1,600	500	**EXCEEDS**
1.4M	Pittsburgh	19-May-09	380	194	
1.4M	Pittsburgh	21-May-09	189	120	
1.4M	Pittsburgh	26-May-09	700	450	**EXCEEDS**
1.4M	Pittsburgh	28-May-09	550	140	**EXCEEDS**
			Geometric Mean 536	236	EXCEEDS
1.4L	Pittsburgh	12-May-09	1,500	700	**EXCEEDS**
1.4L	Pittsburgh	19-May-09	390	230	
1.4L	Pittsburgh	21-May-09	189	120	
1.4L	Pittsburgh	26-May-09	430	264	**EXCEEDS**
1.4L	Pittsburgh	28-May-09	340	209	
			Geometric Mean 438	254	EXCEEDS
4.3	Pittsburgh	12-May-09	2,400	1,100	**EXCEEDS**
4.3	Pittsburgh	19-May-09	390	140	
4.3	Pittsburgh	21-May-09	132	86	
4.3	Pittsburgh	26-May-09	470	200	**EXCEEDS**
4.3	Pittsburgh	28-May-09	520	200	**EXCEEDS**
			Geometric Mean 497	221	EXCEEDS
1.4R	Pittsburgh	02-Jun-09	718	220	**EXCEEDS**
1.4R	Pittsburgh	09-Jun-09	290	80	
1.4R	Pittsburgh	16-Jun-09	250	90	
1.4R	Pittsburgh	23-Jun-09	673	410	**EXCEEDS**
1.4R	Pittsburgh	30-Jun-09	400	100	
			Geometric Mean 426	145	EXCEEDS
1.4M	Pittsburgh	02-Jun-09	170	110	
1.4M	Pittsburgh	09-Jun-09	380	180	
1.4M	Pittsburgh	16-Jun-09	200	50	
1.4M	Pittsburgh	23-Jun-09	1,500	800	**EXCEEDS**
1.4M	Pittsburgh	30-Jun-09	430	90	**EXCEEDS**
			Geometric Mean 384	148	EXCEEDS
1.4L	Pittsburgh	02-Jun-09	430	145	**EXCEEDS**
1.4L	Pittsburgh	09-Jun-09	280	120	
1.4L	Pittsburgh	16-Jun-09	220	60	
1.4L	Pittsburgh	23-Jun-09	2,100	400	**EXCEEDS**
1.4L	Pittsburgh	30-Jun-09	200	140	
			Geometric Mean 407	142	EXCEEDS
4.3	Pittsburgh	02-Jun-09	240	200	
4.3	Pittsburgh	09-Jun-09	240	130	
4.3	Pittsburgh	16-Jun-09	230	36	
4.3	Pittsburgh	23-Jun-09	1,400	700	**EXCEEDS**
4.3	Pittsburgh	30-Jun-09	260	110	
			Geometric Mean 344	148	EXCEEDS
1.4R	Pittsburgh	07-Jul-09	390	110	
1.4R	Pittsburgh	14-Jul-09	850	100	**EXCEEDS**
1.4R	Pittsburgh	21-Jul-09	4000	1,600	**EXCEEDS**
1.4R	Pittsburgh	23-Jul-09	6100	1,900	**EXCEEDS**
1.4R	Pittsburgh	28-Jul-09	450	130	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 1295	337	EXCEEDS
1.4M	Pittsburgh	07-Jul-09	310	90	
1.4M	Pittsburgh	14-Jul-09	530	80	**EXCEEDS**
1.4M	Pittsburgh	21-Jul-09	5,000	3,400	**EXCEEDS**
1.4M	Pittsburgh	23-Jul-09	5,600	3,200	**EXCEEDS**
1.4M	Pittsburgh	28-Jul-09	470	190	**EXCEEDS**
			Geometric Mean 1167	431	EXCEEDS
1.4L	Pittsburgh	07-Jul-09	250	50	
1.4L	Pittsburgh	14-Jul-09	350	60	
1.4L	Pittsburgh	21-Jul-09	5,900	2,900	**EXCEEDS**
1.4L	Pittsburgh	23-Jul-09	5,800	2,700	**EXCEEDS**
1.4L	Pittsburgh	28-Jul-09	570	300	**EXCEEDS**
			Geometric Mean 1113	371	EXCEEDS
4.3	Pittsburgh	07-Jul-09	350	140	
4.3	Pittsburgh	14-Jul-09	390	120	
4.3	Pittsburgh	21-Jul-09	5,500	2,400	**EXCEEDS**
4.3	Pittsburgh	23-Jul-09	6,400	1,400	**EXCEEDS**
4.3	Pittsburgh	28-Jul-09	150	430	**EXCEEDS**
			Geometric Mean 937	475	EXCEEDS
1.4R	Pittsburgh	04-Aug-09	390	180	
1.4R	Pittsburgh	11-Aug-09	7200	3,200	**EXCEEDS**
1.4R	Pittsburgh	18-Aug-09	220	90	
1.4R	Pittsburgh	20-Aug-09	8100	4,700	**EXCEEDS**
1.4R	Pittsburgh	25-Aug-09	250	150	
			Geometric Mean 1046	516	EXCEEDS
1.4M	Pittsburgh	04-Aug-09	360	210	
1.4M	Pittsburgh	11-Aug-09	8,500	2,800	**EXCEEDS**
1.4M	Pittsburgh	18-Aug-09	180	100	
1.4M	Pittsburgh	20-Aug-09	6,300	3,300	**EXCEEDS**
1.4M	Pittsburgh	25-Aug-09	280	120	
			Geometric Mean 994	471	EXCEEDS
1.4L	Pittsburgh	11-Aug-09	8,000	3,500	**EXCEEDS**
1.4L	Pittsburgh	18-Aug-09	260	90	
1.4L	Pittsburgh	18-Aug-09	230	90	
1.4L	Pittsburgh	20-Aug-09	9,400	3,700	**EXCEEDS**
1.4L	Pittsburgh	25-Aug-09	230	110	
			Geometric Mean 1007	410	EXCEEDS
4.3	Pittsburgh	04-Aug-09	300	140	
4.3	Pittsburgh	11-Aug-09	8,800	3,600	**EXCEEDS**
4.3	Pittsburgh	18-Aug-09	160	50	
4.3	Pittsburgh	20-Aug-09	9,800	6,500	**EXCEEDS**
4.3	Pittsburgh	25-Aug-09	400	130	
			Geometric Mean 1106	463	EXCEEDS
1.4R	Pittsburgh	01-Sep-09	940	500	**EXCEEDS**
1.4R	Pittsburgh	08-Sep-09	5500	2,500	**EXCEEDS**
1.4R	Pittsburgh	15-Sep-09	170	100	
1.4R	Pittsburgh	29-Sep-09	7800	4,800	**EXCEEDS**
1.4R	Pittsburgh	30-Sep-09	1100	470	**EXCEEDS**
			Geometric Mean 1498	776	EXCEEDS
1.4M	Pittsburgh	01-Sep-09	710	250	**EXCEEDS**
1.4M	Pittsburgh	08-Sep-09	4,400	2,000	**EXCEEDS**
1.4M	Pittsburgh	15-Sep-09	160	100	
1.4M	Pittsburgh	29-Sep-09	8,000	5,200	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
1.4M	Pittsburgh	30-Sep-09	1,500	350	**EXCEEDS**
			Geometric Mean 1431	619	EXCEEDS
1.4L	Pittsburgh	01-Sep-09	730	100	**EXCEEDS**
1.4L	Pittsburgh	08-Sep-09	3,800	2,100	**EXCEEDS**
1.4L	Pittsburgh	15-Sep-09	160	90	
1.4L	Pittsburgh	29-Sep-09	7,200	3,200	**EXCEEDS**
1.4L	Pittsburgh	30-Sep-09	1,200	370	**EXCEEDS**
			Geometric Mean 1308	468	EXCEEDS
4.3	Pittsburgh	01-Sep-09	670	180	**EXCEEDS**
4.3	Pittsburgh	08-Sep-09	500	210	**EXCEEDS**
4.3	Pittsburgh	15-Sep-09	150	50	
4.3	Pittsburgh	29-Sep-09	6,300	3,500	**EXCEEDS**
4.3	Pittsburgh	30-Sep-09	1,000	310	**EXCEEDS**
			Geometric Mean 795	290	EXCEEDS
1.4R	Pittsburgh	06-Oct-09	370	170	
1.4R	Pittsburgh	13-Oct-09	530	180	**EXCEEDS**
1.4R	Pittsburgh	20-Oct-09	360	170	
1.4M	Pittsburgh	06-Oct-09	480	60	**EXCEEDS**
1.4M	Pittsburgh	13-Oct-09	570	280	**EXCEEDS**
1.4M	Pittsburgh	20-Oct-09	270	180	
1.4L	Pittsburgh	06-Oct-09	420	120	**EXCEEDS**
1.4L	Pittsburgh	13-Oct-09	660	340	**EXCEEDS**
1.4L	Pittsburgh	20-Oct-09	370	140	
4.3	Pittsburgh	06-Oct-09	530	140	**EXCEEDS**
4.3	Pittsburgh	13-Oct-09	620	280	**EXCEEDS**
4.3	Pittsburgh	20-Oct-09	390	120	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
84.2	Wheeling	05-May-09	520	274	**EXCEEDS**
84.2	Wheeling	12-May-09	144	64	
84.2	Wheeling	19-May-09	66	48	
84.2	Wheeling	21-May-09	148	32	
84.2	Wheeling	26-May-09	76	56	
		Geometric Mean	141	69	
86.8	Wheeling	05-May-09	700	280	**EXCEEDS**
86.8	Wheeling	12-May-09	168	68	
86.8	Wheeling	19-May-09	36	32	
86.8	Wheeling	21-May-09	88	72	
86.8	Wheeling	26-May-09	20	100	
		Geometric Mean	94	85	
91.4	Wheeling	05-May-09	240	240	
91.4	Wheeling	12-May-09	250	160	
91.4	Wheeling	19-May-09	77	132	
91.4	Wheeling	21-May-09	150	72	
91.4	Wheeling	26-May-09	88	16	
		Geometric Mean	144	90	
92.8	Wheeling	05-May-09	870	1,020	**EXCEEDS**
92.8	Wheeling	12-May-09	360	88	
92.8	Wheeling	19-May-09	220	430	**EXCEEDS**
92.8	Wheeling	21-May-09	400	690	**EXCEEDS**
92.8	Wheeling	26-May-09	220	72	
		Geometric Mean	360	286	EXCEEDS
84.2	Wheeling	02-Jun-09	450	520	**EXCEEDS**
84.2	Wheeling	09-Jun-09	200	156	
84.2	Wheeling	16-Jun-09	200	64	
84.2	Wheeling	23-Jun-09	350	176	
84.2	Wheeling	30-Jun-09	32	56	
		Geometric Mean	182	139	EXCEEDS
86.8	Wheeling	02-Jun-09	36	108	
86.8	Wheeling	09-Jun-09	44	20	
86.8	Wheeling	16-Jun-09	1,300	28	**EXCEEDS**
86.8	Wheeling	23-Jun-09	228	246	**EXCEEDS**
86.8	Wheeling	30-Jun-09	40	40	
		Geometric Mean	113	57	
91.4	Wheeling	02-Jun-09	152	171	
91.4	Wheeling	09-Jun-09	92	36	
91.4	Wheeling	16-Jun-09	172	56	
91.4	Wheeling	23-Jun-09	470	108	**EXCEEDS**
91.4	Wheeling	30-Jun-09	350	214	
		Geometric Mean	209	96	EXCEEDS
92.8	Wheeling	02-Jun-09	2,100	1,100	**EXCEEDS**
92.8	Wheeling	09-Jun-09	128	68	
92.8	Wheeling	16-Jun-09	3,000	1,900	**EXCEEDS**
92.8	Wheeling	23-Jun-09	550	132	**EXCEEDS**
92.8	Wheeling	30-Jun-09	430	148	**EXCEEDS**
		Geometric Mean	718	308	EXCEEDS
84.2	Wheeling	07-Jul-09	108	32	
84.2	Wheeling	21-Jul-09	16	8	
84.2	Wheeling	23-Jul-09	72	64	
84.2	Wheeling	28-Jul-09	188	24	
84.2	Wheeling	30-Jul-09	1,000	1,400	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 119	56	
86.8	Wheeling	07-Jul-09	68	8	
86.8	Wheeling	21-Jul-09	8	4	
86.8	Wheeling	23-Jul-09	212	52	
86.8	Wheeling	28-Jul-09	88	44	
86.8	Wheeling	30-Jul-09	20	28	
			Geometric Mean 46	18	
91.4	Wheeling	07-Jul-09	194	24	
91.4	Wheeling	21-Jul-09	8	12	
91.4	Wheeling	23-Jul-09	340	171	
91.4	Wheeling	28-Jul-09	192	52	
91.4	Wheeling	30-Jul-09	116	28	
			Geometric Mean 103	37	
92.8	Wheeling	07-Jul-09	190	52	
92.8	Wheeling	21-Jul-09	52	48	
92.8	Wheeling	23-Jul-09	6,700	2,700	**EXCEEDS**
92.8	Wheeling	28-Jul-09	490	380	**EXCEEDS**
92.8	Wheeling	30-Jul-09	280	28	
			Geometric Mean 391	148	EXCEEDS
84.2	Wheeling	04-Aug-09	920	64	**EXCEEDS**
84.2	Wheeling	11-Aug-09	20	4	
84.2	Wheeling	18-Aug-09	86	28	
84.2	Wheeling	20-Aug-09	180	24	
84.2	Wheeling	25-Aug-09	104	20	
			Geometric Mean 124	20	
86.8	Wheeling	04-Aug-09	210	36	
86.8	Wheeling	11-Aug-09	4	4	
86.8	Wheeling	18-Aug-09	48	16	
86.8	Wheeling	20-Aug-09	16	24	
86.8	Wheeling	25-Aug-09	4	4	
			Geometric Mean 19	12	
91.4	Wheeling	04-Aug-09	188	24	
91.4	Wheeling	11-Aug-09	4	4	
91.4	Wheeling	18-Aug-09	44	16	
91.4	Wheeling	20-Aug-09	196	52	
91.4	Wheeling	25-Aug-09	12	8	
			Geometric Mean 38	14	
92.8	Wheeling	04-Aug-09	530	84	**EXCEEDS**
92.8	Wheeling	11-Aug-09	350	36	
92.8	Wheeling	18-Aug-09	92	36	
92.8	Wheeling	20-Aug-09	254	230	
92.8	Wheeling	25-Aug-09	120	20	
			Geometric Mean 220	55	EXCEEDS
84.2	Wheeling	01-Sep-09	40	8	
84.2	Wheeling	08-Sep-09	12	4	
84.2	Wheeling	15-Sep-09	4	4	
84.2	Wheeling	22-Sep-09	4	4	
84.2	Wheeling	29-Sep-09	14	36	
			Geometric Mean 10	7	
86.8	Wheeling	01-Sep-09	20	12	
86.8	Wheeling	08-Sep-09	4	4	
86.8	Wheeling	15-Sep-09	12	4	
86.8	Wheeling	22-Sep-09	24	12	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
86.8	Wheeling	29-Sep-09	104	44	
			Geometric Mean 19	10	
91.4	Wheeling	01-Sep-09	32	40	
91.4	Wheeling	08-Sep-09	174	120	
91.4	Wheeling	15-Sep-09	100	88	
91.4	Wheeling	22-Sep-09	12	12	
91.4	Wheeling	29-Sep-09	36	12	
			Geometric Mean 47	36	
92.8	Wheeling	01-Sep-09	290	16	
92.8	Wheeling	08-Sep-09	168	60	
92.8	Wheeling	15-Sep-09	176	72	
92.8	Wheeling	22-Sep-09	68	52	
92.8	Wheeling	29-Sep-09	216	92	
			Geometric Mean 166	51	
84.2	Wheeling	06-Oct-09	12	12	
84.2	Wheeling	13-Oct-09	360	12	
84.2	Wheeling	20-Oct-09	16	16	
84.2	Wheeling	22-Oct-09	28	28	
84.2	Wheeling	27-Oct-09	560	16	**EXCEEDS**
			Geometric Mean 64	16	
86.8	Wheeling	06-Oct-09	32	16	
86.8	Wheeling	13-Oct-09	4	4	
86.8	Wheeling	20-Oct-09	4	12	
86.8	Wheeling	22-Oct-09	8	4	
86.8	Wheeling	27-Oct-09	36	12	
			Geometric Mean 11	8	
91.4	Wheeling	06-Oct-09	28	32	
91.4	Wheeling	13-Oct-09	80	100	
91.4	Wheeling	20-Oct-09	8	12	
91.4	Wheeling	22-Oct-09	12	4	
91.4	Wheeling	27-Oct-09	32	16	
			Geometric Mean 23	19	
92.8	Wheeling	06-Oct-09	20	32	
92.8	Wheeling	13-Oct-09	670	290	**EXCEEDS**
92.8	Wheeling	20-Oct-09	257	185	
92.8	Wheeling	22-Oct-09	40	52	
92.8	Wheeling	27-Oct-09	100	60	
			Geometric Mean 107	88	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
305.1	Huntington	05-May-09	800	310	**EXCEEDS**
305.1	Huntington	12-May-09	217	157	
305.1	Huntington	19-May-09	80	69	
305.1	Huntington	21-May-09	24	20	
305.1	Huntington	26-May-09	4	4	
			Geometric Mean 67	49	
308.1	Huntington	05-May-09	3,700	1,290	**EXCEEDS**
308.1	Huntington	12-May-09	400	226	
308.1	Huntington	19-May-09	180	146	
308.1	Huntington	21-May-09	84	60	
308.1	Huntington	26-May-09	134	57	
			Geometric Mean 313	171	EXCEEDS
314.8	Huntington	05-May-09	1,500	450	**EXCEEDS**
314.8	Huntington	12-May-09	440	234	**EXCEEDS**
314.8	Huntington	19-May-09	169	96	
314.8	Huntington	21-May-09	160	144	
314.8	Huntington	26-May-09	440	240	**EXCEEDS**
			Geometric Mean 379	204	EXCEEDS
305.1	Huntington	02-Jun-09	74	54	
305.1	Huntington	09-Jun-09	32	4	
305.1	Huntington	16-Jun-09	16	12	
305.1	Huntington	23-Jun-09	84	63	
305.1	Huntington	30-Jun-09	24	4	
			Geometric Mean 38	15	
308.1	Huntington	02-Jun-09	500	260	**EXCEEDS**
308.1	Huntington	09-Jun-09	720	540	**EXCEEDS**
308.1	Huntington	16-Jun-09	257	132	
308.1	Huntington	23-Jun-09	152	120	
308.1	Huntington	30-Jun-09	243	166	
			Geometric Mean 321	206	EXCEEDS
314.8	Huntington	02-Jun-09	340	229	
314.8	Huntington	09-Jun-09	206	144	
314.8	Huntington	16-Jun-09	214	163	
314.8	Huntington	23-Jun-09	92	63	
314.8	Huntington	30-Jun-09	180	132	
			Geometric Mean 190	135	EXCEEDS
305.1	Huntington	07-Jul-09	20	4	
305.1	Huntington	14-Jul-09	63	4	
305.1	Huntington	21-Jul-09	4	4	
305.1	Huntington	23-Jul-09	8	4	
305.1	Huntington	28-Jul-09	20	8	
			Geometric Mean 15	5	
308.1	Huntington	07-Jul-09	160	124	
308.1	Huntington	14-Jul-09	108	20	
308.1	Huntington	21-Jul-09	112	54	
308.1	Huntington	23-Jul-09	243	151	
308.1	Huntington	28-Jul-09	510	246	**EXCEEDS**
			Geometric Mean 189	87	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
314.8	Huntington	07-Jul-09	112	54	
314.8	Huntington	14-Jul-09	4	4	
314.8	Huntington	21-Jul-09	54	8	
314.8	Huntington	23-Jul-09	500	229	**EXCEEDS**
314.8	Huntington	28-Jul-09	160	71	
			Geometric Mean 72	31	
305.1	Huntington	04-Aug-09	120	69	
305.1	Huntington	11-Aug-09	410	100	**EXCEEDS**
305.1	Huntington	18-Aug-09	8	8	
305.1	Huntington	20-Aug-09	12	8	
305.1	Huntington	25-Aug-09	8	8	
			Geometric Mean 33	20	
308.1	Huntington	04-Aug-09	280	156	
308.1	Huntington	11-Aug-09	3,200	594	**EXCEEDS**
308.1	Huntington	18-Aug-09	6,000	691	**EXCEEDS**
308.1	Huntington	20-Aug-09	2,900	2,200	**EXCEEDS**
308.1	Huntington	25-Aug-09	124	96	
			Geometric Mean 1141	423	EXCEEDS
314.8	Huntington	04-Aug-09	370	249	**EXCEEDS**
314.8	Huntington	11-Aug-09	1,500	430	**EXCEEDS**
314.8	Huntington	18-Aug-09	148	24	
314.8	Huntington	20-Aug-09	290	84	
314.8	Huntington	25-Aug-09	100	40	
			Geometric Mean 299	97	EXCEEDS
305.1	Huntington	01-Sep-09	12	8	
305.1	Huntington	08-Sep-09	12	4	
305.1	Huntington	15-Sep-09	4	4	
305.1	Huntington	22-Sep-09	4	4	
305.1	Huntington	29-Sep-09	28	20	
			Geometric Mean 9	6	
308.1	Huntington	01-Sep-09	144	71	
308.1	Huntington	08-Sep-09	36	24	
308.1	Huntington	15-Sep-09	36	28	
308.1	Huntington	22-Sep-09	63	12	
308.1	Huntington	29-Sep-09	226	104	
			Geometric Mean 77	36	
314.8	Huntington	01-Sep-09	60	20	
314.8	Huntington	08-Sep-09	152	108	
314.8	Huntington	15-Sep-09	24	12	
314.8	Huntington	22-Sep-09	44	20	
314.8	Huntington	29-Sep-09	140	100	
			Geometric Mean 67	35	
305.1	Huntington	06-Oct-09	4	4	
305.1	Huntington	13-Oct-09	32	24	
305.1	Huntington	20-Oct-09	12	4	
305.1	Huntington	23-Oct-09	4	4	
305.1	Huntington	27-Oct-09	24	8	
			Geometric Mean 11	7	
308.1	Huntington	06-Oct-09	60	32	
308.1	Huntington	13-Oct-09	120	60	
308.1	Huntington	20-Oct-09	12	8	
308.1	Huntington	23-Oct-09	89	12	
308.1	Huntington	27-Oct-09	92	48	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 59	25	
314.8	Huntington	06-Oct-09	64	20	
314.8	Huntington	13-Oct-09	97	20	
314.8	Huntington	20-Oct-09	66	12	
314.8	Huntington	23-Oct-09	4	4	
314.8	Huntington	27-Oct-09	74	40	
			Geometric Mean 41	15	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	Cincinnati	05-May-09	184	32	
462.6	Cincinnati	12-May-09	3,800	1,800	**EXCEEDS**
462.6	Cincinnati	19-May-09	60	76	
462.6	Cincinnati	21-May-09	63	36	
462.6	Cincinnati	26-May-09	57	80	
			Geometric Mean 172	105	
463.9	Cincinnati AquaRamp	05-May-09	50	16	
463.9	Cincinnati AquaRamp	12-May-09	1,500	800	**EXCEEDS**
463.9	Cincinnati AquaRamp	19-May-09	40	20	
463.9	Cincinnati AquaRamp	21-May-09	52	52	
463.9	Cincinnati AquaRamp	26-May-09	4	8	
			Geometric Mean 57	40	
469.9	Cincinnati Who-Day Dock	05-May-09	130	28	
469.9	Cincinnati Who-Day Dock	12-May-09	4,600	1,800	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	19-May-09	136	104	
469.9	Cincinnati Who-Day Dock	21-May-09	290	223	
469.9	Cincinnati Who-Day Dock	26-May-09	76	100	
			Geometric Mean 282	164	EXCEEDS
470	Cincinnati	05-May-09	184	48	
470	Cincinnati	12-May-09	600	1,100	**EXCEEDS**
470	Cincinnati	19-May-09	50	60	
470	Cincinnati	21-May-09	48	43	
470	Cincinnati	26-May-09	176	108	
			Geometric Mean 136	108	
477.5	Cincinnati	05-May-09	50	40	
477.5	Cincinnati	12-May-09	600	400	**EXCEEDS**
477.5	Cincinnati	19-May-09	60	36	
477.5	Cincinnati	21-May-09	16	28	
477.5	Cincinnati	26-May-09	146	157	
			Geometric Mean 84	76	
462.6	Cincinnati	02-Jun-09	120	148	
462.6	Cincinnati	09-Jun-09	**208**	**43**	
462.6	Cincinnati	16-Jun-09	380	110	
462.6	Cincinnati	23-Jun-09	128	124	
462.6	Cincinnati	30-Jun-09	20	12	
			Geometric Mean 119	64	
463.9	Cincinnati AquaRamp	02-Jun-09	50	92	
463.9	Cincinnati AquaRamp	09-Jun-09	**146**	**160**	
463.9	Cincinnati AquaRamp	16-Jun-09	400	192	
463.9	Cincinnati AquaRamp	23-Jun-09	92	88	
463.9	Cincinnati AquaRamp	30-Jun-09	16	8	
			Geometric Mean 84	72	
469.9	Cincinnati Who-Day Dock	02-Jun-09	88	52	
469.9	Cincinnati Who-Day Dock	09-Jun-09	**909**	**2,000**	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	16-Jun-09	231	200	
469.9	Cincinnati Who-Day Dock	23-Jun-09	88	100	
469.9	Cincinnati Who-Day Dock	30-Jun-09	84	92	
			Geometric Mean 169	180	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
470	Cincinnati	02-Jun-09	40	50	
470	Cincinnati	09-Jun-09	**2,200**	**40**	**EXCEEDS**
470	Cincinnati	16-Jun-09	250	210	
470	Cincinnati	23-Jun-09	60	62	
470	Cincinnati	30-Jun-09	92	40	
			Geometric Mean 165	64	
477.5	Cincinnati	02-Jun-09	80	36	
477.5	Cincinnati	09-Jun-09	**2,900**	**146**	**EXCEEDS**
477.5	Cincinnati	16-Jun-09	210	68	
477.5	Cincinnati	23-Jun-09	88	96	
477.5	Cincinnati	30-Jun-09	112	48	
			Geometric Mean 217	70	EXCEEDS
Possible Lab contamination-Blanks had positive results on June 9, 2009 samples.					
462.6	Cincinnati	07-Jul-09	51	40	
462.6	Cincinnati	14-Jul-09	43	8	
462.6	Cincinnati	21-Jul-09	40	24	
462.6	Cincinnati	23-Jul-09	1,200	490	**EXCEEDS**
462.6	Cincinnati	28-Jul-09	100	43	
			Geometric Mean 101	44	
463.9	Cincinnati AquaRamp	07-Jul-09	63	20	
463.9	Cincinnati AquaRamp	14-Jul-09	8	12	
463.9	Cincinnati AquaRamp	21-Jul-09	12	8	
463.9	Cincinnati AquaRamp	23-Jul-09	50	60	
463.9	Cincinnati AquaRamp	28-Jul-09	8	28	
			Geometric Mean 19	20	
469.9	Cincinnati Who-Day Dock	07-Jul-09	66	64	
469.9	Cincinnati Who-Day Dock	14-Jul-09	4	4	
469.9	Cincinnati Who-Day Dock	21-Jul-09	17,000	14,200	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	23-Jul-09	460	280	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	28-Jul-09	70	71	
			Geometric Mean 171	149	EXCEEDS
470	Cincinnati	07-Jul-09	60	34	
470	Cincinnati	14-Jul-09	8	4	
470	Cincinnati	21-Jul-09	128	54	
470	Cincinnati	23-Jul-09	460	360	**EXCEEDS**
470	Cincinnati	28-Jul-09	36	12	
			Geometric Mean 63	32	
477.5	Cincinnati	07-Jul-09	600	50	**EXCEEDS**
477.5	Cincinnati	14-Jul-09	32	8	
477.5	Cincinnati	21-Jul-09	891	400	**EXCEEDS**
477.5	Cincinnati	23-Jul-09	10,500	5,900	**EXCEEDS**
477.5	Cincinnati	28-Jul-09	36	48	
			Geometric Mean 365	135	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
462.6	Cincinnati	04-Aug-09	211	168	
462.6	Cincinnati	11-Aug-09	250	290	**EXCEEDS**
462.6	Cincinnati	18-Aug-09	24	12	
462.6	Cincinnati	20-Aug-09	68	12	
462.6	Cincinnati	25-Aug-09	52	20	
			Geometric Mean 85	43	
463.9	Cincinnati AquaRamp	04-Aug-09	214	140	
463.9	Cincinnati AquaRamp	11-Aug-09	24	24	
463.9	Cincinnati AquaRamp	18-Aug-09	24	12	
463.9	Cincinnati AquaRamp	20-Aug-09	8	4	
463.9	Cincinnati AquaRamp	25-Aug-09	16	16	
			Geometric Mean 28	19	
469.9	Cincinnati Who-Day Dock	04-Aug-09	360	228	
469.9	Cincinnati Who-Day Dock	11-Aug-09	1,020	530	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	18-Aug-09	800	600	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	20-Aug-09	92	54	
469.9	Cincinnati Who-Day Dock	25-Aug-09	36	20	
			Geometric Mean 250	151	EXCEEDS
470	Cincinnati	04-Aug-09	220	186	
470	Cincinnati	11-Aug-09	1,200	890	**EXCEEDS**
470	Cincinnati	18-Aug-09	510	350	**EXCEEDS**
470	Cincinnati	20-Aug-09	86	76	
470	Cincinnati	25-Aug-09	50	32	
			Geometric Mean 225	170	EXCEEDS
477.5	Cincinnati	04-Aug-09	208	154	
477.5	Cincinnati	11-Aug-09	954	500	**EXCEEDS**
477.5	Cincinnati	18-Aug-09	540	280	**EXCEEDS**
477.5	Cincinnati	20-Aug-09	226	164	
477.5	Cincinnati	25-Aug-09	24	4	
			Geometric Mean 225	107	EXCEEDS
462.6	Cincinnati	01-Sep-09	4	16	
462.6	Cincinnati	08-Sep-09	16	4	
462.6	Cincinnati	15-Sep-09	4	24	
462.6	Cincinnati	22-Sep-09	28	8	
462.6	Cincinnati	29-Sep-09	570	283	**EXCEEDS**
			Geometric Mean 21	20	
463.9	Cincinnati AquaRamp	01-Sep-09	4	4	
463.9	Cincinnati AquaRamp	08-Sep-09	8	12	
463.9	Cincinnati AquaRamp	15-Sep-09	4	4	
463.9	Cincinnati AquaRamp	22-Sep-09	4	4	
463.9	Cincinnati AquaRamp	29-Sep-09	440	400	**EXCEEDS**
			Geometric Mean 12	13	
469.9	Cincinnati Who-Day Dock	01-Sep-09	16	4	
469.9	Cincinnati Who-Day Dock	08-Sep-09	1,800	709	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	15-Sep-09	60	40	
469.9	Cincinnati Who-Day Dock	22-Sep-09	290	192	
469.9	Cincinnati Who-Day Dock	29-Sep-09	320	370	**EXCEEDS**
			Geometric Mean 174	96	
470	Cincinnati	01-Sep-09	4	4	
470	Cincinnati	08-Sep-09	764	420	**EXCEEDS**
470	Cincinnati	15-Sep-09	16	12	
470	Cincinnati	22-Sep-09	1,900	5,000	**EXCEEDS**
470	Cincinnati	29-Sep-09	370	370	**EXCEEDS**

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 128	130	EXCEEDS
477.5	Cincinnati	01-Sep-09	8	4	
477.5	Cincinnati	08-Sep-09	1,300	700	**EXCEEDS**
477.5	Cincinnati	15-Sep-09	28	16	
477.5	Cincinnati	22-Sep-09	736	136	**EXCEEDS**
477.5	Cincinnati	29-Sep-09	350	277	**EXCEEDS**
			Geometric Mean 150	70	
462.6	Cincinnati	08-Oct-09	40	16	
462.6	Cincinnati	13-Oct-09	320	223	
462.6	Cincinnati	20-Oct-09	40	28	
462.6	Cincinnati	22-Oct-09	44	24	
462.6	Cincinnati	27-Oct-09	168	164	
			Geometric Mean 82	52	
463.9	Cincinnati AquaRamp	08-Oct-09	12	8	
463.9	Cincinnati AquaRamp	13-Oct-09	292	290	**EXCEEDS**
463.9	Cincinnati AquaRamp	20-Oct-09	24	16	
463.9	Cincinnati AquaRamp	22-Oct-09	20	24	
463.9	Cincinnati AquaRamp	27-Oct-09	220	231	
			Geometric Mean 52	46	
469.9	Cincinnati Who-Day Dock	08-Oct-09	74	24	
469.9	Cincinnati Who-Day Dock	13-Oct-09	370	440	**EXCEEDS**
469.9	Cincinnati Who-Day Dock	20-Oct-09	92	64	
469.9	Cincinnati Who-Day Dock	22-Oct-09	72	36	
469.9	Cincinnati Who-Day Dock	27-Oct-09	200	217	
			Geometric Mean 129	88	
470	Cincinnati	08-Oct-09	108	40	
470	Cincinnati	13-Oct-09	290	226	
470	Cincinnati	20-Oct-09	40	54	
470	Cincinnati	22-Oct-09	40	28	
470	Cincinnati	27-Oct-09	240	220	
			Geometric Mean 104	79	
477.5	Cincinnati	08-Oct-09	57	44	
477.5	Cincinnati	13-Oct-09	600	410	**EXCEEDS**
477.5	Cincinnati	20-Oct-09	36	20	
477.5	Cincinnati	22-Oct-09	51	51	
477.5	Cincinnati	27-Oct-09	186	217	
			Geometric Mean 103	83	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
594	Louisville	05-May-09	48	20	
594	Louisville	12-May-09	223	60	
594	Louisville	19-May-09	200	200	
594	Louisville	21-May-09	80	48	
594	Louisville	27-May-09	36	4	
			Geometric Mean 91	34	
608.7	Louisville	05-May-09	43	16	
608.7	Louisville	12-May-09	108	116	
608.7	Louisville	19-May-09	177	70	
608.7	Louisville	21-May-09	92	40	
608.7	Louisville	27-May-09	24	20	
			Geometric Mean 71	40	
619.3	Louisville	05-May-09	36	4	
619.3	Louisville	12-May-09	226	80	
619.3	Louisville	19-May-09	152	60	
619.3	Louisville	21-May-09	100	60	
619.3	Louisville	27-May-09	112	4	
			Geometric Mean 107	22	
594	Louisville	02-Jun-09	63	4	
594	Louisville	09-Jun-09	51	100	
594	Louisville	16-Jun-09	174	40	
594	Louisville	18-Jun-09	234	300	**EXCEEDS**
594	Louisville	23-Jun-09	190,000	8,900	**EXCEEDS**
			Geometric Mean 478	134	EXCEEDS
608.7	Louisville	02-Jun-09	66	4	
608.7	Louisville	09-Jun-09	112	80	
608.7	Louisville	16-Jun-09	100	20	
608.7	Louisville	18-Jun-09	217	100	
608.7	Louisville	23-Jun-09	7,300	1,300	**EXCEEDS**
			Geometric Mean 259	61	EXCEEDS
619.3	Louisville	02-Jun-09	152	8	
619.3	Louisville	09-Jun-09	68	57	
619.3	Louisville	16-Jun-09	2,500	900	**EXCEEDS**
619.3	Louisville	18-Jun-09	2,900	300	**EXCEEDS**
619.3	Louisville	23-Jun-09	600	50	**EXCEEDS**
			Geometric Mean 538	91	EXCEEDS
594	Louisville	08-Jul-09	360	80	
594	Louisville	14-Jul-09	24	12	
594	Louisville	21-Jul-09	12	4	
594	Louisville	23-Jul-09	68	60	
594	Louisville	28-Jul-09	100	16	
			Geometric Mean 59	21	
608.7	Louisville	08-Jul-09	257	160	
608.7	Louisville	14-Jul-09	30	50	
608.7	Louisville	21-Jul-09	257	4	
608.7	Louisville	23-Jul-09	600	500	**EXCEEDS**
608.7	Louisville	28-Jul-09	328	12	
			Geometric Mean 208	45	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
619.3	Louisville	08-Jul-09	46	24	
619.3	Louisville	14-Jul-09	233	112	
619.3	Louisville	21-Jul-09	410	92	**EXCEEDS**
619.3	Louisville	23-Jul-09	257	97	
619.3	Louisville	28-Jul-09	590	184	**EXCEEDS**
			Geometric Mean 232	85	EXCEEDS
594	Louisville	04-Aug-09	144	80	
594	Louisville	06-Aug-09	4,300	2,200	**EXCEEDS**
594	Louisville	18-Aug-09	48	16	
594	Louisville	25-Aug-09	12	10	
594	Louisville	27-Aug-09	40	100	
			Geometric Mean 107	78	
608.7	Louisville	04-Aug-09	248	100	
608.7	Louisville	06-Aug-09	4,800	2,200	**EXCEEDS**
608.7	Louisville	18-Aug-09	450	190	**EXCEEDS**
608.7	Louisville	25-Aug-09	210	4	
608.7	Louisville	27-Aug-09	4	16	
			Geometric Mean 214	77	EXCEEDS
619.3	Louisville	04-Aug-09	570	140	**EXCEEDS**
619.3	Louisville	06-Aug-09	12,300	6,300	**EXCEEDS**
619.3	Louisville	18-Aug-09	88	200	
619.3	Louisville	25-Aug-09	24	16	
619.3	Louisville	27-Aug-09	56	100	
			Geometric Mean 242	195	EXCEEDS
594	Louisville	01-Sep-09	20	50	
594	Louisville	09-Sep-09	12	16	
594	Louisville	15-Sep-09	32	16	
594	Louisville	22-Sep-09	720	760	**EXCEEDS**
594	Louisville	29-Sep-09	116	39	
			Geometric Mean 58	52	
608.7	Louisville	01-Sep-09	44	10	
608.7	Louisville	09-Sep-09	64	24	
608.7	Louisville	15-Sep-09	64	20	
608.7	Louisville	22-Sep-09	16,500	17,300	**EXCEEDS**
608.7	Louisville	29-Sep-09	80	172	
			Geometric Mean 188	107	
619.3	Louisville	01-Sep-09	96	60	
619.3	Louisville	09-Sep-09	84	24	
619.3	Louisville	15-Sep-09	16	4	
619.3	Louisville	22-Sep-09	11,900	6,400	**EXCEEDS**
619.3	Louisville	29-Sep-09	600	400	**EXCEEDS**
			Geometric Mean 247	108	EXCEEDS
594	Louisville	07-Oct-09	20	4	
594	Louisville	13-Oct-09	440	90	**EXCEEDS**
594	Louisville	20-Oct-09	60	32	
594	Louisville	27-Oct-09	60	44	
594	Louisville	29-Oct-09	340	250	**EXCEEDS**
			Geometric Mean 101	42	
608.7	Louisville	07-Oct-09	16	12	
608.7	Louisville	13-Oct-09	510	1,100	**EXCEEDS**
608.7	Louisville	20-Oct-09	76	48	
608.7	Louisville	27-Oct-09	92	36	
608.7	Louisville	29-Oct-09	380	160	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 117	82	
619.3	Louisville	07-Oct-09	2,400	1,100	**EXCEEDS**
619.3	Louisville	13-Oct-09	1,600	600	**EXCEEDS**
619.3	Louisville	20-Oct-09	112	52	
619.3	Louisville	27-Oct-09	72	20	
619.3	Louisville	29-Oct-09	810	630	**EXCEEDS**
			Geometric Mean 478	212	EXCEEDS

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
791.5	Evansville	05-May-09	31	28	
791.5	Evansville	12-May-09	132	130	
791.5	Evansville	19-May-09	45	120	
791.5	Evansville	21-May-09	100	4	
791.5	Evansville	26-May-09	150	700	**EXCEEDS**
		Geometric Mean	77	66	
793.7	Evansville	05-May-09	100	80	
793.7	Evansville	12-May-09	430	300	**EXCEEDS**
793.7	Evansville	19-May-09	128	200	
793.7	Evansville	21-May-09	100	20	
793.7	Evansville	26-May-09	1,500	2,000	**EXCEEDS**
		Geometric Mean	242	181	EXCEEDS
797.3	Evansville	05-May-09	116	132	
797.3	Evansville	12-May-09	254	200	
797.3	Evansville	19-May-09	54	30	
797.3	Evansville	21-May-09	136	4	
797.3	Evansville	26-May-09	800	3,600	**EXCEEDS**
		Geometric Mean	177	103	
791.5	Evansville	02-Jun-09	20	4	
791.5	Evansville	09-Jun-09	12	20	
791.5	Evansville	16-Jun-09	180	130	
791.5	Evansville	23-Jun-09	180	191	
791.5	Evansville	30-Jun-09	12	12	
		Geometric Mean	39	30	
793.7	Evansville	02-Jun-09	52	16	
793.7	Evansville	09-Jun-09	20	24	
793.7	Evansville	16-Jun-09	2,200	2,100	**EXCEEDS**
793.7	Evansville	23-Jun-09	110	180	
793.7	Evansville	30-Jun-09	24	44	
		Geometric Mean	90	91	
797.3	Evansville	02-Jun-09	68	54	
797.3	Evansville	09-Jun-09	180	40	
797.3	Evansville	16-Jun-09	310	50	
797.3	Evansville	23-Jun-09	192	163	
797.3	Evansville	30-Jun-09	20	16	
		Geometric Mean	108	49	
791.5	Evansville	07-Jul-09	83	24	
791.5	Evansville	14-Jul-09	8	4	
791.5	Evansville	21-Jul-09	8	4	
791.5	Evansville	23-Jul-09	140	60	
791.5	Evansville	28-Jul-09	8	10	
		Geometric Mean	23	12	
793.7	Evansville	07-Jul-09	36	90	
793.7	Evansville	14-Jul-09	220	250	**EXCEEDS**
793.7	Evansville	21-Jul-09	20	20	
793.7	Evansville	23-Jul-09	570	88	**EXCEEDS**
793.7	Evansville	28-Jul-09	68	54	
		Geometric Mean	91	73	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
797.3	Evansville	07-Jul-09	20	40	
797.3	Evansville	14-Jul-09	54	60	
797.3	Evansville	21-Jul-09	24	24	
797.3	Evansville	23-Jul-09	620	390	**EXCEEDS**
797.3	Evansville	28-Jul-09	60	4	
			Geometric Mean 63	39	
791.5	Evansville	04-Aug-09	51	200	
791.5	Evansville	11-Aug-09	144	100	
791.5	Evansville	18-Aug-09	40	20	
791.5	Evansville	20-Aug-09	520	152	**EXCEEDS**
791.5	Evansville	25-Aug-09	4	4	
			Geometric Mean 57	48	
793.7	Evansville	04-Aug-09	96	4	
793.7	Evansville	11-Aug-09	540	1,100	**EXCEEDS**
793.7	Evansville	18-Aug-09	40	16	
793.7	Evansville	20-Aug-09	6,100	2,200	**EXCEEDS**
793.7	Evansville	25-Aug-09	20	14	
			Geometric Mean 191	74	
797.3	Evansville	04-Aug-09	96	108	
797.3	Evansville	11-Aug-09	810	1,100	**EXCEEDS**
797.3	Evansville	18-Aug-09	92	20	
797.3	Evansville	20-Aug-09	540	92	**EXCEEDS**
797.3	Evansville	25-Aug-09	4	20	
			Geometric Mean 109	85	
791.5	Evansville	01-Sep-09	12	32	
791.5	Evansville	08-Sep-09	60	100	
791.5	Evansville	15-Sep-09	17	4	
791.5	Evansville	22-Sep-09	243	450	**EXCEEDS**
791.5	Evansville	29-Sep-09	66	64	
			Geometric Mean 46	52	
793.7	Evansville	01-Sep-09	128	86	
793.7	Evansville	08-Sep-09	240	300	**EXCEEDS**
793.7	Evansville	15-Sep-09	12	17	
793.7	Evansville	22-Sep-09	246	250	**EXCEEDS**
793.7	Evansville	29-Sep-09	136	166	
			Geometric Mean 104	113	
797.3	Evansville	01-Sep-09	12	16	
797.3	Evansville	08-Sep-09	220	400	**EXCEEDS**
797.3	Evansville	15-Sep-09	20	32	
797.3	Evansville	22-Sep-09	211	190	
797.3	Evansville	29-Sep-09	108	100	
			Geometric Mean 65	83	
791.5	Evansville	06-Oct-09	28	4	
791.5	Evansville	13-Oct-09	570	200	**EXCEEDS**
791.5	Evansville	20-Oct-09	48	36	
791.5	Evansville	22-Oct-09	20	16	
791.5	Evansville	27-Oct-09	77	108	
			Geometric Mean 65	35	
793.7	Evansville	06-Oct-09	136	64	
793.7	Evansville	13-Oct-09	590	100	**EXCEEDS**
793.7	Evansville	20-Oct-09	24	54	
793.7	Evansville	22-Oct-09	24	60	
793.7	Evansville	27-Oct-09	74	92	

EXCEEDS - Value Exceeds Commission Criteria

Appendix G: Ohio River Bacteria Samnpling 2009

MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL	
			Geometric Mean 81	72	
797.3	Evansville	06-Oct-09	64	20	
797.3	Evansville	13-Oct-09	220	400	**EXCEEDS**
797.3	Evansville	20-Oct-09	30	11	
797.3	Evansville	22-Oct-09	32	57	
797.3	Evansville	27-Oct-09	92	84	
			Geometric Mean 66	53	

FECAL- Not to exceed 400 in more than 10% of samples taken during month
Not to exceed 200 as a monthly geometric mean (at least 5 samples required)
E.COLI- Not to exceed 240 in any single sample
Not to exceed 130 as a monthly geometric mean (at least 5 samples required)

EXCEEDS - Value Exceeds Commission Criteria

Appendix H: Contact Recreation Use Assessment

Mile Point	States	Longitudinal Survey Data 2003 - 2008 #>SS Max	# of Samples	% of Samples > SSM (03-08)	Assessment of Longitudinal Data	Contact Recreation 2005 - 2009 No. Mos. > GM 2005	No. Mos. > GM 2006	No. Mos. > GM 2007	No. Mos. > GM 2008	No. Mos. > GM 2009	% Mos. > GM 05-'09	Assessment	OVERALL ASSESSMENT	RIVER MILE OFASSESSMENT
1.4	PA					6	5	3	6	5	93%	Not Supporting	Not Supporting	0
1.5	PA	7	17	**41.2**	Not Supporting								Not Supporting	
3.3	PA	10	17	**58.8**	Not Supporting								Not Supporting	
4.3	PA					5	5	1	5	5	78%	Not Supporting	Not Supporting	
6.4	PA	5	15	**33.3**	Not Supporting								Not Supporting	
9.5	PA	8	15	**53.3**	Not Supporting								Not Supporting	
11.4	PA	8	15	**53.3**	Not Supporting								Not Supporting	
12.5	PA	8	17	**47.1**	Not Supporting								Not Supporting	
14.4	PA	7	15	**46.7**	Not Supporting								Not Supporting	
17.7	PA	7	15	**46.7**	Not Supporting								Not Supporting	
20.5	PA	7	15	**46.7**	Not Supporting								Not Supporting	
20.8	PA	6	15	**40.0**	Not Supporting								Not Supporting	
21.8	PA	6	15	**40.0**	Not Supporting								Not Supporting	
22.9	PA	12	17	**70.6**	Not Supporting								Not Supporting	
25.5	PA	6	17	**35.3**	Not Supporting								Not Supporting	
25.8	PA	9	17	**52.9**	Not Supporting								Not Supporting	
26.4	PA	8	17	**47.1**	Not Supporting								Not Supporting	
28.3	PA	9	17	**52.9**	Not Supporting								Not Supporting	
32.9	PA	7	17	**41.2**	Not Supporting								Not Supporting	
37.6	PA	7	17	**41.2**	Not Supporting								Not Supporting	
40.2	PA													
41.2	OH-WV	7	17	**41.2**	Not Supporting								Not Supporting	
44.8	OH-WV	7	16	**43.8**	Not Supporting								Not Supporting	
48.7	OH-WV	7	17	**41.2**	Not Supporting								Not Supporting	
52.5	OH-WV	6	17	**35.3**	Not Supporting								Not Supporting	
56.4	OH-WV	5	15	**33.3**	Not Supporting								Not Supporting	
60.3	OH-WV	8	15	**53.3**	Not Supporting								Not Supporting	
66.4	OH-WV	8	17	**47.1**	Not Supporting								Not Supporting	
66.9	OH-WV	5	10	**50.0**	Not Supporting								Not Supporting	
68.2	OH-WV	2	7	**28.6**	Not Supporting								Not Supporting	
70.7	OH-WV	6	15	**40.0**	Not Supporting								Not Supporting	
71.8	OH-WV	7	15	**46.7**	Not Supporting								Not Supporting	
74.9	OH-WV	5	17	**29.4**	Not Supporting								Not Supporting	
80.2	OH-WV	5	17	**29.4**	Not Supporting								Not Supporting	
84.2	OH-WV					NS	2	3	2	1	33%	Not Supporting	Not Supporting	0-84.9
85.6	OH-WV	3	17	**17.6**	Partial Support								Partial Support	84.9-86.2
86.8	OH-WV					0	1	1	1	0	10%	Full Support	Full Support	86.2-89.0
91.2	OH-WV	8	17	**47.1**	Not Supporting								Not Supporting	89.0-91.3
91.4	OH-WV					1	2	1	2	1	23%	Partial Support	Partial Support	91.3-92.1
92.8	OH-WV					3	4	3	3	4	57%	Not Supporting	Not Supporting	
94.2	OH-WV	6	17	**35.3**	Not Supporting								Not Supporting	
97.8	OH-WV	4	17	**23.5**	Not Supporting								Not Supporting	
102.6	OH-WV	5	17	**29.4**	Not Supporting								Not Supporting	92.1-105.2
107.7	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
113.0	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
118.3	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
123.7	OH-WV	2	17	**11.8**	Partial Support								Partial Support	105.2-124.3
124.9	OH-WV	1	15	6.7	Full Support								Full Support	124.3-127.0
129.1	OH-WV	3	17	**17.6**	Partial Support								Partial Support	127.0-131.3
133.4	OH-WV	1	15	6.7	Full Support								Full Support	131.3-136.1
138.7	OH-WV	3	17	**17.6**	Partial Support								Partial Support	136.1-141.5
144.2	OH-WV	1	15	6.7	Full Support								Full Support	141.5-146.9
149.6	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
155.0	OH-WV	2	17	**11.8**	Partial Support								Partial Support	146.9-157.7
160.4	OH-WV	0	15	0.0	Full Support								Full Support	157.7-163.1
165.8	OH-WV	3	17	**17.6**	Partial Support								Partial Support	
171.2	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
175.1	OH-WV	3	17	**17.6**	Partial Support								Partial Support	163.1-177.3
179.4	OH-WV	4	15	**26.7**	Not Supporting								Not Supporting	177.3-181.5
183.5	OH-WV	3	17	**17.6**	Partial Support								Partial Support	181.5-184.7
185.9	OH-WV	1	17	5.9	Full Support								Full Support	184.7-188.4
190.8	OH-WV	2	17	**11.8**	Partial Support								Partial Support	188.4-193.3
195.7	OH-WV	1	17	5.9	Full Support								Full Support	
200.7	OH-WV	1	17	5.9	Full Support								Full Support	193.3-203.2
205.7	OH-WV	4	17	**23.5**	Partial Support								Partial Support	
210.7	OH-WV	4	17	**23.5**	Partial Support								Partial Support	
215.7	OH-WV	4	17	**23.5**	Partial Support								Partial Support	
220.4	OH-WV	4	17	**23.5**	Partial Support								Partial Support	
225.4	OH-WV	3	17	**17.6**	Partial Support								Partial Support	
230.4	OH-WV	3	17	**17.6**	Partial Support								Partial Support	
235.6	OH-WV	3	17	**17.6**	Partial Support								Partial Support	
240.4	OH-WV	3	16	**18.8**	Partial Support								Partial Support	
245.4	OH-WV	4	17	**23.5**	Partial Support								Partial Support	203.2-247.9
250.4	OH-WV	6	17	**35.3**	Not Supporting								Not Supporting	
255.5	OH-WV	5	17	**29.4**	Not Supporting								Not Supporting	247.9-258.0
260.6	OH-WV	4	17	**23.5**	Partial Support								Partial Support	
265.7	OH-WV	4	17	**23.5**	Partial Support								Partial Support	258.0-267.8
269.8	OH-WV	7	17	**41.2**	Not Supporting								Not Supporting	267.8-272.5
275.2	OH-WV	2	17	**11.8**	Partial Support								Partial Support	
280.8	OH-WV	4	23	**17.4**	Partial Support								Partial Support	
285.9	OH-WV	5	23	**21.7**	Partial Support								Partial Support	
291.4	OH-WV	4	22	**18.2**	Partial Support								Partial Support	
296.6	OH-WV	3	20	**15.0**	Partial Support								Partial Support	
302.0	OH-WV	2	18	**11.1**	Partial Support								Partial Support	272.5-303.6
305.1	OH-WV					1	1	0	1	0	10%	Full Support	Full Support	303.6-306.4

Appendix H: Contact Recreation Use Assessment

Mile Point	States	Longitudinal Survey Data 2003 - 2008 #>SS Max	# of Samples	% of Samples > SSM (03-08)	Assessment of Longitudinal Data	Contact Recreation 2005 - 2009 No. Mos. > GM 2005	No. Mos. > GM 2006	No. Mos. > GM 2007	No. Mos. > GM 2008	No. Mos. > GM 2009	% Mos. > GM 05-'09	Assessment	OVERALL ASSESSMENT	RIVER MILE OFASSESSMENT
307.7	OH-WV	5	17	**29.4**	Not Supporting								Not Supporting	
308.1	OH-WV					0	3	3	3	3	41%	Not Supporting	Not Supporting	
313.3	OH-WV	7	17	**41.2**	Not Supporting								Not Supporting	
314.8	OH-WV					1	3	1	2	3	34%	Not Supporting	Not Supporting	
317.1	OH-WV													
317.2	KY-OH	5	17	**29.4**	Not Supporting								Not Supporting	306.4-319.4
321.5	KY-OH	4	17	**23.5**	Partial Support								Partial Support	
327.4	KY-OH	2	15	**13.3**	Partial Support								Partial Support	
327.7	KY-OH	3	15	**20.0**	Partial Support								Partial Support	
328.0	KY-OH	4	17	**23.5**	Partial Support								Partial Support	
332.5	KY-OH	2	17	**11.8**	Partial Support								Partial Support	
338.1	KY-OH	3	17	**17.6**	Partial Support								Partial Support	319.4-340.8
343.5	KY-OH	1	17	5.9	Full Support								Full Support	
349.2	KY-OH	1	17	5.9	Full Support								Full Support	
352.0	KY-OH	1	17	5.9	Full Support								Full Support	
353.8	KY-OH	1	17	5.9	Full Support								Full Support	340.8-356.6
359.3	KY-OH	4	17	**23.5**	Partial Support								Partial Support	
364.6	KY-OH	3	17	**17.6**	Partial Support								Partial Support	
369.8	KY-OH	2	17	**11.8**	Partial Support								Partial Support	
375.0	KY-OH	2	17	**11.8**	Partial Support								Partial Support	356.6-377.7
380.4	KY-OH	1	17	5.9	Full Support								Full Support	377.7-382.9
385.4	KY-OH	2	17	**11.8**	Partial Support								Partial Support	382.9-388.0
390.6	KY-OH	1	17	5.9	Full Support								Full Support	
395.0	KY-OH	1	15	6.7	Full Support								Full Support	
400.4	KY-OH	1	17	5.9	Full Support								Full Support	
405.8	KY-OH	1	17	5.9	Full Support								Full Support	
411.4	KY-OH	0	17	0.0	Full Support								Full Support	
416.4	KY-OH	0	17	0.0	Full Support								Full Support	
421.6	KY-OH	0	17	0.0	Full Support								Full Support	
426.4	KY-OH	0	17	0.0	Full Support								Full Support	
431.4	KY-OH	0	17	0.0	Full Support								Full Support	
436.8	KY-OH	0	15	0.0	Full Support								Full Support	
441.5	KY-OH	0	15	0.0	Full Support								Full Support	
446.5	KY-OH	0	17	0.0	Full Support								Full Support	
451.6	KY-OH	0	16	0.0	Full Support								Full Support	
455.3	KY-OH	1	15	6.7	Full Support								Full Support	
460.0	KY-OH	1	16	6.3	Full Support								Full Support	
462.6	KY-OH					0	2	0	0	0	7%	Full Support	Full Support	
463.9	KY-OH					NS	NS	0	0	0	0%	Full Support	Full Support	388.0-464.5
465.0		1	5	**20.0**	Partial Support								Partial Support	464.5-465.2
465.4	KY-OH	0	11	0.0	Full Support								Full Support	
468.7	KY-OH	1	16	6.3	Full Support								Full Support	465.2-469.3
469.9	KY-OH					NS	NS	1	1	4	33%	Not Supporting	Not Supporting	
470.0	KY-OH					0	4	0	2	2	27%	Not Supporting	Not Supporting	469.3-471.4
472.7	KY-OH	3	16	**18.8**	Partial Support								Partial Support	471.4-475.1
477.5	KY-OH					0	3	1	2	3	30%	Not Supporting	Not Supporting	475.1-477.6
477.6	KY-OH	2	16	**12.5**	Partial Support								Partial Support	
482.2	KY-OH	4	16	**25.0**	Partial Support								Partial Support	
486.2	KY-OH	2	16	**12.5**	Partial Support								Partial Support	477.6-488.0
489.7	KY-OH	1	16	6.3	Full Support								Full Support	
491.3	KY-OH													
493.2	IN-KY	1	15	6.7	Full Support								Full Support	
498.0	IN-KY	1	16	6.3	Full Support								Full Support	
503.1	IN-KY	0	16	0.0	Full Support								Full Support	
508.3	IN-KY	0	16	0.0	Full Support								Full Support	
513.4	IN-KY	0	16	0.0	Full Support								Full Support	
518.5	IN-KY	1	16	6.3	Full Support								Full Support	
523.4	IN-KY	1	15	6.7	Full Support								Full Support	
528.4	IN-KY	1	16	6.3	Full Support								Full Support	
533.2	IN-KY	1	16	6.3	Full Support								Full Support	
538.5	IN-KY	1	16	6.3	Full Support								Full Support	
543.5	IN-KY	0	16	0.0	Full Support								Full Support	
548.3	IN-KY	0	16	0.0	Full Support								Full Support	
553.6	IN-KY	0	16	0.0	Full Support								Full Support	
558.8	IN-KY	1	15	6.7	Full Support								Full Support	
562.7	IN-KY	1	15	6.7	Full Support								Full Support	
567.6	IN-KY	0	16	0.0	Full Support								Full Support	
572.5	IN-KY	0	16	0.0	Full Support								Full Support	
577.4	IN-KY	0	15	0.0	Full Support								Full Support	
582.9	IN-KY	0	15	0.0	Full Support								Full Support	
587.8	IN-KY	0	16	0.0	Full Support								Full Support	
592.2	IN-KY	0	16	0.0	Full Support								Full Support	
594.0	IN-KY					0	0	0	1	1	7%	Full Support	Full Support	
597.1	IN-KY	0	16	0.0	Full Support								Full Support	
602.2	IN-KY	1	16	6.3	Full Support								Full Support	488.0-603.3
604.3	IN-KY	3	16	**18.8**	Partial Support								Partial Support	
607.5	IN-KY	4	21	**19.0**	Partial Support								Partial Support	603.3-608.1
608.7	IN-KY					3	1	1	1	3	30%	Not Supporting	Not Supporting	608.1-609.2
609.7	IN-KY	4	21	**19.0**	Partial Support								Partial Support	
612.2	IN-KY	3	21	**14.3**	Partial Support								Partial Support	609.2-614.9
617.6	IN-KY	8	21	**38.1**	Not Supporting								Not Supporting	
619.3	IN-KY					4	6	3	6	5	80%	Not Supporting	Not Supporting	
623.1	IN-KY	8	21	**38.1**	Not Supporting								Not Supporting	
628.1	IN-KY	8	21	**38.1**	Not Supporting								Not Supporting	
630.0	IN-KY	6	10	**60.0**	Not Supporting								Not Supporting	

Appendix H: Contact Recreation Use Assessment

Mile Point	States	Longitudinal Survey Data 2003 - 2008 #>SS Max	# of Samples	% of Samples > SSM (03-08)	Assessment of Longitudinal Data	Contact Recreation 2005 - 2009 No. Mos. > GM 2005	No. Mos. > GM 2006	No. Mos. > GM 2007	No. Mos. > GM 2008	No. Mos. > GM 2009	% Mos. > GM 05-'09	Assessment	OVERALL ASSESSMENT	RIVER MILE OFASSESSMENT
631.6	IN-KY	11	20	**55.0**	Not Supporting								Not Supporting	
637.6	IN-KY	12	21	**57.1**	Not Supporting								Not Supporting	
643.1	IN-KY	10	21	**47.6**	Not Supporting								Not Supporting	
648.9	IN-KY	8	20	**40.0**	Not Supporting								Not Supporting	
654.0	IN-KY	7	17	**41.2**	Not Supporting								Not Supporting	
659.2	IN-KY	5	17	**29.4**	Not Supporting								Not Supporting	
664.2	IN-KY	6	17	**35.3**	Not Supporting								Not Supporting	
669.1	IN-KY	8	17	**47.1**	Not Supporting								Not Supporting	
674.5	IN-KY	8	17	**47.1**	Not Supporting								Not Supporting	
680.4	IN-KY	6	17	**35.3**	Not Supporting								Not Supporting	614.9-683.0
685.6	IN-KY	3	15	**20.0**	Partial Support								Partial Support	
690.7	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
695.6	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
700.9	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
706.2	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
711.5	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
717.4	IN-KY	2	15	**13.3**	Partial Support								Partial Support	683.0-719.5
721.5	IN-KY	4	14	**28.6**	Not Supporting								Not Supporting	
727.0	IN-KY	5	17	**29.4**	Not Supporting								Not Supporting	
732.5	IN-KY	6	17	**35.3**	Not Supporting								Not Supporting	719.5-735.7
738.8	IN-KY	2	15	**13.3**	Partial Support								Partial Support	
742.4	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
746.4	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
750.6	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
754.8	IN-KY	2	17	**11.8**	Partial Support								Partial Support	735.7-756.4
758.0	IN-KY	5	17	**29.4**	Not Supporting								Not Supporting	756.4-760.6
763.2	IN-KY	3	15	**20.0**	Partial Support								Partial Support	
769.1	IN-KY	2	17	**11.8**	Partial Support								Partial Support	
773.6	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
778.2	IN-KY	2	17	**11.8**	Partial Support								Partial Support	
782.8	IN-KY	2	17	**11.8**	Partial Support								Partial Support	
787.0	IN-KY	2	17	**11.8**	Partial Support								Partial Support	760.6-789.3
791.5	IN-KY					6	3	0	1	0	33%	Not Supporting	Not Supporting	789.3-792.1
792.7	IN-KY	4	17	**23.5**	Partial Support								Partial Support	792.1-793.2
793.7	IN-KY					6	5	4	3	1	63%	Not Supporting	Not Supporting	
794.2	IN-KY	5	17	**29.4**	Not Supporting								Not Supporting	
797.3	IN-KY					6	4	0	2	0	40%	Not Supporting	Not Supporting	793.2-798.4
799.5	IN-KY	1	5	**20.0**	Partial Support								Partial Support	798.4-799.8
800.0	IN-KY	4	10	**40.0**	Not Supporting								Not Supporting	799.8-802.9
805.8	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
811.3	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
817.0	IN-KY	4	17	**23.5**	Partial Support								Partial Support	802.9-820.1
823.2	IN-KY	5	17	**29.4**	Not Supporting								Not Supporting	820.1-826.4
829.5	IN-KY	4	17	**23.5**	Partial Support								Partial Support	
832.2	IN-KY	2	15	**13.3**	Partial Support								Partial Support	
837.2	IN-KY	3	17	**17.6**	Partial Support								Partial Support	
842.3	IN-KY	2	17	**11.8**	Partial Support								Partial Support	
846.5	IN-KY	3	17	**17.6**	Partial Support								Partial Support	826.4-847.3
848.0	IN-KY													
851.3	IL-KY	1	17	5.9	Full Support								Full Support	847.3-853.4
855.5	IL-KY	2	15	**13.3**	Partial Support								Partial Support	853.4-857.6
859.7	IL-KY	1	15	6.7	Full Support								Full Support	857.6-862.1
864.4	IL-KY	2	17	**11.8**	Partial Support								Partial Support	
869.8	IL-KY	2	17	**11.8**	Partial Support								Partial Support	862.1-872.8
875.7	IL-KY	1	17	5.9	Full Support								Full Support	872.8-878.2
880.7	IL-KY	2	17	**11.8**	Partial Support								Partial Support	878.2-882.9
885.0	IL-KY	1	17	5.9	Full Support								Full Support	
889.2	IL-KY	1	17	5.9	Full Support								Full Support	
891.7	IL-KY	1	17	5.9	Full Support								Full Support	882.9-894.6
897.5	IL-KY	3	17	**17.6**	Partial Support								Partial Support	
903.2	IL-KY	3	17	**17.6**	Partial Support								Partial Support	
908.0	IL-KY	2	17	**11.8**	Partial Support								Partial Support	894.6-910.3
912.6	IL-KY	1	17	5.9	Full Support								Full Support	
917.6	IL-KY	1	17	5.9	Full Support								Full Support	910.3-920.5
923.4	IL-KY	2	17	**11.8**	Partial Support								Partial Support	920.5-925.8
928.2	IL-KY	1	15	6.7	Full Support								Full Support	
932.2	IL-KY	0	17	0.0	Full Support								Full Support	
936.2	IL-KY	0	17	0.0	Full Support								Full Support	
937.7	IL-KY	0	17	0.0	Full Support								Full Support	
940.9	IL-KY	0	17	0.0	Full Support								Full Support	
944.2	IL-KY	0	17	0.0	Full Support								Full Support	
947.5	IL-KY	1	17	5.9	Full Support								Full Support	
952.2	IL-KY	1	17	5.9	Full Support								Full Support	
957.7	IL-KY	1	17	5.9	Full Support								Full Support	
963.0	IL-KY	1	16	6.3	Full Support								Full Support	
969.2	IL-KY	1	16	6.3	Full Support								Full Support	
974.1	IL-KY	1	16	6.3	Full Support								Full Support	
979.2	IL-KY	1	16	6.3	Full Support								Full Support	925.8-981.0

Appendix I: Dioxin High Volume Water Sampling Results
1997-2004

			2, 3, 7, 8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)			Dioxin TEQ Standard
Mile Point	Date	Flow ft^3/s	Dissolved fg/L	Particulate fg/L	Total fg/L	Dissolved fg/L	Particulate fg/L	Total fg/L	5 ppq
4.0	2-Aug-00	16852	2.47 est	12.4	14.9 est	10.9	221	232	violation
4.0	25-Apr-01	38706	1.19	11.3	12.5	4.34	105	109	violation
4.0	13-Jul-04	27214	<3	3.08		16.3	73.4	89.7	violation
10.9	3-Aug-00	17808	4.51	18	22.5	12.0	248	260	violation
10.9	26-Apr-01	35600	1.44	12.6	14.0	3.94	94.0	97.9	violation
10.9	14-Jul-04	29723	<4	1.69		14.6	36.1	50.7	violation
20.2	7-Jul-98	19500	3.65	23.9	27.6	14.7	219	233	violation
20.2	4-Aug-98	5000	<1.56	25.9		23.8	150	174	violation
20.2	15-Sep-98	7700	<0.92	23.9		12.4	158	171	violation
20.2	4-Aug-00	22484	4.2	66.9	71.1	15.6	420	436	violation
20.2	27-Apr-01	33770	2.02	12.8	14.8	4.98	152	157	violation
30.9	5-Aug-00	25615	3.57	<1.18		9.67	248	258	violation
30.9	30-Apr-01	24000	1.95	14.9	16.9	6.20	135	141	violation
30.9	30-Mar-04	61039	<2	12.7		9.03	168	177	violation
30.9	15-Jul-04	27777	<4	2.14		12.9	26.6	39.5	violation
40.0	8-Jul-98	20700	2.02	28	30.0	18.4	245	263	violation
40.0	5-Aug-98	7300	<0.97	19.3		24.3	138	163	violation
40.0	16-Sep-98	7700	<0.92	17.4		15.6	131	146	violation
40.0	8-Aug-00	50098	3.42	55.4	58.8	45.1	701	746	violation
40.0	1-May-01	27700	2.13	15.3	17.4	6.26	114	121	violation
44.6	9-Jul-98	21700	3.16	15.1	18.3	17.3	179	196	violation
44.6	6-Aug-98	7800	<0.49	15.2		24.7	149	174	violation
44.6	17-Sep-98	7100	<0.72	16.3		15.7	117	132	violation
69.9	9-Aug-00	37837	2.57 est	23.9	26.47 est	30.6	402	433	violation
69.9	2-May-01	23600	1.18	10.5	11.7	6.18	70.8	76.9	violation
69.9	4-Nov-04	32286	10.9	7.27	18.2	15.5	91.5	107	violation
99.2	11-Aug-00	26439	5.33			28.4		insufficient data	
99.2	3-May-01	18828	1.29	4.85	6.14	5.95	51.0	56.9	violation
99.2	31-Mar-04	67049	<2.5	10.3		11.2	101	113	violation
99.2	3-Nov-04	33622	15.1	8.08	23.2	20.5	72.4	92.9	violation
129.0	14-Jul-98	17000	2.48	8.26	10.7	20.2	107	127	violation
129.0	11-Aug-98	10500	<0.59	10.4		26.1	109	135	violation
129.0	22-Sep-98	10100	0.92	11.8	12.7	8.21	110	118	violation
129.0	12-Aug-00	28359	<1			24.6		insufficient data	
129.0	4-May-01	15700	2.35	5.66	8.01	7.84	76.5	84.3	violation
149.0	13-Aug-00	15954	<1.36	<1.03	<2.39	20.9	89.1	110	violation
149.0	5-May-01	21500	1.44	8.5	9.94	6.30	76.6	82.9	violation
149.0	25-Mar-04	84867	<3	18.7		24.2	265	290	violation
171.8	14-Aug-00	19291	<1	9.68		15.8	103	118	violation
171.8	7-May-01	12000	1.6	5.7	7.30	6.60	69.9	76.5	violation
171.8	24-Mar-04	97183	<3.5	45.9		33.4	648	681	violation
175.1	15-Jul-98	34600	1.03	19.4	20.4	8.72	282	291	violation
175.1	12-Aug-98	19100	<1.49	15.5		18.6	158	176	violation
175.1	23-Sep-98	14200	<0.25	7.81		7.37	100	108	violation
175.1	16-Aug-00	19644	<1	<0.99	<1.99	15.0	92.3	107	violation
175.1	9-May-01	14600	1.16	6.05	7.21	5.46	97.0	102	violation
184.3	17-Aug-00	17313	6.89	<1.19		29.1	238	267	violation
184.3	10-May-01	25700	1.68	25.2	26.9	12.9	899	912	violation
184.3	23-Mar-04	134274	<3.5	35.1		23.3	534	558	violation
207.7	16-Jul-98	32500	1.66	9.52	11.2	19.6	234	253	violation
207.7	13-Aug-98	20500	<0.32	7.8		21.9	220	242	violation
207.7	24-Sep-98	12000	3.5	6.48	9.98	20.4	131	151	violation
207.7	18-Aug-00	17212	<1.2	<0.95	<2.15	16.5	189	205	violation
207.7	11-May-01	13100	1.94	19	20.9	9.46	321	331	violation
264.0	16-Jul-97	19000	2.71	14	16.7	18.1	317	335	violation
264.0	20-Aug-97	62700	2.02	9.8	11.8	15.0	516	531	violation
264.0	24-Sep-97	14500	<0.99	8.02		12.9	268	281	violation
264.0	18-Jun-98	93700	<2.6	69.7		47.1	1240	1287	violation
264.0	3-Nov-98	9100	2.51	4.26	6.77	11.7	88.6	100	violation
264.0	19-Aug-00	10269	<1.01	<0.9	<1.91	15.3	171	186	violation
264.0	12-May-01	22100	1.72	8.58	10.3	10.0	256	266	violation
281.5	17-Jul-97	21300	5.36	32.3	37.7	16.3	296	312	violation
281.5	21-Aug-97	68800	3.34	44.3	47.6	13.4	891	904	violation
281.5	25-Sep-97	17600	<0.86	30.6		7.14	246	253	violation
281.5	19-Jun-98	175400	7.14	136	143	46.5	1290	1337	violation
281.5	4-Nov-98	15900	8.01	23.6	31.6	18.1	101	119	violation
302.9	18-Jul-97	20400	5.86	29.4	35.3	11.6	199	211	violation
302.9	22-Aug-97	61300	<0.4	44		11.6	482	494	violation
302.9	26-Sep-97	21800	4.85	18	22.9	15.5	117	132	violation
302.9	20-Jun-98	103100	7.12	160	167	52.7	731	784	violation
302.9	5-Nov-98	17000	6.49	19	25.5	16.3	90.6	107	violation
321.5	7-May-99	33300	6.85	12.2	19.1	18.6	64.9	83.6	violation
321.5	15-Jul-99	9890	3.53	11.8	15.3	11.8	54.6	66.3	violation
321.5	20-Apr-00	211000	4.33	284	288	19.3	1291	1310	violation
360.0	9-May-99	48700	3.54	22	25.5	10.4	136	147	violation
360.0	17-Jul-99	13661	4.25	12.7	17.0	9.29	67.2	76.4	violation

Est- Estimated
Assessment determined using Total Dioxin TEQ data

Appendix I: Dioxin High Volume Water Sampling Results
1997-2004

			2, 3, 7, 8 TCDD pg/L (ppq)			Dioxin TEQ pg/L (ppq)			Dioxin TEQ Standard
Mile Point	Date	Flow ft^3/s	Dissolved fg/L	Particulate fg/L	Total fg/L	Dissolved fg/L	Particulate fg/L	Total fg/L	5 ppq
360.0	22-Apr-00	175000	5.94	230	236	17.7	1073	1091	violation
438.6	10-May-99	35800	3.26	1.839	5.10	10.8	102	113	violation
438.6	18-Jul-99	12200	5.61	17.1	22.7	14.6	101	116	violation
438.6	23-Apr-00	174000	10.3 est	380	390.3 est	17.0	1441	1458	violation
486.5	12-May-99	38400	6.75	14.05	20.8	14.8	61.6	76.4	violation
486.5	19-Jul-99	12800	<0.29	<0.41	<.7	10.9	22.7	33.6	violation
486.5	25-Apr-00	177000	7.86	137	145	30.9	694	725	violation
494.5	14-May-99	43000	3.16	12.2	15.4	10.9	86.9	97.8	violation
494.5	21-Jul-99	15600	<0.16	10.8		14.2	63.1	77.4	violation
494.5	26-Apr-00	180000	8.94	122	131	33.2	618	651	violation
548.3	15-May-99	48000	1.66	7.53	9.19	4.92	49.0	53.9	violation
548.3	22-Jul-99	14180	<0.32	5.07		15.4	27.9	43.2	violation
548.3	27-Apr-00	199000	3.94	47.2	51.1	14.2	289	303	violation
625.6	17-May-99	54800	3.13	16.6	19.7	12.3	116	128	violation
625.6	23-Jul-99	23600	<0.42	4.7		11.0	35.5	46.6	violation
625.6	28-Apr-00	210000	8.27	229	237	31.3	1018	1049	violation
625.6	11-Sep-03	80244	10.7	188	199	44.2	774	818	violation
670.7	18-May-99	54700	4.31	15.2	19.5	13.9	104	117	violation
670.7	27-Jul-99	17700	1.98	5.65	7.63	8.03	37.0	45.0	violation
670.7	1-May-00	146000	6.04	127	133	26.0	677	703	violation
670.7	4-Nov-03	91661	6.63	61.8	68.4	28.6	313	341	violation
717.4	19-May-99	66200	2.92	7.55	10.5	11.4	48.7	60.0	violation
717.4	28-Jul-99	19400	2.79	10.7	13.5	13.2	60.3	73.5	violation
717.4	2-May-00	126000	4.25	61.5	65.8	14.5	352	367	violation
717.4	17-Sep-03	34169	6.79	9.95	16.7	30.8	41.8	72.6	violation
722.5	20-May-99	57800	3.33	8.36	11.7	12.3	66.8	79.0	violation
722.5	29-Jul-99	35400	3.22	5.92	9.14	12.2	45.1	57.3	violation
722.5	3-May-00	95500	3.17	65.4	68.6	10.2	404	414	violation
722.5	16-Sep-03	45938	8.13	21.6	29.7	34.0	117	151	violation
765.0	7-May-02	365000	16.2	357	373	93.2	1629	1722	violation
765.0	22-Oct-02	35600	<3.25	19.2		8.94	131	140	violation
765.0	17-May-03	303000	17.3	416	433	86.0	2167	2253	violation
770.0	9-May-02	370000	12.2	285	297	69.2	1639	1708	violation
770.0	23-Oct-02	35300	3.42	21.6	25.0	16.5	154	170	violation
770.0	18-May-03	282000	37.6	202	240	215	1011	1226	violation
847.0	13-May-02	228000	4.39 est	144	148.4 est	25.1	987	1012	violation
847.0	25-Oct-02	49700	5.57	15.3	20.9	31.8	114	145	violation
847.0	20-May-03	201000	20.1	181	201	120	1106	1226	violation
917.0	16-May-02	491058	10.4	182	192	66.0	1150	1216	violation
917.0	30-Oct-02	80600	4 est	17.6	21.6 est	21.7	119	141	violation
917.0	29-May-03	268000	10.3	116	126	64.8	597	662	violation
943.0	19-May-02	773000	5.83 est	205	210.8 est	32.8	773	806	violation
943.0	2-Nov-02	215000	1.55 est	22.8	24.35 est	6.84	166	173	violation
943.0	1-Jun-03	230000	4.75 est	76.5	81.3 est	21.1	502	523	violation
948.0	20-May-02	767000	3.27	83.9	87.2	17.0	590	607	violation
948.0	3-Nov-02	223000	0.991 est	22.1	23.09 est	3.29	154	157	violation
948.0	2-Jun-03	217000	6.75	183	190	41.6	1091	1132	violation
980.0	21-May-02	772000	5.56	56.9	62.5	33.6	382	415	violation
980.0	4-Nov-02	222000	2.78	54.6	57.4	27.5	405	432	violation
980.0	3-Jun-03	229000	13.8 est	288	301.8 est	70.9	1545	1616	violation

Est- Estimated
Assessment determined using Total Dioxin TEQ data

Appendix J: PCB High Volume Water Sampling Results
1997-2004

Mile Point	Date	Flow (cfs)	Dissolved pg/L	Particulate pg/L	Total PCBs pg/L	PCB Standard 64 pg/L
4.0	2-Aug-00	16852		3706.4	insufficient data	
4.0	25-Apr-01	38706	430.3	1148.2	1578.5	violation
4.0	13-Jul-04	27214	2240.3	1084.7	3325.0	violation
10.9	3-Aug-00	17808		4131.0	insufficient data	
10.9	26-Apr-01	35600	590.6	1010.5	1601.1	violation
10.9	14-Jul-04	29723	2120.6	648.5	2769.1	violation
20.2	7-Jul-98	19500	1241.6	2018.1	3259.7	violation
20.2	15-Sep-98	7700	1497.5	1477.9	2975.3	violation
20.2	4-Aug-00	22484		6443.6	insufficient data	
20.2	27-Apr-01	33770	551.0	1434.1	1985.1	violation
30.9	5-Aug-00	25615		4292.6	insufficient data	
30.9	30-Apr-01	24000	814.5	1708.6	2523.2	violation
30.9	30-Mar-04	61039	430.7	1427.0	1857.7	violation
30.9	15-Jul-04	27777	2103.3	485.7	2589.1	violation
40.0	8-Jul-98	20700	1463.6	2714.5	4178.1	violation
40.0	16-Sep-98	7700	1431.7	1647.8	3079.5	violation
40.0	8-Aug-00	50098		11744.0	insufficient data	
40.0	1-May-01	27700	791.8	1494.0	2285.8	violation
44.6	9-Jul-98	21700	1368.7	1755.5	3124.2	violation
44.6	17-Sep-98	7100	1515.8	1417.2	2933.0	violation
69.9	9-Aug-00	37837		5589.6	insufficient data	
69.9	2-May-01	23600	786.1	998.6	1784.7	violation
69.9	4-Nov-04	32286	1317.1	1586.6	2903.7	violation
99.2	11-Aug-00	26439	2910.0		insufficient data	
99.2	3-May-01	18828	774.0	676.4	1450.4	violation
99.2	31-Mar-04	67049	831.0	1845.6	2676.7	violation
99.2	3-Nov-04	33622	1152.9	976.5	2129.3	violation
129.0	14-Jul-98	17000	1206.8	1137.0	2343.8	violation
129.0	11-Aug-98	10500	1403.8		insufficient data	
129.0	22-Sep-98	10100	270.2	906.3	1176.4	violation
129.0	12-Aug-00	28359	2494.9	2052.8	4547.7	violation
129.0	4-May-01	15700	822.1	889.1	1711.2	violation
149.0	13-Aug-00	15954	2173.0	1083.7	3256.7	violation
149.0	5-May-01	21500	848.8	982.4	1831.2	violation
149.0	25-Mar-04	84867	743.2	2930.7	3673.9	violation
171.8	14-Aug-00	19291	1878.0	1205.1	3083.1	violation
171.8	7-May-01	12000	779.1	934.9	1713.9	violation
171.8	24-Mar-04	97183	1100.6	8290.6	9391.2	violation
175.1	15-Jul-98	34600	1072.0	2298.8	3370.8	violation
175.1	12-Aug-98	19100	1198.9	1090.8	2289.7	violation
175.1	23-Sep-98	14200	164.9	743.7	908.6	violation
175.1	16-Aug-00	19644	1575.9	1127.7	2703.6	violation
175.1	9-May-01	14600	775.4	1313.9	2089.2	violation
184.3	17-Aug-00	17313	1620.2	1079.3	2699.5	violation
184.3	10-May-01	25700	845.7	1435.3	2281.1	violation
184.3	23-Mar-04	134274	736.2	3189.5	3925.7	violation
207.7	16-Jul-98	32500	1232.4	804.1	2036.6	violation
207.7	13-Aug-98	20500	1337.3	520.2	1857.5	violation
207.7	24-Sep-98	12000	260.2	279.5	539.7	violation
207.7	18-Aug-00	17212	1299.1	1014.7	2313.9	violation
207.7	11-May-01	13100	879.8	1556.5	2436.3	violation
264.0	20-Aug-97	62700	816.9	798.5	1615.4	violation
264.0	24-Sep-97	14500	758.2	691.6	1449.8	violation
264.0	18-Jun-98	93700		4157.4	insufficient data	
264.0	3-Nov-98	9100		253.7	insufficient data	
264.0	19-Aug-00	10269	1173.3	656.4	1829.7	violation
264.0	12-May-01	22100	872.3	1394.7	2267.1	violation
281.5	21-Aug-97	68800	698.0	1715.8	2413.8	violation
281.5	25-Sep-97	17600	592.7		insufficient data	
281.5	19-Jun-98	175400		2935.7	insufficient data	
281.5	4-Nov-98	15900		334.3	insufficient data	
302.9	22-Aug-97	61300	677.4	1201.3	1878.8	violation
302.9	20-Jun-98	103100		2855.6	insufficient data	
302.9	5-Nov-98	17000		238.7	insufficient data	
321.5	7-May-99	33300		214.7	insufficient data	
321.5	15-Jul-99	9890	695.5	257.9	953.4	violation

Appendix J: PCB High Volume Water Sampling Results
1997-2004

Mile Point	Date	Flow (cfs)	Dissolved pg/L	Particulate pg/L	Total PCBs pg/L	PCB Standard 64 pg/L
321.5	20-Apr-00	211000	360.0	6079.9	6439.9	violation
360.0	9-May-99	48700	591.0	455.7	1046.7	violation
360.0	17-Jul-99	13661	865.1	491.9	1357.0	violation
360.0	22-Apr-00	175000	525.8	8122.3	8648.1	violation
438.6	10-May-99	35800	580.2	409.4	989.6	violation
438.6	18-Jul-99	12200	619.5	309.9	929.4	violation
438.6	23-Apr-00	174000		5072.8	insufficient data	
486.5	12-May-99	38400	1768.7	406.9	2175.6	violation
486.5	19-Jul-99	12800	664.8	218.9	883.7	violation
486.5	25-Apr-00	177000	800.0	3752.1	4552.1	violation
494.5	14-May-99	43000	794.1	393.1	1187.3	violation
494.5	21-Jul-99	15600	1141.4	381.2	1522.6	violation
494.5	26-Apr-00	180000	851.5	3921.5	4773.0	violation
548.3	15-May-99	48000	494.7	213.8	708.5	violation
548.3	22-Jul-99	14180	915.8	126.2	1042.1	violation
548.3	27-Apr-00	199000	465.6	1569.9	2035.6	violation
625.6	17-May-99	54800	658.7		insufficient data	
625.6	23-Jul-99	23600	907.1	204.3	1111.5	violation
625.6	28-Apr-00	210000	820.1	5761.9	6582.1	violation
625.6	11-Sep-03	80244	871.7	3003.5	3875.2	violation
670.7	18-May-99	54700	618.0		insufficient data	
670.7	27-Jul-99	17700	635.9	164.2	800.1	violation
670.7	1-May-00	146000	63.8	4138.3	4202.0	violation
670.7	4-Nov-03	91661	598.0	1428.5	2026.6	violation
717.4	19-May-99	66200	455.7		insufficient data	
717.4	28-Jul-99	19400	480.2	190.1	670.3	violation
717.4	2-May-00	126000	671.0	1894.6	2565.6	violation
717.4	17-Sep-03	34169	456.8	201.5	658.3	violation
722.5	20-May-99	57800	589.3		insufficient data	
722.5	29-Jul-99	35400	482.3	208.0	690.3	violation
722.5	3-May-00	95500	711.2	2213.9	2925.1	violation
722.5	16-Sep-03	45938	696.1	508.2	1204.3	violation
765.0	7-May-02	365000	868.7	6589.8	7458.5	violation
765.0	22-Oct-02	35600	407.2	425.0	832.2	violation
765.0	17-May-03	303000	992.0	11611.5	12603.5	violation
770.0	9-May-02	370000	751.7	6424.6	7176.4	violation
770.0	23-Oct-02	35300	512.0	499.8	1011.9	violation
770.0	18-May-03	282000	1301.7	6278.0	7579.7	violation
847.0	13-May-02	228000	479.2	8207.5	8686.7	violation
847.0	25-Oct-02	49700	518.1	404.1	922.2	violation
847.0	20-May-03	201000	979.0	5480.0	6458.9	violation
917.0	16-May-02	491058	806.2	4833.4	5639.6	violation
917.0	30-Oct-02	80600	324.0	412.1	736.1	violation
917.0	29-May-03	268000	766.2	3611.3	4377.5	violation
943.0	19-May-02	773000	572.6	2469.9	3042.5	violation
943.0	2-Nov-02	215000	206.5	616.1	822.6	violation
943.0	1-Jun-03	230000	444.4	1843.5	2288.0	violation
948.0	20-May-02	767000	539.1	3009.8	3548.9	violation
948.0	3-Nov-02	223000	150.3	451.5	601.7	violation
948.0	2-Jun-03	217000	1403.3	4251.9	5655.2	violation
980.0	21-May-02	772000	636.8	1504.3	2141.0	violation
980.0	4-Nov-02	222000	284.9	1501.1	1786.0	violation
980.0	3-Jun-03	229000	42.1	6696.6	6738.7	violation

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
0.2	Emsworth	2007	C	44.55	50.76	2	Fair	
1.9	Emsworth	2007	B	46.71	34.98	0	**Very Poor**	
4.0	Emsworth	2007	B	46.71	75.89	5	Excellent	
4.3	Emsworth	2007	C	44.55	56.13	3	Good	
5.1	Emsworth	2007	A	50.03	51.47	2	Fair	**GOOD**
6.7	Dashields	2008	A	50.03	55.33	2	Fair	
7.4	Dashields	2008	C	44.55	54.42	3	Good	
7.8	Dashields	2008	C	44.55	31.39	1	**Poor**	
8.1	Dashields	2008	C	44.55	44.50	1	**Poor**	
8.4	Dashields	2008	B	46.71	62.89	3	Good	
9.1	Dashields	2008	B	46.71	35.79	0	**Very Poor**	
9.4	Dashields	2008	B	46.71	49.57	2	Fair	
9.8	Dashields	2008	B	46.71	35.71	0	**Very Poor**	
10.0	Dashields	2008	C	44.55	35.09	1	**Poor**	
10.6	Dashields	2008	C	44.55	28.85	0	**Very Poor**	
10.8	Dashields	2008	B	46.71	46.48	1	**Poor**	
11.3	Dashields	2008	D	41.80	41.55	1	**Poor**	
11.6	Dashields	2008	B	46.71	59.07	3	Good	
12.0	Dashields	2008	B	46.71	51.90	2	Fair	
12.5	Dashields	2008	B	46.71	61.15	3	Good	**POOR**
13.7	Montgomery	2006	B	46.71	56.39	3	Good	
14.1	Montgomery	2006	B	46.71	51.51	2	Fair	
15.8	Montgomery	2006	B	46.71	45.77	1	**Poor**	
16.6	Montgomery	2006	B	46.71	46.42	1	**Poor**	
19.3	Montgomery	2006	B	46.71	33.55	0	**Very Poor**	
22.0	Montgomery	2006	B	46.71	54.40	2	Fair	
23.1	Montgomery	2006	B	46.71	43.72	1	**Poor**	
26.1	Montgomery	2006	B	46.71	50.24	2	Fair	
27.0	Montgomery	2006	C	44.55	44.75	2	Fair	
27.1	Montgomery	2006	B	46.71	61.92	3	Good	
27.3	Montgomery	2006	D	41.80	46.73	2	Fair	
27.6	Montgomery	2006	D	41.80	39.98	1	**Poor**	
28.7	Montgomery	2006	C	44.55	63.45	4	Very Good	
30.1	Montgomery	2006	B	46.71	41.49	1	**Poor**	
30.4	Montgomery	2006	B	46.71	53.56	2	Fair	**POOR**
32.5	New Cumberland	2005	B	46.71	72.73	4	Very Good	
34.3	New Cumberland	2005	B	46.71	76.07	5	Excellent	
34.9	New Cumberland	2005	D	41.80	49.07	2	Fair	
37.7	New Cumberland	2005	B	46.71	59.35	3	Good	
39.2	New Cumberland	2005	C	44.55	62.50	4	Very Good	
40.9	New Cumberland	2005	B	46.71	58.88	3	Good	
41.9	New Cumberland	2005	B	46.71	53.21	2	Fair	
44.8	New Cumberland	2005	B	46.71	63.59	3	Good	
45.7	New Cumberland	2005	B	46.71	71.25	4	Very Good	
45.8	New Cumberland	2005	B	46.71	50.20	2	Fair	
46.6	New Cumberland	2005	C	44.55	64.09	4	Very Good	
47.9	New Cumberland	2005	B	46.71	71.34	4	Very Good	
48.6	New Cumberland	2005	B	46.71	68.83	4	Very Good	
50.2	New Cumberland	2005	C	44.55	49.82	2	Fair	
51.9	New Cumberland	2005	A	50.03	57.86	3	Good	**GOOD**
55.5	Pike Island	2007	B	46.71	69.36	4	Very Good	
56.2	Pike Island	2007	C	44.55	81.03	5	Excellent	

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
58.2	Pike Island	2007	C	44.55	73.48	5	Excellent	
60.1	Pike Island	2007	C	44.55	74.31	5	Excellent	
60.4	Pike Island	2007	B	46.71	61.34	3	Good	
62.8	Pike Island	2007	B	46.71	66.43	4	Very Good	
64.3	Pike Island	2007	C	44.55	73.82	5	Excellent	
64.8	Pike Island	2007	C	44.55	58.40	3	Good	
68.4	Pike Island	2007	C	44.55	70.76	4	Very Good	
72.9	Pike Island	2007	C	44.55	68.10	4	Very Good	
75.2	Pike Island	2007	A	50.03	60.30	3	Good	
78.1	Pike Island	2007	D	41.80	49.20	2	Fair	
79.0	Pike Island	2007	D	41.80	52.94	3	Good	
79.2	Pike Island	2007	C	44.55	58.70	3	Good	
79.8	Pike Island	2007	C	44.55	62.37	4	Very Good	**GOOD**
89.0	Hannibal	2008	B	46.71	65.28	4	Very Good	
89.9	Hannibal	2008	C	44.55	56.33	3	Good	
91.0	Hannibal	2008	A	50.03	63.63	4	Very Good	
92.2	Hannibal	2008	B	46.71	63.87	4	Very Good	
95.8	Hannibal	2008	C	44.55	49.17	2	Fair	
98.4	Hannibal	2008	A	50.03	38.90	1	**Poor**	
100.6	Hannibal	2008	B	46.71	63.91	4	Very Good	
103.1	Hannibal	2008	D	41.80	19.97	0	**Very Poor**	
105.0	Hannibal	2008	C	44.55	55.12	3	Good	
107.9	Hannibal	2008	D	41.80	62.59	4	Very Good	
108.4	Hannibal	2008	D	41.80	49.98	3	Good	
109.9	Hannibal	2008	C	44.55	68.49	4	Very Good	
113.4	Hannibal	2008	D	41.80	52.01	3	Good	
118.6	Hannibal	2008	E	39.59	54.25	3	Good	
124.6	Hannibal	2008	D	41.80	67.41	4	Very Good	**GOOD**
127.4	Willow Island	2006	B	46.71	62.69	3	Good	
128.0	Willow Island	2006	C	44.55	65.32	4	Very Good	
128.5	Willow Island	2006	B	46.71	65.70	4	Very Good	
130.6	Willow Island	2006	B	46.71	70.58	4	Very Good	
132.4	Willow Island	2006	C	44.55	56.95	3	Good	
135.9	Willow Island	2006	D	41.80	51.54	3	Good	
137.8	Willow Island	2006	D	41.80	57.10	3	Good	
138.9	Willow Island	2006	D	41.80	51.76	3	Good	
140.9	Willow Island	2006	B	46.71	60.91	3	Good	
141.1	Willow Island	2006	D	41.80	68.76	5	Excellent	
141.7	Willow Island	2006	B	46.71	72.41	4	Very Good	
145.2	Willow Island	2006	C	44.55	58.71	3	Good	
150.8	Willow Island	2006	C	44.55	62.57	4	Very Good	
153.2	Willow Island	2006	C	44.55	56.83	3	Good	
157.4	Willow Island	2006	C	44.55	57.20	3	Good	**GOOD**
163.9	Belleville	2009	C	44.55	67.39	4	Very Good	
166.9	Belleville	2009	D	41.80	70.74	5	Excellent	
170.3	Belleville	2009	C	44.55	50.50	2	Fair	
170.4	Belleville	2009	C	44.55	63.62	4	Very Good	
170.8	Belleville	2009	C	44.55	54.89	3	Good	
171.3	Belleville	2009	C	44.55	57.53	3	Good	
171.4	Belleville	2009	D	41.80	56.38	3	Good	
174.3	Belleville	2009	C	44.55	39.84	1	**Poor**	
179.3	Belleville	2009	C	44.55	54.53	3	Good	

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
185.1	Belleville	2009	B	46.71	48.42	2	Fair	
186.4	Belleville	2009	D	41.80	48.62	2	Fair	
189.3	Belleville	2009	C	44.55	61.99	4	Very Good	
191.0	Belleville	2009	B	46.71	54.98	2	Fair	
193.5	Belleville	2009	C	44.55	57.50	3	Good	
194.6	Belleville	2009	B	46.71	59.54	3	Good	**FAIR**
205.2	Racine	2005	B	46.71	48.09	2	Fair	
208.7	Racine	2005	C	44.55	59.82	3	Good	
210.2	Racine	2005	D	41.80	50.41	3	Good	
210.7	Racine	2005	C	44.55	62.25	4	Very Good	
214.3	Racine	2005	C	44.55	47.90	2	Fair	
217.0	Racine	2005	D	41.80	52.69	3	Good	
218.0	Racine	2005	D	41.80	56.58	3	Good	
219.8	Racine	2005	D	41.80	54.61	3	Good	
223.5	Racine	2005	D	41.80	46.10	2	Fair	
225.4	Racine	2005	D	41.80	52.80	3	Good	
226.2	Racine	2005	E	39.59	59.95	4	Very Good	
226.4	Racine	2005	D	41.80	58.26	4	Very Good	
229.8	Racine	2005	D	41.80	26.28	0	**Very Poor**	
231.3	Racine	2005	D	41.80	51.08	3	Good	
235.8	Racine	2005	C	44.55	48.06	2	Fair	**FAIR**
238.1	Rc Byrd	2008	B	46.71	54.99	2	Fair	
242.7	Rc Byrd	2008	C	44.55	59.95	3	Good	
247.1	Rc Byrd	2008	B	46.71	54.43	2	Fair	
251.7	Rc Byrd	2008	D	41.80	59.39	4	Very Good	
252.0	Rc Byrd	2008	B	46.71	54.58	2	Fair	
252.3	Rc Byrd	2008	D	41.80	46.49	2	Fair	
253.1	Rc Byrd	2008	D	41.80	50.93	3	Good	
256.6	Rc Byrd	2008	C	44.55	53.31	3	Good	
261.5	Rc Byrd	2008	A	50.03	61.33	3	Good	
264.7	Rc Byrd	2008	C	44.55	61.50	4	Very Good	
266.5	Rc Byrd	2008	B	46.71	42.07	1	**Poor**	
267.2	Rc Byrd	2008	C	44.55	62.82	4	Very Good	
268.5	Rc Byrd	2008	D	41.80	44.14	2	Fair	
273.3	Rc Byrd	2008	E	39.59	51.05	3	Good	
275.8	Rc Byrd	2008	D	41.80	47.73	2	Fair	**FAIR**
281.6	Greenup	2006	C	44.55	58.31	3	Good	
283.4	Greenup	2006	B	46.71	65.40	4	Very Good	
290.2	Greenup	2006	C	44.55	48.01	2	Fair	
291.2	Greenup	2006	C	44.55	45.31	2	Fair	
294.3	Greenup	2006	C	44.55	54.09	3	Good	
297.3	Greenup	2006	C	44.55	58.42	3	Good	
302.5	Greenup	2006	B	46.71	73.25	4	Very Good	
305.8	Greenup	2006	D	41.80	41.42	1	**Poor**	
308.7	Greenup	2006	C	44.55	58.59	3	Good	
323.5	Greenup	2006	B	46.71	42.64	1	**Poor**	
332.5	Greenup	2006	D	41.80	50.20	3	Good	
335.9	Greenup	2006	C	44.55	58.28	3	Good	
336.4	Greenup	2006	D	41.80	58.68	4	Very Good	
336.7	Greenup	2006	D	41.80	45.21	2	Fair	
338.9	Greenup	2006	C	44.55	60.80	3	Good	**FAIR**
356.2	Meldahl	2007	C	44.55	69.82	4	Very Good	

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
363.6	Meldahl	2007	D	41.80	76.99	5	Excellent	
365.7	Meldahl	2007	C	44.55	77.46	5	Excellent	
378.6	Meldahl	2007	D	41.80	61.00	4	Very Good	
380.4	Meldahl	2007	C	44.55	68.60	4	Very Good	
384.9	Meldahl	2007	D	41.80	59.24	4	Very Good	
395.1	Meldahl	2007	C	44.55	64.12	4	Very Good	
396.6	Meldahl	2007	B	46.71	63.99	4	Very Good	
397.4	Meldahl	2007	C	44.55	69.21	4	Very Good	
404.8	Meldahl	2007	D	41.80	61.70	4	Very Good	
410.0	Meldahl	2007	C	44.55	73.19	4	Very Good	
410.6	Meldahl	2007	B	46.71	68.43	4	Very Good	
423.5	Meldahl	2007	D	41.80	71.01	5	Excellent	
427.9	Meldahl	2007	D	41.80	75.04	5	Excellent	
431.2	Meldahl	2007	D	41.80	69.68	5	Excellent	**VERY GOOD**
449.1	Markland	2005	B	46.71	58.86	3	Good	
462.6	Markland	2005	D	41.80	64.43	4	Very Good	
464.7	Markland	2005	C	44.55	62.46	4	Very Good	
465.5	Markland	2005	B	46.71	66.27	4	Very Good	
469.3	Markland	2005	A	50.03	71.95	4	Very Good	
472.0	Markland	2005	B	46.71	76.87	5	Excellent	
475.9	Markland	2005	C	44.55	70.40	4	Very Good	
478.7	Markland	2005	D	41.80	64.18	4	Very Good	
480.6	Markland	2005	C	44.55	81.50	5	Excellent	
491.1	Markland	2005	D	41.80	69.31	5	Excellent	
508.5	Markland	2005	D	41.80	59.75	4	Very Good	
520.4	Markland	2005	D	41.80	57.90	3	Good	
527.9	Markland	2005	B	46.71	58.75	3	Good	
528.3	Markland	2005	D	41.80	52.68	3	Good	
530.2	Markland	2005	D	41.80	57.12	3	Good	
438.3	Markland	2009	A	50.03	68.53	4	Very Good	
445.7	Markland	2009	D	41.80	58.61	4	Very Good	
458.2	Markland	2009	D	41.80	50.75	3	Good	
469.2	Markland	2009	C	44.55	56.83	3	Good	
473.0	Markland	2009	A	50.03	70.27	4	Very Good	
477.7	Markland	2009	D	41.80	47.91	2	Fair	
487.3	Markland	2009	E	39.59	58.66	3	Good	
490.1	Markland	2009	B	46.71	81.19	5	Excellent	
508.9	Markland	2009	D	41.80	59.19	4	Very Good	
511.9	Markland	2009	D	41.80	68.29	4	Very Good	
519.0	Markland	2009	D	41.80	69.77	5	Excellent	
520.0	Markland	2009	C	44.55	71.20	4	Very Good	
527.0	Markland	2009	D	41.80	61.06	4	Very Good	
529.0	Markland	2009	D	41.80	65.51	4	Very Good	
531.0	Markland	2009	D	41.80	60.21	4	Very Good	**GOOD**
534.1	Mcalpine	2009	D	41.80	59.14	4	Very Good	
540.5	Mcalpine	2009	D	41.80	57.51	3	Good	
544.5	Mcalpine	2009	C	44.55	64.42	4	Very Good	
547.1	Mcalpine	2009	D	41.80	59.87	4	Very Good	
549.5	Mcalpine	2009	D	41.80	49.31	2	Fair	
550.2	Mcalpine	2009	D	41.80	67.32	4	Very Good	
556.1	Mcalpine	2009	C	44.55	47.06	2	Fair	
571.9	Mcalpine	2009	B	46.71	63.97	4	Very Good	

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
575.4	Mcalpine	2009	B	46.71	73.51	4	Very Good	
584.4	Mcalpine	2009	B	46.71	24.93	0	**Very Poor**	
585.9	Mcalpine	2009	D	41.80	52.67	3	Good	
586.4	Mcalpine	2009	B	46.71	49.44	2	Fair	
596.5	Mcalpine	2009	D	41.80	54.59	3	Good	
597.0	Mcalpine	2009	D	41.80	49.02	2	Fair	
600.3	Mcalpine	2009	D	41.80	67.64	4	Very Good	**GOOD**
650.3	Cannelton	2006	C	44.55	57.53	3	Good	
652.9	Cannelton	2006	C	44.55	57.67	3	Good	
655.8	Cannelton	2006	C	44.55	60.19	3	Good	
660.9	Cannelton	2006	C	44.55	52.31	3	Good	
667.7	Cannelton	2006	D	41.80	37.03	1	**Poor**	
672.8	Cannelton	2006	D	41.80	47.11	2	Fair	
687.3	Cannelton	2006	E	39.59	41.76	2	Fair	
692.0	Cannelton	2006	B	46.71	41.75	1	**Poor**	
697.9	Cannelton	2006	D	41.80	48.58	2	Fair	
698.3	Cannelton	2006	D	41.80	48.22	2	Fair	
711.6	Cannelton	2006	D	41.80	53.68	3	Good	
612.1	Cannelton	2007	B	46.71	62.57	3	Good	
612.2	Cannelton	2007	D	41.80	60.95	4	Very Good	
614.1	Cannelton	2007	C	44.55	64.21	4	Very Good	
617.7	Cannelton	2007	D	41.80	60.33	4	Very Good	
621.2	Cannelton	2007	B	46.71	74.99	4	Very Good	
623.8	Cannelton	2007	C	44.55	63.96	4	Very Good	
628.2	Cannelton	2007	C	44.55	64.65	4	Very Good	
639.7	Cannelton	2007	C	44.55	76.46	5	Excellent	
648.6	Cannelton	2007	D	41.80	51.64	3	Good	
656.4	Cannelton	2007	D	41.80	73.77	5	Excellent	
661.6	Cannelton	2007	B	46.71	69.99	4	Very Good	
680.7	Cannelton	2007	E	39.59	54.33	3	Good	
682.3	Cannelton	2007	A	50.03	79.24	5	Excellent	
689.8	Cannelton	2007	C	44.55	67.40	4	Very Good	
694.5	Cannelton	2007	D	41.80	69.56	5	Excellent	
696.1	Cannelton	2007	D	41.80	64.52	4	Very Good	
707.5	Cannelton	2007	D	41.80	67.41	4	Very Good	
709.8	Cannelton	2007	C	44.55	68.77	4	Very Good	
720.3	Cannelton	2007	E	39.59	64.68	4	Very Good	**GOOD**
721.2	Newburgh	2007	C	44.55	77.77	5	Excellent	
724.8	Newburgh	2007	C	44.55	74.62	5	Excellent	
736.7	Newburgh	2007	E	39.59	58.79	3	Good	
740.4	Newburgh	2007	C	44.55	64.95	4	Very Good	
742.4	Newburgh	2007	D	41.80	43.41	2	Fair	
747.3	Newburgh	2007	D	41.80	53.04	3	Good	
748.8	Newburgh	2007	D	41.80	66.27	4	Very Good	
749.3	Newburgh	2007	D	41.80	58.30	4	Very Good	
752.0	Newburgh	2007	D	41.80	69.01	5	Excellent	
754.3	Newburgh	2007	C	44.55	60.29	3	Good	
754.8	Newburgh	2007	C	44.55	59.93	3	Good	
759.7	Newburgh	2007	D	41.80	66.12	4	Very Good	
762.5	Newburgh	2007	D	41.80	61.36	4	Very Good	
768.9	Newburgh	2007	D	41.80	49.72	3	Good	
772.1	Newburgh	2007	D	41.80	62.45	4	Very Good	**GOOD**

Appendix K: MORFIn Scores

Mile Point	Pool	Year	Habitat Type	Criteria	MORFIn Score	Fish Quality Score	Biological Condition	Overall Pool Biological Condition
789.4	J.T. Myers	2005	B	46.71	66.04	4	Very Good	
790.2	J.T. Myers	2005	D	41.80	55.05	3	Good	
799.2	J.T. Myers	2005	D	41.80	70.88	5	Excellent	
800.4	J.T. Myers	2005	D	41.80	63.60	4	Very Good	
802.3	J.T. Myers	2005	D	41.80	54.94	3	Good	
804.9	J.T. Myers	2005	C	44.55	74.16	5	Excellent	
809.3	J.T. Myers	2005	E	39.59	59.56	4	Very Good	
813.1	J.T. Myers	2005	D	41.80	67.85	4	Very Good	
819.4	J.T. Myers	2005	C	44.55	54.92	3	Good	
821.0	J.T. Myers	2005	D	41.80	58.77	4	Very Good	
826.6	J.T. Myers	2005	E	39.59	67.26	4	Very Good	
831.3	J.T. Myers	2005	D	41.80	76.22	5	Excellent	
831.5	J.T. Myers	2005	B	46.71	59.86	3	Good	
837.6	J.T. Myers	2005	D	41.80	68.30	4	Very Good	
842.2	J.T. Myers	2005	B	46.71	76.97	5	Excellent	**VERY GOOD**
849.5	Smithland	2008	E	39.59	35.21	1	**Poor**	
854.6	Smithland	2008	D	41.80	44.71	2	Fair	
856.3	Smithland	2008	D	41.80	43.62	2	Fair	
859.4	Smithland	2008	D	41.80	45.92	2	Fair	
860.4	Smithland	2008	E	39.59	47.37	2	Fair	
869.7	Smithland	2008	D	41.80	48.56	2	Fair	
873.0	Smithland	2008	C	44.55	39.70	1	**Poor**	
874.9	Smithland	2008	D	41.80	61.95	4	Very Good	
881.7	Smithland	2008	C	44.55	62.52	4	Very Good	
889.4	Smithland	2008	E	39.59	68.85	5	Excellent	
903.7	Smithland	2008	D	41.80	61.71	4	Very Good	
905.7	Smithland	2008	D	41.80	60.53	4	Very Good	
910.7	Smithland	2008	D	41.80	65.69	4	Very Good	
912.0	Smithland	2008	D	41.80	62.45	4	Very Good	**FAIR**
919.2	Open Water	2009	D	41.80	48.84	2	Fair	
923.4	Open Water	2009	D	41.80	70.06	5	Excellent	
924.7	Open Water	2009	D	41.80	58.88	4	Very Good	
926.2	Open Water	2009	D	41.80	69.00	5	Excellent	
928.1	Open Water	2009	C	44.55	64.98	4	Very Good	
935.6	Open Water	2009	D	41.80	63.35	4	Very Good	
938.6	Open Water	2009	B	46.71	78.41	5	Excellent	
939.9	Open Water	2009	D	41.80	36.37	1	**Poor**	
940.7	Open Water	2009	D	41.80	30.21	0	**Very Poor**	
950.1	Open Water	2009	D	41.80	31.19	0	**Very Poor**	
950.4	Open Water	2009	C	44.55	47.57	2	Fair	
952.2	Open Water	2009	D	41.80	41.71	1	**Poor**	
953.3	Open Water	2009	C	44.55	52.95	3	Good	
954.2	Open Water	2009	C	44.55	42.39	1	**Poor**	
961.0	Open Water	2009	D	41.80	33.07	1	**Poor**	
970.3	Open Water	2009	D	41.80	48.55	2	Fair	
977.3	Open Water	2009	B	46.71	59.18	3	Good	**FAIR**

Appendix L: Fish Tissue Mercury Data 2005-2009

River Mile	Year	Species	Hg (mg/kg)
13.0	2008	CHANNEL CATFISH	0.058
13.0	2008	BLUEGILL	0.065
13.0	2008	COMMON CARP	0.067
13.0	2008	SMALLMOUTH BUFFALO	0.088
13.0	2008	WALLEYE	0.11
13.0	2008	FLATHEAD CATFISH	0.11
13.0	2008	WHITE BASS	0.11
13.0	2008	SAUGER	0.13
13.0	2008	LARGEMOUTH BASS	0.14
13.0	2008	SMALLMOUTH BASS	0.25
13.0	2008	FRESHWATER DRUM	0.27
26.0	2007	CHANNEL CATFISH	0.04
26.0	2007	SAUGER	0.058
26.0	2008	SAUGER	0.044
26.0	2008	CHANNEL CATFISH	0.15
26.1	2005	SAUGER	0.1
26.1	2006	CHANNEL CATFISH	0.09
26.1	2006	SAUGER	0.11
31.7	2006	BLUEGILL	0.034
31.7	2006	SMALLMOUTH BASS	0.063
31.7	2006	COMMON CARP	0.071
31.7	2006	BLACK CRAPPIE	0.087
31.7	2006	SMALLMOUTH BUFFALO	0.088
31.7	2006	CHANNEL CATFISH	0.095
31.7	2006	FLATHEAD CATFISH	0.11
31.7	2006	FRESHWATER DRUM	0.13
42.9	2006	SMALLMOUTH BASS	0.082
54.4	2005	FLATHEAD CATFISH	0.067
54.4	2005	BLACK CRAPPIE	0.076
54.4	2005	WALLEYE	0.076
54.4	2005	SAUGER	0.079
54.4	2005	COMMON CARP	0.081
54.4	2005	SMALLMOUTH BASS	0.091
54.4	2005	SMALLMOUTH BUFFALO	0.1
54.4	2005	WHITE BASS	0.11
54.4	2005	FRESHWATER DRUM	0.15
54.4	2005	CHANNEL CATFISH	0.19
54.4	2005	CHANNEL CATFISH	0.27
84.0	2007	BLACK CRAPPIE	0.046
84.0	2007	CHANNEL CATFISH	0.051
84.0	2007	HYBRID STRIPER	0.068
84.0	2007	CHANNEL CATFISH	0.077
84.0	2007	SMALLMOUTH BASS	0.078
84.0	2007	SAUGER	0.082
84.0	2007	SMALLMOUTH BASS	0.083
84.0	2007	FLATHEAD CATFISH	0.086
84.0	2007	SMALLMOUTH BUFFALO	0.099
84.0	2007	SAUGER	0.12
84.0	2007	SMALLMOUTH BUFFALO	0.12
84.0	2007	FLATHEAD CATFISH	0.13
84.0	2007	FRESHWATER DRUM	0.15
84.0	2007	COMMON CARP	0.18
100.0	2005	SAUGER	0.12
100.0	2008	SAUGER	0.044
100.0	2008	CHANNEL CATFISH	0.15
105.0	2009	HYBRID STRIPER	0.19
105.0	2009	HYBRID STRIPER	0.23
105.0	2009	HYBRID STRIPER	**0.32**
126.0	2008	BLUEGILL	0.044
126.0	2008	COMMON CARP	0.075
126.0	2008	SMALLMOUTH BUFFALO	0.085
126.0	2008	WHITE BASS	0.085
126.0	2008	WHITE BASS	0.1
126.0	2008	SMALLMOUTH BASS	0.18
127.0	2008	WHITE BASS	0.085
127.0	2008	LARGEMOUTH BASS	0.19
161.7	2006	CHANNEL CATFISH	0.041
161.7	2006	CHANNEL CATFISH	0.074
161.7	2006	BLUEGILL	0.077
161.7	2006	LARGEMOUTH BASS	0.099
161.7	2006	SAUGER	0.14
161.7	2006	SMALLMOUTH BUFFALO	0.17

Appendix L: Fish Tissue Mercury Data 2005-2009

River Mile	Year	Species	Hg (mg/kg)
161.7	2006	FLATHEAD CATFISH	0.17
161.7	2006	COMMON CARP	0.2
161.7	2006	FRESHWATER DRUM	**0.32**
161.7	2009	HYBRID STRIPER	0.28
203.9	2009	HYBRID STRIPER	0.26
203.9	2009	HYBRID STRIPER	0.28
203.9	2009	HYBRID STRIPER	**0.34**
237.5	2005	SAUGER	0.044
237.5	2005	COMMON CARP	0.057
237.5	2005	SMALLMOUTH BUFFALO	0.088
237.5	2005	LARGEMOUTH BASS	0.11
237.5	2005	CHANNEL CATFISH	0.13
237.5	2005	FRESHWATER DRUM	0.14
237.5	2005	FLATHEAD CATFISH	0.15
237.5	2005	CHANNEL CATFISH	0.17
237.5	2005	BLACK CRAPPIE	0.22
279.0	2008	WHITE CRAPPIE	0.049
279.0	2008	BLUEGILL	0.058
279.0	2008	CHANNEL CATFISH	0.063
279.0	2008	CHANNEL CATFISH	0.088
279.0	2008	COMMON CARP	0.12
279.0	2008	CHANNEL CATFISH	0.14
279.0	2008	SAUGER	0.17
279.0	2008	SMALLMOUTH BUFFALO	0.17
279.0	2008	FLATHEAD CATFISH	0.18
279.0	2008	SMALLMOUTH BASS	0.21
279.0	2008	HYBRID STRIPER	**0.33**
279.2	2009	HYBRID STRIPER	0.2
293.0	2007	CHANNEL CATFISH	0.11
293.0	2007	SAUGER	0.13
300.0	2008	CHANNEL CATFISH	0.035
341.0	2006	REDEAR SUNFISH	0.036
341.0	2006	LARGEMOUTH BASS	0.051
341.0	2006	CHANNEL CATFISH	0.058
341.0	2006	CHANNEL CATFISH	0.069
341.0	2006	LARGEMOUTH BASS	0.096
341.0	2006	COMMON CARP	0.1
341.0	2006	BLUEGILL	0.1
341.0	2006	SMALLMOUTH BUFFALO	0.11
341.0	2006	SMALLMOUTH BUFFALO	0.12
341.0	2006	SAUGER	0.13
341.0	2006	FRESHWATER DRUM	0.13
341.0	2006	FLATHEAD CATFISH	0.19
341.5	2009	HYBRID STRIPER	0.26
436.0	2007	CHANNEL CATFISH	0.056
436.0	2007	COMMON CARP	0.082
436.0	2007	BLUEGILL	0.099
436.0	2007	FLATHEAD CATFISH	0.11
436.0	2007	SAUGER	0.13
436.0	2007	CHANNEL CATFISH	0.13
436.0	2007	SMALLMOUTH BUFFALO	0.15
436.0	2007	LARGEMOUTH BASS	0.17
436.0	2007	FRESHWATER DRUM	0.17
436.0	2007	SMALLMOUTH BUFFALO	0.18
436.5	2009	HYBRID STRIPER	0.23
436.5	2009	HYBRID STRIPER	0.27
436.5	2009	HYBRID STRIPER	0.29
439.8	2005	SAUGER	0.087
440.0	2008	CHANNEL CATFISH	0.036
440.0	2008	SAUGER	0.24
531.5	2005	HYBRID STRIPER	0.044
531.5	2005	CHANNEL CATFISH	0.055
531.5	2005	SAUGER	0.06
531.5	2005	BLACK CRAPPIE	0.061
531.5	2005	FRESHWATER DRUM	0.073
531.5	2005	COMMON CARP	0.1
531.5	2005	SMALLMOUTH BUFFALO	0.1
531.5	2005	LARGEMOUTH BASS	0.12
531.5	2005	CHANNEL CATFISH	0.17
531.5	2005	CHANNEL CATFISH	0.22
531.5	2005	FLATHEAD CATFISH	0.22

Appendix L: Fish Tissue Mercury Data 2005-2009

River Mile	Year	Species	Hg (mg/kg)
532.0	2009	HYBRID STRIPER	0.2
577.0	2008	CHANNEL CATFISH	0.039
577.0	2008	SAUGER	0.1
577.5	2005	CHANNEL CATFISH	0.1
577.5	2005	SAUGER	0.14
577.5	2006	SAUGER	0.091
577.5	2006	CHANNEL CATFISH	0.15
606.8	2009	HYBRID STRIPER	**0.4**
626.0	2007	CHANNEL CATFISH	0.09
626.0	2007	FRESHWATER DRUM	**0.39**
720.7	2006	BLACK CRAPPIE	0.046
720.7	2006	LARGEMOUTH BASS	0.082
720.7	2006	CHANNEL CATFISH	0.095
720.7	2006	FLATHEAD CATFISH	0.097
720.7	2006	FRESHWATER DRUM	0.11
720.7	2006	CHANNEL CATFISH	0.12
720.7	2006	HYBRID STRIPER	0.16
720.7	2006	SAUGER	0.26
720.8	2009	HYBRID STRIPER	**0.33**
751.0	2007	CHANNEL CATFISH	0.088
751.0	2008	CHANNEL CATFISH	0.038
776.0	2007	WHITE CRAPPIE	0.044
776.0	2007	CHANNEL CATFISH	0.059
776.0	2007	CHANNEL CATFISH	0.087
776.0	2007	LARGEMOUTH BASS	0.092
776.0	2007	BIGHEAD CARP	0.11
776.0	2007	COMMON CARP	0.12
776.0	2007	FRESHWATER DRUM	0.16
776.0	2007	SAUGER	0.17
776.0	2007	SMALLMOUTH BUFFALO	0.2
776.0	2007	FLATHEAD CATFISH	0.2
776.5	2009	HYBRID STRIPER	0.25
776.5	2009	HYBRID STRIPER	**0.33**
776.5	2009	HYBRID STRIPER	**0.33**
846.0	2005	COMMON CARP	0.024
846.0	2005	SMALLMOUTH BUFFALO	0.06
846.0	2005	BLUEGILL	0.062
846.0	2005	FRESHWATER DRUM	0.065
846.0	2005	BLACK CRAPPIE	0.074
846.0	2005	CHANNEL CATFISH	0.087
846.0	2005	SAUGER	0.098
846.0	2005	SAUGER	0.11
846.0	2005	CHANNEL CATFISH	0.14
846.0	2005	FLATHEAD CATFISH	0.14
846.0	2009	HYBRID STRIPER	**0.3**
890.0	2005	CHANNEL CATFISH	0.069
890.0	2006	CHANNEL CATFISH	0.15
890.0	2007	CHANNEL CATFISH	0.12
890.0	2007	SAUGER	**0.3**
918.0	2008	BLUEGILL	0.08
918.0	2008	CHANNEL CATFISH	0.095
918.0	2008	BLUEGILL	0.1
918.0	2008	CHANNEL CATFISH	0.11
918.0	2008	CHANNEL CATFISH	0.13
918.0	2008	CHANNEL CATFISH	0.15
918.0	2008	SMALLMOUTH BUFFALO	0.18
918.0	2008	FLATHEAD CATFISH	0.18
918.0	2008	REDEAR SUNFISH	0.18
918.0	2008	SAUGER	0.19
918.0	2008	STRIPED BASS	0.23
918.0	2008	WHITE BASS	0.25
918.0	2008	LARGEMOUTH BASS	0.26
918.0	2008	FRESHWATER DRUM	0.26
918.0	2008	SPOTTED BASS	**0.35**
918.0	2008	COMMON CARP	**0.36**
918.5	2009	HYBRID STRIPER	**0.34**
973.0	2008	CHANNEL CATFISH	0.086
976.0	2005	CHANNEL CATFISH	0.081

Appendix M: Fish Consumption Advisory Summary

State (River Segment)	PA (0-32)	PA2 (32-40)	WV (40-317)	OH (40-491)	KY (317-531)		KY (531-720)		KY (720-981)		IN (491-848)		IL(848-981)	
Population Protected	Both	Both	Both	Both	General	Sensitive	General	Sensitive	General	Sensitive	General	Sensitive	General	Sensitive
Pollutants	PCBs		Dioxins, Hg, PCBs	PCBs	Hg, PCBs						PCBs		PCB, Hg	
Paddlefish					6 ml/yr	Do Not Eat	6 ml/yr	Do Not Eat	6 ml/yr	Do Not Eat	1 ml/month	Do Not Eat		
Carp	Do Not Eat	Do Not Eat	Do Not Eat	1 ml/month	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr		Do Not Eat		1 ml/month
Carp <33"											1 ml/month			
Carp >33"											Do Not Eat			
Suckers			2 ml/month											
Smallmouth Buffalo			1 ml/month	1 ml/month	1 ml/month	6 ml/yr								
Bigmouth Buffalo										1 ml/month				
Blue Catifsh														1 ml/wk
Blue Catfish <14"										1 ml/month				
Blue Catfish >14"									1 ml/month	6 ml/yr				
Channel Catfish	Do Not Eat			6 ml/yr					1 ml/month	6 ml/yr		Do Not Eat		
Channel Catfish <19"											1 ml/month			
Channel Cat 19-26"											6 ml/yr			
Channel Cat >26"											Do Not Eat			
Channel Catfish >15"														1 ml/wk
Channel Catfish <17"		6 ml/yr	6 ml/yr											
Channel Catfish >17"		Do Not Eat	Do Not Eat											
Channel Catfish <21"					1 ml/month	6 ml/yr	1 ml/month	6 ml/yr						
Channel Catfish >21"					6 ml/yr	Do Not Eat	6 ml/yr	Do Not Eat						
Flathead Cat		6 ml/yr	6 ml/yr	1 ml/month	1 ml/month	6 ml/yr		1 ml/month				Do Not Eat		1 ml/wk
Flathead Cat <23"											1 ml/month			
Flathead Cat >23"											6 ml/yr			
White Bass	1 ml/month	1 ml/month	1 ml/month	1 ml/month	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr		Do Not Eat		1 ml/wk
White Bass <20"											1 ml/month			
White Bass >20"											6 ml/yr			
Striped Bass												Do Not Eat		1 ml/wk
Striped Bass <20"											1 ml/month			
Striped Bass >20"											6 ml/yr			
Hybrid Striped Bass		1 ml/month	1 ml/month	1 ml/month	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr		Do Not Eat		1 ml/wk
Hybrid Striper <20"											1 ml/month			
Hybrid Striped >20"											6 ml/yr			
Rock Bass			2 ml/month											1 ml/wk
Smallmouth Bass			2 ml/month	1 ml/month		1 ml/month		1 ml/month		1 ml/month		Do Not Eat		1 ml/wk
Spotted Bass			2 ml/month			1 ml/month		1 ml/month		1 ml/month	1 ml/month	Do Not Eat		1 ml/wk
SM Bass <15"											6 ml/yr			
SM Bass >15"											Do Not Eat			
Largemouth Bass			2 ml/month			1 ml/month		1 ml/month		1 ml/month			1 ml/wk	1 ml/month
LM Bass >13"											1 ml/month	Do Not Eat		
White Crappie														1 ml/wk
Black Crappie				1 ml/month										1 ml/wk
Sauger	1 ml/month		2 ml/month	1 ml/month	1 ml/month	6 ml/yr		1 ml/month		1 ml/month		Do Not Eat		1 ml/month
Sauger <17"											1 ml/month			
Sauger >17"											6 ml/yr			
Walleye	1 ml/month		2 ml/month	1 ml/month								Do Not Eat		1 ml/wk
Walleye <17"											1 ml/month			
Walleye >17"		1 ml/month									6 ml/yr			
Saugeye			2 ml/month									Do Not Eat		1 ml/wk
Saugeye <17"											1 ml/month			
Saugeye >17"											6 ml/yr			
Freshwater Drum	1 ml/month	1 ml/month	1 ml/month	1 ml/month	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr	1 ml/month	6 ml/yr		1 ml/month		
FW Drum >13"											1 ml/month	Do Not Eat		
FW Drum <14"														1 ml/wk
FW Drum >14"														1 ml/month
Statewide Advisory	1 ml/wk	1 ml/wk	1 ml/wk	1 ml/wk	none	1 ml/wk	none	1 ml/wk	none	1 ml/wk	none	1 ml/wk	none	1 ml/wk

***Statewide advisories based on Hg for sensitive populations**

PA	developed for sensitive, "sensitive should follow extra carefully", general should also follow
WV	developed for sensitive and general populations, "sensitive should follow extra carefully"
OH	issued to protect sensitive, but general should also follow
KY	developed for general; for sensitive bump advisory up 1 level (used sensitive in the above table)
IN	PCBs protect sensitive; Hg issued to both groups using different reference doses for each; sensitive used in above table
IL	PCBs protect sensitive, "may be over protective for general; Hg issued to both groups using different reference doses for each

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
WEST VIEW	5.0	1/6/2005	0.05	0.857	3.98	0.98
WEST VIEW	5.0	1/20/2005	0.07	0.764	0.586	0.037
WEST VIEW	5.0	2/9/2005	0.11	0.901	0.65	0.011
WEST VIEW	5.0	2/24/2005	0.04	0.803	0.611	<0.010
WEST VIEW	5.0	3/16/2005	0.05	0.784	0.504	0.041
WEST VIEW	5.0	3/24/2005	0.09	0.748	0.842	0.075
WEST VIEW	5.0	4/12/2005	<0.03	0.569	0.884	0.042
WEST VIEW	5.0	4/28/2005	<0.03	0.657	0.696	0.098
WEST VIEW	5.0	5/19/2005	<0.030	0.52	1.45	<0.010
WEST VIEW	5.0	6/8/2005	<0.03	0.813	2.37	0.028
WEST VIEW	5.0	6/23/2005	<0.03	0.922	1.87	0.04
WEST VIEW	5.0	7/7/2005	<0.03	0.987	<0.10	0.047
WEST VIEW	5.0	7/20/2005	<0.03	0.75	0.407	0.046
WEST VIEW	5.0	8/4/2005	<0.03	0.835	0.492	0.032
WEST VIEW	5.0	8/17/2005	<0.03	1.06	0.54	0.032
WEST VIEW	5.0	9/7/2005	<0.03	0.527	0.735	0.012
WEST VIEW	5.0	9/21/2005	0.06	0.816	0.56	0.016
WEST VIEW	5.0	10/6/2005	0.04	0.85	0.614	0.283
WEST VIEW	5.0	10/19/2005	0.05	1.05	0.613	0.127
WEST VIEW	5.0	11/2/2005	0.07	0.833	0.42	0.049
WEST VIEW	5.0	11/16/2005	0.05	0.551	0.475	0.051
WEST VIEW	5.0	12/8/2005	0.05	0.626	0.626	0.033
WEST VIEW	5.0	12/21/2005	0.08	0.82	0.645	0.048
WEST VIEW	5.0	1/5/2006	0.06	0.956	0.498	0.062
WEST VIEW	5.0	1/18/2006	0.06	0.711	0.41	0.049
WEST VIEW	5.0	2/8/2006	0.03	0.757	0.238	0.029
WEST VIEW	5.0	2/22/2006	0.06	0.56	<0.100	0.033
WEST VIEW	5.0	3/8/2006	0.06	0.863	0.201	0.022
WEST VIEW	5.0	3/23/2006	<0.03	0.652	0.352	0.031
WEST VIEW	5.0	4/5/2006	<0.03	0.775	0.32	0.241
WEST VIEW	5.0	4/20/2006	0.04	0.562	0.463	0.066
WEST VIEW	5.0	5/16/2006	0.05	0.825	0.302	0.058
WEST VIEW	5.0	6/6/2006	0.05	0.702	0.464	0.025
WEST VIEW	5.0	6/21/2006	0.03	0.613	0.526	0.038
WEST VIEW	5.0	7/12/2006	0.03	0.713	<0.100	0.03
WEST VIEW	5.0	7/26/2006	<0.03	0.489	0.515	0.049
WEST VIEW	5.0	8/7/2006	<0.03	0.796	0.547	0.068
WEST VIEW	5.0	8/23/2006	0.08	0.661	0.58	0.027
WEST VIEW	5.0	9/6/2006	0.04	0.509	0.509	0.027
WEST VIEW	5.0	9/21/2006	0.03	0.547	0.448	<0.010
WEST VIEW	5.0	10/4/2006	0.04	0.558	0.236	0.031
WEST VIEW	5.0	10/19/2006	0.04	0.568	1.12	0.128
WEST VIEW	5.0	11/9/2006	0.07	0.646	0.271	0.022
WEST VIEW	5.0	11/29/2006	0.07	0.677	0.258	<0.010
WEST VIEW	5.0	12/11/2006	<0.03	0.614	0.174	0.02
WEST VIEW	5.0	12/20/2006	0.04	0.704	0.411	0.031
WEST VIEW	5.0	1/8/2007	0.04	0.689	0.522	0.058
WEST VIEW	5.0	1/25/2007	<0.03	0.801	0.439	0.011

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
WEST VIEW	5.0	2/8/2007	<0.03	0.924	0.248	0.026
WEST VIEW	5.0	2/22/2007	0.08	0.98	0.496	0.055
WEST VIEW	5.0	3/5/2007	<0.03	1.06	0.595	0.038
WEST VIEW	5.0	3/19/2007	0.06	0.965	0.329	0.025
WEST VIEW	5.0	4/3/2007	0.03	0.71	0.324	0.033
WEST VIEW	5.0	4/18/2007	0.09	0.891	0.683	0.096
WEST VIEW	5.0	5/7/2007	0.05	0.633	0.177	0.047
WEST VIEW	5.0	5/22/2007	<0.03	0.779	0.475	0.022
WEST VIEW	5.0	6/4/2007	0.05	0.734	0.527	0.032
WEST VIEW	5.0	6/18/2007	<0.03	0.811	0.542	0.04
WEST VIEW	5.0	7/11/2007	0.12	1.18	0.397	0.029
WEST VIEW	5.0	7/23/2007	0.05	0.882	0.509	0.04
WEST VIEW	5.0	8/6/2007	0.17	0.773	0.382	0.017
WEST VIEW	5.0	8/21/2007	0.05	1.15	0.212	0.036
WEST VIEW	5.0	9/12/2007	0.04	0.921	0.206	<0.010
WEST VIEW	5.0	10/1/2007	0.13	0.838	No Data	0.034
WEST VIEW	5.0	10/16/2007	0.05	1.38	0.413	0.05
WEST VIEW	5.0	11/5/2007	<0.03	0.972	0.525	0.014
WEST VIEW	5.0	11/26/2007	0.06	0.68	0.294	0.012
WEST VIEW	5.0	12/6/2007	0.04	0.674	0.406	0.031
WEST VIEW	5.0	12/19/2007	<0.03	0.742	0.303	<0.010
WEST VIEW	5.0	1/8/2008	0.06	0.683	0.357	<0.010
WEST VIEW	5.0	1/23/2008	0.04	0.781	0.253	0.012
WEST VIEW	5.0	2/14/2008	<0.03	0.676	0.273	0.028
WEST VIEW	5.0	3/3/2008	0.07	0.648	0.139	0.033
WEST VIEW	5.0	3/20/2008	0.05	0.674	1.16	0.129
WEST VIEW	5.0	5/6/2008	<0.03	0.46	0.357	<0.010
WEST VIEW	5.0	5/21/2008	0.04	0.504	0.458	0.027
WEST VIEW	5.0	6/5/2008	0.05	0.417	0.948	0.318
WEST VIEW	5.0	6/17/2008	0.06	0.58	0.506	<0.010
WEST VIEW	5.0	7/1/2008	0.05	0.57	0.396	0.023
WEST VIEW	5.0	7/30/2008	0.04	0.45	0.537	0.034
WEST VIEW	5.0	8/11/2008	0.04	0.81	0.657	0.033
WEST VIEW	5.0	8/27/2008	0.08	1.12	0.666	0.088
WEST VIEW	5.0	9/9/2008	0.05	0.946	0.587	0.034
WEST VIEW	5.0	9/24/2008	0.03	0.943	0.646	0.033
WEST VIEW	5.0	10/8/2008	0.05	1	0.345	0.056
WEST VIEW	5.0	10/22/2008	0.07	1.11	0.268	0.038
WEST VIEW	5.0	11/6/2008	0.08	0.919	0.439	0.055
WEST VIEW	5.0	11/20/2008	0.08	0.806	0.318	0.043
WEST VIEW	5.0	12/4/2008	0.08	0.839	0.315	0.044
WEST VIEW	5.0	1/7/2009	0.13	0.826	0.356	0.07
WEST VIEW	5.0	1/20/2009	0.09	0.764	0.299	0.028
WEST VIEW	5.0	2/4/2009	0.16	0.892	0.444	0.068
WEST VIEW	5.0	3/3/2009	0.09	0.762	0.348	0.045
WEST VIEW	5.0	3/18/2009	0.09	0.578	0.357	0.045
WEST VIEW	5.0	4/7/2009	0.08	0.575	0.423	0.036
WEST VIEW	5.0	4/21/2009	0.08	0.46	0.291	<0.010

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
WEST VIEW	5.0	5/13/2009	0.05	0.403	0.285	0.016
WEST VIEW	5.0	5/19/2009	0.04	0.408	0.413	<0.010
WEST VIEW	5.0	6/3/2009	0.05	0.521	0.289	<0.010
WEST VIEW	5.0	6/16/2009	0.05	0.731	0.289	0.028
WEST VIEW	5.0	7/9/2009	0.06	0.658	0.204	0.036
WEST VIEW	5.0	7/22/2009	0.07	0.676	0.455	0.039
WEST VIEW	5.0	8/10/2009	0.04	0.674	0.357	0.024
WEST VIEW	5.0	8/19/2009	0.08	0.528	0.393	0.033
WEST VIEW	5.0	9/9/2009	0.03	0.731	0.427	0.026
WEST VIEW	5.0	9/24/2009	0.05	0.582	0.493	0.117
WEST VIEW	5.0	10/7/2009	0.03	0.773	0.381	0.061
EAST LIVERPOOL	40.2	1/3/2005	0.1	0.839	0.893	0.087
EAST LIVERPOOL	40.2	1/18/2005	0.03	0.84	0.841	0.067
EAST LIVERPOOL	40.2	2/7/2005	0.15	1.07	0.869	0.022
EAST LIVERPOOL	40.2	2/22/2005	0.06	0.906	0.909	0.059
EAST LIVERPOOL	40.2	3/21/2005	0.09	0.982	0.491	0.038
EAST LIVERPOOL	40.2	3/31/2005	<0.030	0.761	0.808	0.304
EAST LIVERPOOL	40.2	4/18/2005	<0.03	0.752	0.679	0.023
EAST LIVERPOOL	40.2	5/2/2005	0.05	0.709	0.905	0.111
EAST LIVERPOOL	40.2	5/16/2005	0.06	0.957	1.74	0.03
EAST LIVERPOOL	40.2	6/6/2005	<0.03	0.778	2.51	0.039
EAST LIVERPOOL	40.2	6/21/2005	<0.03	0.875	1.77	<0.010
EAST LIVERPOOL	40.2	7/11/2005	0.11	0.775	0.283	0.024
EAST LIVERPOOL	40.2	7/18/2005	0.06	1.21	0.454	0.072
EAST LIVERPOOL	40.2	8/1/2005	<0.03	0.785	1.23	0.052
EAST LIVERPOOL	40.2	8/15/2005	0.09	1.05	0.573	0.023
EAST LIVERPOOL	40.2	9/8/2005	<0.03	0.733	0.633	0.04
EAST LIVERPOOL	40.2	9/20/2005	0.18	0.867	1.52	0.038
EAST LIVERPOOL	40.2	10/5/2005	0.05	0.921	0.339	0.127
EAST LIVERPOOL	40.2	10/24/2005	0.08	1.28	0.664	0.158
EAST LIVERPOOL	40.2	10/31/2005	<0.03	1.46	0.511	0.107
EAST LIVERPOOL	40.2	11/14/2005	0.06	0.88	0.461	0.125
EAST LIVERPOOL	40.2	12/5/2005	0.08	0.684	1.12	0.111
EAST LIVERPOOL	40.2	12/19/2005	0.1	0.993	0.775	0.068
EAST LIVERPOOL	40.2	1/10/2006	0.07	1.02	0.547	0.062
EAST LIVERPOOL	40.2	1/17/2006	0.05	0.892	0.577	0.066
EAST LIVERPOOL	40.2	2/16/2006	<0.03	1.01	0.27	0.017
EAST LIVERPOOL	40.2	2/22/2006	<0.03	0.81	0.143	0.128
EAST LIVERPOOL	40.2	3/6/2006	0.1	1.07	0.353	0.042
EAST LIVERPOOL	40.2	3/21/2006	0.05	0.841	0.486	0.068
EAST LIVERPOOL	40.2	4/3/2006	<0.03	1.09	0.216	0.032
EAST LIVERPOOL	40.2	4/19/2006	0.15	0.813	0.455	0.038
EAST LIVERPOOL	40.2	5/3/2006	0.04	0.789	0.317	0.024
EAST LIVERPOOL	40.2	6/19/2006	0.06	0.831	0.513	<0.010
FOLLANSBEE	70.8	1/4/2005	0.13	0.967	0.832	0.148
FOLLANSBEE	70.8	1/21/2005	0.05	0.815	1.17	0.048
FOLLANSBEE	70.8	2/7/2005	0.11	0.933	1.13	<0.010
FOLLANSBEE	70.8	2/22/2005	0.06	0.91	0.644	0.136

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
FOLLANSBEE	70.8	3/7/2005	0.12	0.967	1.11	0.304
FOLLANSBEE	70.8	3/21/2005	0.1	0.977	0.554	0.072
FOLLANSBEE	70.8	4/4/2005	0.07	0.746	0.978	0.153
FOLLANSBEE	70.8	4/19/2005	<0.03	0.76	0.641	0.082
FOLLANSBEE	70.8	5/16/2005	<0.030	0.655	1.47	0.086
FOLLANSBEE	70.8	5/25/2005	0.05	0.771	1.97	0.03
FOLLANSBEE	70.8	6/6/2005	<0.03	0.702	1.94	0.033
FOLLANSBEE	70.8	6/20/2005	0.04	1.03	1.78	0.03
FOLLANSBEE	70.8	7/8/2005	<0.03	1.05	<0.10	0.034
FOLLANSBEE	70.8	7/18/2005	<0.03	1.04	0.849	0.025
FOLLANSBEE	70.8	8/2/2005	<0.03	0.68	1.22	0.019
FOLLANSBEE	70.8	9/6/2005	0.08	1.04	0.853	0.046
FOLLANSBEE	70.8	9/19/2005	0.07	0.756	1.13	0.053
FOLLANSBEE	70.8	10/4/2005	0.1	1.38	0.828	0.067
FOLLANSBEE	70.8	10/17/2005	0.1	0.828	0.63	0.103
FOLLANSBEE	70.8	10/31/2005	0.07	1.16	0.499	0.086
FOLLANSBEE	70.8	11/21/2005	0.05	0.797	0.573	0.12
FOLLANSBEE	70.8	12/6/2005	0.15	0.81	0.935	0.097
FOLLANSBEE	70.8	12/19/2005	0.11	0.96	0.655	0.082
FOLLANSBEE	70.8	1/3/2006	0.13	1.11	1.07	0.121
FOLLANSBEE	70.8	1/17/2006	0.09	0.805	0.79	0.074
FOLLANSBEE	70.8	2/17/2006	0.09	0.804	0.396	0.034
FOLLANSBEE	70.8	2/21/2006	0.08	0.972	<0.100	0.037
FOLLANSBEE	70.8	3/6/2006	0.1	0.964	0.551	0.072
FOLLANSBEE	70.8	3/23/2006	0.07	0.81	0.513	0.036
FOLLANSBEE	70.8	4/3/2006	0.06	1.06	0.288	0.033
FOLLANSBEE	70.8	4/21/2006	0.07	0.717	0.537	0.017
FOLLANSBEE	70.8	5/4/2006	0.08	0.836	0.384	0.018
FOLLANSBEE	70.8	5/15/2006	0.05	0.93	0.397	0.13
FOLLANSBEE	70.8	6/5/2006	0.05	0.902	0.555	0.059
FOLLANSBEE	70.8	6/19/2006	0.04	0.803	0.527	0.024
WHEELING	86.8	1/3/2005	0.1	0.832	0.734	0.069
WHEELING	86.8	1/18/2005	0.03	0.831	0.68	0.067
WHEELING	86.8	2/7/2005	0.15	0.935	0.315	<0.010
WHEELING	86.8	2/22/2005	0.05	0.856	0.794	0.016
WHEELING	86.8	3/7/2005	0.09	0.898	0.853	0.301
WHEELING	86.8	3/21/2005	0.08	0.948	1.32	0.058
WHEELING	86.8	4/5/2005	0.04	0.697	0.89	0.1
WHEELING	86.8	4/18/2005	<0.03	0.717	0.476	0.071
WHEELING	86.8	5/2/2005	0.04	0.773	0.941	0.157
WHEELING	86.8	5/5/2005	<0.03	0.601	1.53	0.048
WHEELING	86.8	5/17/2005	<0.030	0.617	1.58	0.038
WHEELING	86.8	6/6/2005	<0.03	0.662	2.31	0.035
WHEELING	86.8	6/21/2005	<0.03	0.925	2.15	0.025
WHEELING	86.8	7/5/2005	<0.03	1.01	<0.10	0.024
WHEELING	86.8	7/18/2005	0.06	0.959	0.682	0.042
WHEELING	86.8	8/1/2005	<0.03	0.756	1.17	0.029
WHEELING	86.8	8/15/2005	0.04	0.862	0.54	0.052

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
WHEELING	86.8	9/6/2005	0.04	1.44	0.8	0.117
WHEELING	86.8	9/20/2005	0.06	0.775	1.22	0.022
WHEELING	86.8	10/3/2005	0.04	0.392	0.607	0.06
WHEELING	86.8	10/17/2005	0.05	0.934	0.555	0.135
WHEELING	86.8	11/7/2005	0.06	0.915	0.48	0.034
WHEELING	86.8	11/21/2005	0.08	0.826	0.63	0.033
WHEELING	86.8	12/5/2005	0.06	0.755	1.01	0.235
WHEELING	86.8	12/19/2005	0.1	0.901	0.579	0.064
WHEELING	86.8	1/3/2006	0.11	0.983	1.04	0.192
WHEELING	86.8	1/17/2006	0.07	0.814	0.569	0.082
WHEELING	86.8	2/7/2006	0.06	1.05	0.585	0.096
WHEELING	86.8	2/21/2006	0.08	0.824	0.328	0.04
WHEELING	86.8	3/6/2006	0.07	0.918	0.384	0.037
WHEELING	86.8	3/20/2006	0.05	0.81	0.543	0.037
WHEELING	86.8	4/3/2006	0.05	1.03	0.315	0.021
WHEELING	86.8	4/18/2006	0.05	0.855	0.293	0.046
WHEELING	86.8	5/1/2006	0.04	0.65	0.188	0.017
WHEELING	86.8	5/15/2006	0.03	0.828	0.227	0.031
WHEELING	86.8	6/5/2006	0.05	0.841	0.466	0.133
WHEELING	86.8	6/19/2006	<0.03	0.779	0.354	0.017
WHEELING	86.8	7/10/2006	0.04	0.898	0.495	0.062
WHEELING	86.8	7/24/2006	0.05	0.681	0.414	0.055
WHEELING	86.8	8/7/2006	0.05	0.663	0.569	0.049
WHEELING	86.8	8/21/2006	0.06	0.841	0.612	0.048
WHEELING	86.8	9/18/2006	0.03	0.74	0.318	0.105
WHEELING	86.8	10/2/2006	0.04	0.77	0.596	0.034
WHEELING	86.8	10/16/2006	0.09	0.806	0.338	0.042
WHEELING	86.8	11/6/2006	0.04	0.614	0.5	0.056
WHEELING	86.8	11/27/2006	0.04	0.794	0.348	0.038
WHEELING	86.8	12/4/2006	0.07	0.851	0.265	0.035
WHEELING	86.8	12/28/2006	0.07	0.755	0.593	0.098
WHEELING	86.8	1/8/2007	0.05	0.802	0.697	0.11
WHEELING	86.8	1/22/2007	<0.03	0.832	0.584	0.052
WHEELING	86.8	2/5/2007	0.08	1.02	0.327	0.025
WHEELING	86.8	2/20/2007	<0.03	1.27	0.556	0.046
WHEELING	86.8	3/5/2007	<0.03	1.1	0.966	0.14
WHEELING	86.8	3/19/2007	0.05	0.94	0.565	0.094
WHEELING	86.8	4/2/2007	0.04	0.794	0.391	0.051
WHEELING	86.8	4/16/2007	0.07	0.725	0.512	0.048
WHEELING	86.8	5/7/2007	0.03	0.617	0.335	0.031
WHEELING	86.8	5/23/2007	<0.03	0.708	0.371	0.031
WHEELING	86.8	6/4/2007	<0.03	0.683	0.433	0.033
WHEELING	86.8	6/18/2007	0.08	0.884	0.546	0.035
WHEELING	86.8	7/7/2007	0.06	0.743	0.671	0.066
WHEELING	86.8	7/9/2007	0.06	1.03	0.557	0.021
WHEELING	86.8	7/23/2007	0.07	0.962	0.449	0.02
WHEELING	86.8	8/20/2007	0.11	1.29	0.54	0.017
WHEELING	86.8	9/24/2007	<0.03	1.19	0.383	0.034

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
WHEELING	86.8	10/15/2007	<0.03	1.1	0.52	0.046
WHEELING	86.8	11/6/2007	0.04	0.961	0.395	0.018
WHEELING	86.8	11/26/2007	0.09	0.817	0.412	0.01
WHEELING	86.8	12/10/2007	0.13	0.717	0.547	0.056
WHEELING	86.8	12/17/2007	0.09	0.826	0.919	0.224
WHEELING	86.8	1/7/2008	0.11	0.808	0.436	0.024
WHEELING	86.8	1/22/2008	0.03	0.834	0.315	0.08
WHEELING	86.8	2/6/2008	<0.03	0.904	0.571	0.195
WHEELING	86.8	2/21/2008	<0.03	0.799	0.6	0.076
WHEELING	86.8	3/3/2008	0.14	0.794	0.27	0.044
WHEELING	86.8	3/19/2008	0.05	0.811	0.462	0.053
WHEELING	86.8	6/3/2008	0.04	0.541	0.356	<0.010
WHEELING	86.8	6/16/2008	0.05	0.527	0.565	<0.010
WHEELING	86.8	7/21/2008	0.07	0.664	0.386	0.04
WHEELING	86.8	8/4/2008	<0.03	0.551	0.205	0.041
WHEELING	86.8	8/18/2008	0.04	0.887	0.727	<0.010
WHEELING	86.8	9/9/2008	0.05	0.823	0.923	0.037
WHEELING	86.8	9/22/2008	0.03	1.08	0.694	0.038
WHEELING	86.8	10/6/2008	<0.03	1.07	0.553	0.05
WHEELING	86.8	10/20/2008	0.08	1.37	0.277	0.046
WHEELING	86.8	11/18/2008	0.09	1.11	0.306	0.064
WHEELING	86.8	1/5/2009	0.1	0.812	0.416	0.058
WHEELING	86.8	1/21/2009	0.13	0.815	0.476	0.048
WHEELING	86.8	2/3/2009	0.19	0.857	0.384	0.049
WHEELING	86.8	2/17/2009	0.1	0.715	0.746	0.09
WHEELING	86.8	3/2/2009	0.08	0.852	0.389	0.064
WHEELING	86.8	3/16/2009	0.09	0.702	0.405	0.176
WHEELING	86.8	4/6/2009	0.08	0.709	0.512	0.106
WHEELING	86.8	4/20/2009		0.558		0.014
WHEELING	86.8	5/5/2009	0.08	0.634	0.517	0.087
WHEELING	86.8	5/19/2009	0.04	0.511	0.443	0.036
WHEELING	86.8	6/1/2009	0.06	0.675	0.373	0.012
WHEELING	86.8	6/8/2009	0.06	0.713	0.487	0.038
WHEELING	86.8	6/15/2009	0.05	0.622	0.356	0.022
WHEELING	86.8	7/13/2009	0.05	0.837	0.42	0.044
WHEELING	86.8	7/20/2009	0.06	0.631	0.557	0.022
WHEELING	86.8	8/3/2009	0.05	0.729	0.576	0.063
WHEELING	86.8	8/25/2009	0.08	0.696	0.434	0.045
WHEELING	86.8	9/8/2009	0.03	0.866	0.348	0.038
WHEELING	86.8	9/21/2009	0.06	0.802	0.444	0.065
WHEELING	86.8	10/5/2009	0.08	0.99	0.503	0.072
WHEELING	86.8	10/19/2009	0.07	0.816	0.624	0.052
WHEELING	86.8	11/2/2009	0.09	0.655	0.442	0.042
WHEELING	86.8	11/17/2009	0.08	0.601	0.501	0.035
WHEELING	86.8	12/7/2009	0.08	0.822	0.766	0.051
WHEELING	86.8	12/21/2009	0.07	0.911	0.639	0.088
HUNTINGTON	306.0	1/5/2005	0.08	1.32	1.25	0.417
HUNTINGTON	306.0	1/21/2005	0.04	0.915	1.29	0.09

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
HUNTINGTON	306.0	2/7/2005	0.04	0.84	0.822	0.065
HUNTINGTON	306.0	2/21/2005	0.04	1.02	0.866	0.048
HUNTINGTON	306.0	3/7/2005	0.04	0.77	0.869	0.249
HUNTINGTON	306.0	3/21/2005	0.04	0.712	0.503	0.051
HUNTINGTON	306.0	4/4/2005	<0.03	0.63	0.993	0.218
HUNTINGTON	306.0	4/18/2005	<0.03	0.771	0.569	0.027
HUNTINGTON	306.0	5/5/2005	<0.03	0.75	2.55	0.133
HUNTINGTON	306.0	5/17/2005	<0.030	0.484	1.09	0.049
HUNTINGTON	306.0	6/6/2005	<0.03	0.572	2.06	0.031
HUNTINGTON	306.0	6/22/2005	<0.03	0.546	2.02	0.018
HUNTINGTON	306.0	7/6/2005	<0.03	0.769	<0.10	0.02
HUNTINGTON	306.0	7/20/2005	<0.03	0.914	0.356	0.03
HUNTINGTON	306.0	8/1/2005	<0.03	0.621	1.03	0.038
HUNTINGTON	306.0	8/19/2005	<0.03	0.658	0.542	0.017
HUNTINGTON	306.0	9/7/2005	0.04	0.825	0.862	0.056
HUNTINGTON	306.0	9/26/2005	<0.03	0.877	0.126	0.036
HUNTINGTON	306.0	10/4/2005	<0.03	0.98	0.479	0.028
HUNTINGTON	306.0	10/18/2005	<0.03	0.879	0.515	0.068
HUNTINGTON	306.0	11/2/2005	0.03	1.14	0.243	0.078
HUNTINGTON	306.0	11/30/2005	0.07	0.669	0.471	0.137
HUNTINGTON	306.0	12/6/2005	0.07	0.814	1.19	0.399
HUNTINGTON	306.0	12/20/2005	0.06	0.825	0.531	0.075
HUNTINGTON	306.0	1/4/2006	0.1	1.02	0.667	0.12
HUNTINGTON	306.0	1/16/2006	0.2	0.883	0.652	0.122
HUNTINGTON	306.0	2/6/2006	0.05	0.992	0.636	0.187
HUNTINGTON	306.0	2/21/2006	0.05	0.937	0.343	0.062
HUNTINGTON	306.0	3/6/2006	<0.03	0.848	0.326	0.038
HUNTINGTON	306.0	3/21/2006	0.05	0.942	0.622	0.173
HUNTINGTON	306.0	4/4/2006	<0.03	0.914	0.38	0.112
HUNTINGTON	306.0	4/17/2006	<0.03	0.798	0.5	0.081
HUNTINGTON	306.0	5/1/2006	0.05	0.661	0.28	0.029
HUNTINGTON	306.0	5/15/2006	<0.03	0.66	0.28	0.024
HUNTINGTON	306.0	6/5/2006	0.03	1.21	0.533	0.565
HUNTINGTON	306.0	6/21/2006	<0.03	0.954	0.345	0.105
HUNTINGTON	306.0	7/11/2006	0.03	0.796	0.451	0.069
HUNTINGTON	306.0	7/24/2006	0.03	0.887	0.507	0.088
HUNTINGTON	306.0	8/9/2006	0.03	0.539	0.546	0.036
HUNTINGTON	306.0	8/21/2006	0.06	0.666	0.809	0.212
HUNTINGTON	306.0	9/5/2006	0.1	0.788	0.634	0.075
HUNTINGTON	306.0	9/20/2006	<0.03	0.813	0.555	0.036
HUNTINGTON	306.0	10/4/2006	0.03	0.784	0.291	0.064
HUNTINGTON	306.0	10/17/2006	0.03	0.831	0.366	0.065
HUNTINGTON	306.0	11/7/2006	<0.03	0.681	0.66	0.104
HUNTINGTON	306.0	11/30/2006	0.04	0.742	0.928	0.158
HUNTINGTON	306.0	12/5/2006	0.06	0.839	0.405	0.046
HUNTINGTON	306.0	12/19/2006	0.07	0.792	0.321	0.042
HUNTINGTON	306.0	1/10/2007	<0.03	0.884	0.663	0.194
HUNTINGTON	306.0	1/29/2007	0.04	0.857	0.433	0.064

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
HUNTINGTON	306.0	2/8/2007	0.03	0.982	0.373	0.031
HUNTINGTON	306.0	2/22/2007	<0.03	0.975	0.793	0.116
HUNTINGTON	306.0	3/7/2007	<0.03	1.11	1.51	0.223
HUNTINGTON	306.0	3/20/2007	0.06	0.838	1.21	0.25
HUNTINGTON	306.0	4/10/2007	0.04	0.73	0.545	0.014
HUNTINGTON	306.0	5/7/2007	0.21	0.766	0.309	0.046
HUNTINGTON	306.0	5/23/2007	<0.03	0.5	0.362	0.031
HUNTINGTON	306.0	6/11/2007	<0.03	0.613	0.33	0.011
HUNTINGTON	306.0	6/20/2007	<0.03	0.668	0.519	0.031
HUNTINGTON	306.0	7/10/2007	0.05	0.973	0.443	<0.010
HUNTINGTON	306.0	7/30/2007	0.47	0.695	0.42	<0.010
HUNTINGTON	306.0	8/7/2007	0.07	0.828	0.303	0.033
HUNTINGTON	306.0	8/27/2007	0.04	1.18	0.562	0.037
HUNTINGTON	306.0	9/12/2007	0.05	1.16	0.522	0.03
HUNTINGTON	306.0	9/26/2007	<0.03	0.822	0.578	0.063
HUNTINGTON	306.0	10/18/2007	<0.03	0.998	0.401	0.019
HUNTINGTON	306.0	11/8/2007	<0.03	1.24	0.58	0.113
HUNTINGTON	306.0	2/6/2008	<0.03	0.837	0.61	0.21
HUNTINGTON	306.0	3/5/2008	0.07	0.704	0.504	0.233
HUNTINGTON	306.0	3/18/2008	0.07	0.909	0.326	0.089
HUNTINGTON	306.0	5/14/2008	0.05	0.387	0.873	0.11
HUNTINGTON	306.0	6/4/2008	0.05	0.368	1.31	0.246
HUNTINGTON	306.0	6/24/2008	0.04	0.603	0.338	0.049
HUNTINGTON	306.0	7/28/2008	0.04	0.635	0.284	0.031
HUNTINGTON	306.0	8/25/2008	<0.03	0.671	0.564	<0.010
HUNTINGTON	306.0	9/11/2008	<0.03	0.503	0.37	0.013
HUNTINGTON	306.0	9/30/2008	0.05	0.737	0.254	0.026
HUNTINGTON	306.0	10/15/2008	0.04	0.854	0.281	0.028
HUNTINGTON	306.0	11/5/2008	0.05	1.11	0.437	0.078
HUNTINGTON	306.0	11/18/2008	0.06	1.14	0.647	0.065
HUNTINGTON	306.0	12/4/2008	0.08	1.02	0.491	0.122
HUNTINGTON	306.0	1/5/2009	0.07	0.884	0.94	0.121
HUNTINGTON	306.0	1/21/2009	0.09	0.809	0.265	0.037
HUNTINGTON	306.0	2/4/2009	0.13	0.901	0.364	0.099
HUNTINGTON	306.0	2/18/2009	0.1	0.988	2.48	0.249
HUNTINGTON	306.0	3/3/2009	0.07	0.886	0.424	0.065
HUNTINGTON	306.0	3/17/2009	0.09	0.849	0.449	0.109
HUNTINGTON	306.0	4/13/2009	0.05	0.501	0.573	0.17
HUNTINGTON	306.0	4/22/2009	0.07	0.61	0.468	0.05
HUNTINGTON	306.0	5/6/2009	0.06	0.478	1.2	0.376
HUNTINGTON	306.0	6/3/2009	0.05	0.491	0.715	0.137
HUNTINGTON	306.0	6/16/2009	<0.03	0.596	0.434	0.054
HUNTINGTON	306.0	7/22/2009	0.05	0.686	0.414	0.027
HUNTINGTON	306.0	8/5/2009	<0.03	0.626	0.598	0.069
HUNTINGTON	306.0	8/20/2009	0.06	0.799	0.431	0.042
HUNTINGTON	306.0	9/9/2009	0.03	0.607	0.43	0.029
HUNTINGTON	306.0	9/22/2009	0.05	0.612	0.588	0.13
HUNTINGTON	306.0	10/8/2009	<0.03	0.768	0.533	0.067

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
HUNTINGTON	306.0	10/22/2009	0.04	0.909	0.51	0.048
HUNTINGTON	306.0	11/4/2009	0.05	0.738	0.619	0.106
HUNTINGTON	306.0	11/18/2009	0.05	0.66	0.662	0.039
HUNTINGTON	306.0	12/1/2009	0.06	0.804	0.401	0.017
HUNTINGTON	306.0	12/16/2009	0.05	0.845	0.557	0.163
ASHLAND	319.7	1/13/2005	0.03	0.796	0.944	0.232
ASHLAND	319.7	2/23/2005	0.04	0.743	0.678	0.032
ASHLAND	319.7	3/29/2005	0.06	0.62	0.587	0.085
ASHLAND	319.7	4/26/2005	0.07	0.612	0.665	0.03
ASHLAND	319.7	4/27/2005	0.07	0.594	0.815	0.062
ASHLAND	319.7	5/19/2005	0.03	0.472	1.5	0.024
ASHLAND	319.7	6/8/2005	0.04	0.523	2.55	0.028
ASHLAND	319.7	6/20/2005	<0.03	0.593	1.79	0.1
ASHLAND	319.7	7/18/2005	0.03	0.677	0.552	0.017
ASHLAND	319.7	7/19/2005	0.03	0.67	0.43	0.054
ASHLAND	319.7	8/8/2005	<0.03	0.663	0.455	0.015
ASHLAND	319.7	8/15/2005	<0.03	0.569	0.545	0.018
ASHLAND	319.7	9/13/2005	<0.03	0.803	0.333	0.021
ASHLAND	319.7	10/3/2005	0.04	0.924	0.575	0.024
ASHLAND	319.7	10/13/2005	0.04	0.996	0.543	0.124
ASHLAND	319.7	11/7/2005	0.03	1.18	0.707	0.027
ASHLAND	319.7	12/14/2005	0.06	0.764	0.507	0.027
ASHLAND	319.7	1/5/2006	0.07	0.954	0.935	0.074
ASHLAND	319.7	1/12/2006	0.06	0.963	0.538	0.079
ASHLAND	319.7	2/15/2006	0.04	1.05	0.792	0.042
ASHLAND	319.7	2/21/2006	0.04	0.787	0.728	0.066
ASHLAND	319.7	3/7/2006	0.1	0.856	0.65	0.062
ASHLAND	319.7	3/27/2006	0.04	0.854	0.367	0.019
ASHLAND	319.7	4/24/2006	0.11	0.492	0.373	0.03
ASHLAND	319.7	5/8/2006	0.03	0.582	0.236	0.011
ASHLAND	319.7	6/5/2006	<0.03	0.922	0.445	<0.010
N. KENTUCKY	462.9	1/4/2005	0.06	1.02	1.61	0.342
N. KENTUCKY	462.9	1/25/2005	0.04	1.09	1.25	0.136
N. KENTUCKY	462.9	2/7/2005	0.05	1.02	1.05	0.038
N. KENTUCKY	462.9	2/22/2005	0.04	0.974	0.854	0.044
N. KENTUCKY	462.9	3/7/2005	0.04	0.828	0.812	0.357
N. KENTUCKY	462.9	3/21/2005	<0.03	0.807	0.328	0.049
N. KENTUCKY	462.9	4/4/2005	<0.03	0.734	0.719	0.165
N. KENTUCKY	462.9	4/18/2005	<0.03	0.904	0.713	0.156
N. KENTUCKY	462.9	5/2/2005	<0.03	1.09	0.955	0.134
N. KENTUCKY	462.9	5/17/2005	<0.030	0.702	1.05	0.073
N. KENTUCKY	462.9	6/6/2005	<0.03	0.64	1.85	0.025
N. KENTUCKY	462.9	6/21/2005	0.03	0.728	2.25	0.018
N. KENTUCKY	462.9	7/7/2005	<0.03	0.44	<0.10	0.085
N. KENTUCKY	462.9	7/18/2005	<0.03	0.81	<0.10	<0.01
N. KENTUCKY	462.9	8/1/2005	0.05	0.517	1.15	0.036
N. KENTUCKY	462.9	8/15/2005	<0.03	0.657	0.392	<0.010
N. KENTUCKY	462.9	9/7/2005	<0.03	0.677	0.604	0.127

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
N. KENTUCKY	462.9	9/19/2005	0.06	0.781	1.21	0.047
N. KENTUCKY	462.9	10/3/2005	<0.03	0.993	0.371	0.243
N. KENTUCKY	462.9	10/17/2005	0.04	1.17	0.634	0.053
N. KENTUCKY	462.9	11/7/2005	0.03	1.77	0.591	0.091
N. KENTUCKY	462.9	11/21/2005	0.04	1.08	0.65	0.057
N. KENTUCKY	462.9	12/5/2005	0.04	0.925	0.73	0.111
N. KENTUCKY	462.9	12/19/2005	0.05	1.01	0.577	0.091
N. KENTUCKY	462.9	1/3/2006	0.08	1.18	0.726	0.114
N. KENTUCKY	462.9	1/17/2006	0.04	1.33	0.461	0.114
N. KENTUCKY	462.9	2/21/2006	0.04	1.11	0.436	0.061
N. KENTUCKY	462.9	3/7/2006	<0.03	0.912	0.16	0.061
N. KENTUCKY	462.9	3/20/2006	0.03	1.18	0.589	0.149
N. KENTUCKY	462.9	4/4/2006	<0.03	1.11	0.282	0.32
N. KENTUCKY	462.9	4/18/2006	<0.03	0.864	0.416	0.029
N. KENTUCKY	462.9	5/2/2006	0.08	0.718	0.208	0.015
N. KENTUCKY	462.9	5/16/2006	<0.03	0.674	0.147	0.029
N. KENTUCKY	462.9	6/6/2006	0.04	1.44	0.371	0.029
N. KENTUCKY	462.9	6/21/2006	0.03	1.58	0.378	0.012
N. KENTUCKY	462.9	7/5/2006	0.04	1	0.402	0.057
N. KENTUCKY	462.9	7/17/2006	<0.03	0.979	0.607	0.106
N. KENTUCKY	462.9	8/8/2006	0.06	0.764	0.476	0.055
N. KENTUCKY	462.9	8/22/2006	<0.03	0.735	0.46	0.033
N. KENTUCKY	462.9	9/5/2006	<0.03	0.807	0.543	0.059
N. KENTUCKY	462.9	9/18/2006	<0.03	0.858	0.463	0.093
N. KENTUCKY	462.9	10/3/2006	0.11	0.678	0.3	0.084
N. KENTUCKY	462.9	10/16/2006	0.04	0.951	<0.100	0.112
N. KENTUCKY	462.9	11/6/2006	<0.03	0.837	0.554	0.135
N. KENTUCKY	462.9	11/20/2006	0.03	0.91	0.542	0.298
N. KENTUCKY	462.9	12/4/2006	0.03	0.913	0.413	0.065
N. KENTUCKY	462.9	12/18/2006	0.04	0.899	0.37	0.052
N. KENTUCKY	462.9	1/10/2007	<0.03	0.876	0.513	0.128
N. KENTUCKY	462.9	1/23/2007	0.04	0.98	0.954	0.194
N. KENTUCKY	462.9	2/12/2007	<0.03	1.09	0.403	0.047
N. KENTUCKY	462.9	2/20/2007	<0.03	1.02	0.437	0.016
N. KENTUCKY	462.9	3/5/2007	<0.03	0.927	0.869	0.16
N. KENTUCKY	462.9	3/19/2007	0.08	1.07	0.601	0.138
N. KENTUCKY	462.9	4/3/2007	<0.03	0.942	0.389	0.073
N. KENTUCKY	462.9	4/16/2007	0.05	0.88	0.442	0.019
N. KENTUCKY	462.9	5/8/2007	0.06	0.814	0.247	0.042
N. KENTUCKY	462.9	5/23/2007	<0.03	0.492	0.597	0.014
N. KENTUCKY	462.9	6/4/2007	<0.03	0.483	0.927	0.019
N. KENTUCKY	462.9	6/19/2007	<0.03	0.617	0.483	0.029
N. KENTUCKY	462.9	7/9/2007	0.05	0.538	0.482	<0.010
N. KENTUCKY	462.9	7/23/2007	0.03	0.698	0.388	<0.010
N. KENTUCKY	462.9	8/6/2007	0.04	0.735	0.385	<0.010
N. KENTUCKY	462.9	8/20/2007	0.04	0.79	0.532	<0.010
N. KENTUCKY	462.9	9/4/2007	<0.03	1.19	0.309	0.034
N. KENTUCKY	462.9	9/17/2007	0.06	0.94	0.498	0.036

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
N. KENTUCKY	462.9	10/22/2007	<0.03	1.26	0.272	0.03
N. KENTUCKY	462.9	11/6/2007	<0.03	1.15	0.467	0.067
N. KENTUCKY	462.9	11/26/2007	0.06	1.2	0.428	0.034
N. KENTUCKY	462.9	12/6/2007	0.04	0.974	0.339	0.067
N. KENTUCKY	462.9	5/5/2008	0.04	0.543	0.351	<0.010
N. KENTUCKY	462.9	6/16/2008	0.07	1.25	0.708	0.024
N. KENTUCKY	462.9	7/7/2008	0.05	1.08	0.525	0.031
N. KENTUCKY	462.9	8/4/2008	0.05	0.764	0.217	0.025
N. KENTUCKY	462.9	8/19/2008	0.03	0.519	0.499	<0.010
N. KENTUCKY	462.9	9/2/2008	0.07	0.508	0.607	0.013
N. KENTUCKY	462.9	10/6/2008	0.06	0.594	0.577	0.032
N. KENTUCKY	462.9	10/20/2008	0.11	0.686	0.404	0.052
N. KENTUCKY	462.9	12/1/2008	0.07	1.13	0.281	0.04
N. KENTUCKY	462.9	12/16/2008	0.12	0.993	1.48	0.237
N. KENTUCKY	462.9	1/5/2009	0.08	1.1	0.512	0.11
N. KENTUCKY	462.9	3/4/2009	0.08	0.992	0.498	0.12
N. KENTUCKY	462.9	4/21/2009	0.09	0.756	0.418	0.03
N. KENTUCKY	462.9	6/2/2009	0.05	1.03	0.409	0.072
N. KENTUCKY	462.9	7/7/2009	0.06	0.928	0.405	0.052
N. KENTUCKY	462.9	7/21/2009	0.07	0.817	0.457	0.054
N. KENTUCKY	462.9	8/6/2009	<0.03	0.589	0.595	0.104
N. KENTUCKY	462.9	8/18/2009	0.05	0.655	0.431	0.055
N. KENTUCKY	462.9	9/9/2009	<0.03	0.631	0.406	0.028
N. KENTUCKY	462.9	12/15/2009	0.05	0.843	0.877	0.214
LOUISVILLE	600.0	1/4/2005	0.08	1.32	1.25	0.417
LOUISVILLE	600.0	1/18/2005	0.04	1.07	1.78	0.248
LOUISVILLE	600.0	2/7/2005	0.05	1.07	0.805	0.044
LOUISVILLE	600.0	2/21/2005	0.05	1.13	0.994	0.05
LOUISVILLE	600.0	3/7/2005	0.04	0.923	0.527	0.231
LOUISVILLE	600.0	3/21/2005	<0.03	0.955	0.349	0.068
LOUISVILLE	600.0	4/4/2005	<0.03	0.886	0.879	0.167
LOUISVILLE	600.0	4/18/2005	<0.03	1	0.621	0.077
LOUISVILLE	600.0	5/2/2005	0.16	1.06	0.964	0.124
LOUISVILLE	600.0	5/16/2005	<0.030	0.843	1.33	0.056
LOUISVILLE	600.0	6/7/2005	0.03	0.996	2.95	0.032
LOUISVILLE	600.0	6/20/2005	<0.03	0.926	1.72	0.012
LOUISVILLE	600.0	7/5/2005	<0.03	1.06	<0.10	0.036
LOUISVILLE	600.0	7/18/2005	<0.03	1.09	0.42	0.043
LOUISVILLE	600.0	8/1/2005	<0.03	0.691	1.2	0.028
LOUISVILLE	600.0	8/15/2005	<0.03	0.717	0.479	<0.010
LOUISVILLE	600.0	9/7/2005	0.03	1.06	0.718	0.063
LOUISVILLE	600.0	9/27/2005	0.06	0.979	0.547	0.046
LOUISVILLE	600.0	10/17/2005	0.04	1.32	0.357	0.069
LOUISVILLE	600.0	11/1/2005	0.03	1.92	0.57	0.087
LOUISVILLE	600.0	11/15/2005	0.04	1.59	0.592	0.089
LOUISVILLE	600.0	12/5/2005	0.05	1.26	1.16	0.239
LOUISVILLE	600.0	1/3/2006	0.06	1.64	1.09	0.15
LOUISVILLE	600.0	1/17/2006	0.06	1.49	0.676	0.112

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
LOUISVILLE	600.0	2/6/2006	0.03	1.47	0.513	0.1
LOUISVILLE	600.0	2/20/2006	0.05	1.42	0.259	0.074
LOUISVILLE	600.0	3/6/2006	<0.03	1.35	0.275	0.053
LOUISVILLE	600.0	3/23/2006	0.04	1.28	0.463	0.092
LOUISVILLE	600.0	4/6/2006	0.05	1.3	0.384	0.116
LOUISVILLE	600.0	4/17/2006	<0.03	1.03	0.427	0.086
LOUISVILLE	600.0	5/1/2006	0.03	0.858	1.87	0.058
LOUISVILLE	600.0	5/22/2006	<0.03	1.55	0.364	0.109
LOUISVILLE	600.0	6/5/2006	0.05	1.52	0.393	0.047
LOUISVILLE	600.0	6/19/2006	0.11	2.35	0.562	0.083
LOUISVILLE	600.0	7/10/2006	0.03	1.17	0.402	0.1
LOUISVILLE	600.0	7/24/2006	0.03	1.13	0.398	0.086
LOUISVILLE	600.0	8/7/2006	0.04	1.08	0.505	0.094
LOUISVILLE	600.0	8/21/2006	0.04	0.814	0.785	0.053
LOUISVILLE	600.0	9/5/2006	0.03	1.11	0.36	0.078
LOUISVILLE	600.0	9/19/2006	<0.03	0.984	0.328	0.09
LOUISVILLE	600.0	10/3/2006	0.04	1.02	0.417	0.12
LOUISVILLE	600.0	10/16/2006	0.06	1.13	0.135	0.084
LOUISVILLE	600.0	11/6/2006	0.03	1	0.669	0.204
LOUISVILLE	600.0	12/11/2006	0.07	1.27	0.498	0.123
LOUISVILLE	600.0	12/18/2006	0.21	1.18	0.544	0.098
LOUISVILLE	600.0	1/22/2007	0.03	0.993	0.744	0.105
LOUISVILLE	600.0	2/5/2007	0.04	1.37	0.323	0.043
LOUISVILLE	600.0	2/20/2007	<0.03	1.41	0.706	0.122
LOUISVILLE	600.0	3/5/2007	<0.03	1.16	1.93	0.482
LOUISVILLE	600.0	4/2/2007	<0.03	1.04	1.09	0.163
LOUISVILLE	600.0	4/16/2007	0.04	0.897	1.04	0.185
LOUISVILLE	600.0	5/7/2007	0.13	0.97	0.458	0.069
LOUISVILLE	600.0	5/21/2007	0.03	0.8	0.459	<0.010
LOUISVILLE	600.0	6/4/2007	0.05	0.705	0.469	0.027
LOUISVILLE	600.0	6/20/2007	0.1	0.747	0.668	0.052
LOUISVILLE	600.0	7/9/2007	0.06	0.994	0.567	0.03
LOUISVILLE	600.0	7/23/2007	0.06	0.952	0.504	0.034
LOUISVILLE	600.0	8/6/2007	0.04	0.681	0.481	0.023
LOUISVILLE	600.0	8/20/2007	0.05	0.8	0.422	0.017
LOUISVILLE	600.0	9/4/2007	0.04	1.02	0.375	0.027
LOUISVILLE	600.0	9/18/2007	0.03	1.26	0.648	0.062
LOUISVILLE	600.0	10/15/2007	<0.03	1.44	0.449	0.025
LOUISVILLE	600.0	11/6/2007	<0.03	1.28	0.606	0.052
LOUISVILLE	600.0	11/27/2007	0.06	1.39	0.338	0.052
LOUISVILLE	600.0	12/3/2007	0.03	1.22	0.401	0.056
LOUISVILLE	600.0	12/17/2007	0.03	1.31	0.417	0.023
LOUISVILLE	600.0	1/7/2008	<0.03	1.52	0.28	0.026
LOUISVILLE	600.0	1/22/2008	<0.03	1.6	0.305	0.044
LOUISVILLE	600.0	2/18/2008	<0.03	1.44	0.415	0.076
LOUISVILLE	600.0	3/3/2008	<0.03	1.29	0.284	0.072
LOUISVILLE	600.0	5/6/2008	0.05	0.731	0.414	0.025
LOUISVILLE	600.0	5/19/2008	0.05	0.852	0.646	0.122

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
LOUISVILLE	600.0	6/2/2008	0.08	0.8	0.309	<0.010
LOUISVILLE	600.0	6/16/2008	0.07	1.58	0.646	0.037
LOUISVILLE	600.0	7/7/2008	0.08	1.22	0.42	0.064
LOUISVILLE	600.0	7/21/2008	0.04	1.21	0.473	0.09
LOUISVILLE	600.0	8/4/2008	0.05	1.04	0.179	0.87
LOUISVILLE	600.0	8/18/2008	0.04	0.643	0.602	0.067
LOUISVILLE	600.0	9/8/2008	0.05	0.838	0.557	0.014
LOUISVILLE	600.0	9/22/2008	0.04	1	0.571	0.032
LOUISVILLE	600.0	10/6/2008	<0.03	1.12	0.425	0.04
LOUISVILLE	600.0	10/19/2008	0.06	1.47	0.283	0.042
LOUISVILLE	600.0	11/17/2008	0.06	1.23	0.277	0.053
LOUISVILLE	600.0	1/8/2009	0.07	1.49	0.64	0.079
LOUISVILLE	600.0	2/16/2009	0.07	1.5	0.435	0.169
LOUISVILLE	600.0	3/2/2009	0.06	1.21	0.456	0.106
LOUISVILLE	600.0	3/16/2009	0.08	1.12	0.382	0.08
LOUISVILLE	600.0	4/7/2009	0.07	0.811	0.471	0.147
LOUISVILLE	600.0	5/4/2009	0.07	1.11	0.573	0.066
LOUISVILLE	600.0	6/1/2009	<0..03	0.807	0.412	0.102
LOUISVILLE	600.0	6/15/2009	<0.03	0.827	0.589	0.144
LOUISVILLE	600.0	7/6/2009	0.06	1.21	0.57	0.096
LOUISVILLE	600.0	7/20/2009	0.05	1.03	0.409	0.072
LOUISVILLE	600.0	8/5/2009	0.03	0.781	0.542	0.138
LOUISVILLE	600.0	8/17/2009	0.04	0.794	0.475	0.07
LOUISVILLE	600.0	9/8/2009	0.08	0.764	0.37	0.039
LOUISVILLE	600.0	9/21/2009	0.05	0.994	0.451	0.079
LOUISVILLE	600.0	10/19/2009	0.04	1	0.663	0.14
LOUISVILLE	600.0	11/2/2009		0.929	0.589	<0.03
LOUISVILLE	600.0	11/16/2009	0.07	0.996	0.673	0.065
LOUISVILLE	600.0	12/7/2009	0.09	0.891	0.61	0.076
EVANSVILLE	791.5	1/4/2005	0.07	1.13	0.889	0.246
EVANSVILLE	791.5	1/19/2005	0.04	1.2	1.03	0.169
EVANSVILLE	791.5	2/9/2005	0.07	1.23	1.19	0.109
EVANSVILLE	791.5	2/23/2005	0.05	1.16	1.38	0.227
EVANSVILLE	791.5	3/8/2005	0.08	1.09	1.02	0.347
EVANSVILLE	791.5	3/21/2005	0.05	0.934	0.54	0.104
EVANSVILLE	791.5	4/5/2005	0.03	0.942	0.988	0.2
EVANSVILLE	791.5	4/19/2005	<0.03	1.08	0.668	0.138
EVANSVILLE	791.5	5/4/2005	<0.03	1.32	1.79	0.113
EVANSVILLE	791.5	5/17/2005	<0.030	1.08	0.843	0.07
EVANSVILLE	791.5	6/6/2005	<0.03	0.841	2.16	0.049
EVANSVILLE	791.5	6/21/2005	<0.03	0.77	2.11	0.033
EVANSVILLE	791.5	7/12/2005	0.05	1.03	1.58	0.026
EVANSVILLE	791.5	7/20/2005	<0.03	1.1	0.423	0.042
EVANSVILLE	791.5	8/1/2005	<0.03	0.701	1.11	0.029
EVANSVILLE	791.5	8/16/2005	<0.03	0.949	0.61	<0.010
EVANSVILLE	791.5	9/12/2005	<0.03	0.832	0.857	0.051
EVANSVILLE	791.5	9/20/2005	0.04	0.903	1.99	0.087
EVANSVILLE	791.5	10/4/2005	<0.03	1.01	0.676	0.091

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
EVANSVILLE	791.5	10/17/2005	0.03	1.09	0.752	0.072
EVANSVILLE	791.5	11/7/2005	0.03	1.7	0.623	0.071
EVANSVILLE	791.5	11/15/2005	0.04	1.19	1.21	0.579
EVANSVILLE	791.5	12/5/2005	0.06	1.34	1.23	0.302
EVANSVILLE	791.5	12/21/2005	0.08	1.21	0.656	0.077
EVANSVILLE	791.5	1/9/2006	0.05	1.6	1.02	0.551
EVANSVILLE	791.5	1/17/2006	0.05	0.981	0.768	0.173
EVANSVILLE	791.5	2/22/2006	0.05	1.33	0.545	0.104
EVANSVILLE	791.5	3/7/2006	0.03	1.53	0.294	0.072
EVANSVILLE	791.5	3/21/2006	<0.03	0.971	1.18	0.401
EVANSVILLE	791.5	4/12/2006	<0.03	1.25	0.696	0.237
EVANSVILLE	791.5	4/18/2006	<0.03	1.07	<0.100	0.187
EVANSVILLE	791.5	5/3/2006	0.06	0.953	0.342	0.081
EVANSVILLE	791.5	5/16/2006	<0.03	0.956	0.301	0.085
EVANSVILLE	791.5	6/5/2006	<0.03	1.41	0.657	0.094
EVANSVILLE	791.5	6/19/2006	0.03	2.01	0.425	0.064
EVANSVILLE	791.5	7/10/2006	<0.03	1.22	0.415	0.126
EVANSVILLE	791.5	8/9/2006	0.07	1.17	0.515	0.086
EVANSVILLE	791.5	8/22/2006	0.04	1.12	0.643	0.08
EVANSVILLE	791.5	9/6/2006	<0.03	0.963	0.616	0.078
EVANSVILLE	791.5	9/19/2006	<0.03	1.01	0.395	0.176
EVANSVILLE	791.5	10/9/2006	<0.03	1.21	0.417	0.195
EVANSVILLE	791.5	10/18/2006	0.04	1.2	0.458	0.196
EVANSVILLE	791.5	11/6/2006	<0.03	0.959	1.06	0.239
EVANSVILLE	791.5	12/4/2006	0.04	1.08	0.655	0.149
EVANSVILLE	791.5	1/8/2007	<0.03	1.15	0.683	0.192
EVANSVILLE	791.5	1/22/2007	<0.03	1.37	0.559	0.11
EVANSVILLE	791.5	2/5/2007	0.04	1.31	0.505	0.094
EVANSVILLE	791.5	2/21/2007	<0.03	1.47	0.698	0.144
EVANSVILLE	791.5	3/5/2007	<0.03	1.13	1.32	1.03
EVANSVILLE	791.5	4/2/2007	0.05	0.993	1.05	0.174
EVANSVILLE	791.5	4/16/2007	<0.03	1.02	0.564	0.147
EVANSVILLE	791.5	5/7/2007	0.12	1.2	0.404	0.096
EVANSVILLE	791.5	5/21/2007	<0.03	0.779	0.475	0.022
EVANSVILLE	791.5	6/5/2007	0.06	0.851	0.379	0.025
EVANSVILLE	791.5	6/18/2007	<0.03	0.656	0.636	0.032
EVANSVILLE	791.5	7/17/2007	0.05	0.927	0.577	0.02
EVANSVILLE	791.5	7/23/2007	0.07	0.827	0.402	0.034
EVANSVILLE	791.5	8/7/2007	0.08	0.698	0.534	0.027
EVANSVILLE	791.5	8/21/2007	0.06	1.15	0.29	0.028
EVANSVILLE	791.5	9/12/2007	0.05	1.1	0.234	0.05
EVANSVILLE	791.5	9/25/2007	<0.03	0.857	0.407	0.037
EVANSVILLE	791.5	10/9/2007	<0.03	0.863	No Data	0.037
EVANSVILLE	791.5	10/16/2007	<0.03	1.42	0.333	0.031
EVANSVILLE	791.5	11/5/2007	<0.03	1.85	0.747	0.116
EVANSVILLE	791.5	11/26/2007	0.09	1.45	0.505	0.074
EVANSVILLE	791.5	12/4/2007	0.05	1.41	0.532	0.072
EVANSVILLE	791.5	12/18/2007	0.05	1.48	0.509	0.089

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
EVANSVILLE	791.5	1/7/2008	0.07	1.63	0.654	0.177
EVANSVILLE	791.5	1/22/2008	<0.03	1.43	0.419	0.173
EVANSVILLE	791.5	2/5/2008	<0.03	1.33	0.665	0.255
EVANSVILLE	791.5	2/19/2008	<0.03	1.2	0.88	0.267
EVANSVILLE	791.5	3/12/2008	0.1	1.2	0.58	0.17
EVANSVILLE	791.5	3/17/2008	0.05	1.21	0.63	0.141
EVANSVILLE	791.5	4/7/2008	0.05	0.783	0.656	0.205
EVANSVILLE	791.5	5/7/2008	0.06	0.793	0.707	0.086
EVANSVILLE	791.5	5/27/2008	0.06	0.891	0.751	0.399
EVANSVILLE	791.5	6/10/2008	0.07	1.28	1.58	0.545
EVANSVILLE	791.5	6/17/2008	0.05	1.28	0.622	0.095
EVANSVILLE	791.5	7/7/2008	0.11	1.37	0.737	0.118
EVANSVILLE	791.5	7/21/2008	0.05	1.03	0.466	0.056
EVANSVILLE	791.5	8/5/2008	0.05	1.41	0.355	0.054
EVANSVILLE	791.5	8/18/2008	0.04	1.08	0.675	0.041
EVANSVILLE	791.5	9/8/2008	0.05	0.998	0.874	0.037
EVANSVILLE	791.5	9/22/2008	<0.03	1.07	0.661	0.041
EVANSVILLE	791.5	10/6/2008	0.04	0.863	0.748	0.035
EVANSVILLE	791.5	10/21/2008	0.06	1.1	0.541	0.025
EVANSVILLE	791.5	11/18/2008	0.06	1.38	0.461	0.072
EVANSVILLE	791.5	12/1/2008	0.12	1.13	0.304	0.076
EVANSVILLE	791.5	12/15/2008	0.08	1.36	0.818	0.204
EVANSVILLE	791.5	1/5/2009	0.11	1.31	1.01	0.298
EVANSVILLE	791.5	1/20/2009	0.07	0.931	0.546	0.178
EVANSVILLE	791.5	2/2/2009	0.08	1.34	0.879	0.299
EVANSVILLE	791.5	2/17/2009	0.13	1.47	0.962	0.343
EVANSVILLE	791.5	3/2/2009	0.13	1.37	0.638	0.193
EVANSVILLE	791.5	3/16/2009	0.11	1.5	0.45	0.133
EVANSVILLE	791.5	4/6/2009	0.07	0.893	0.813	0.185
EVANSVILLE	791.5	4/20/2009	0.08	0.895	0.697	0.168
EVANSVILLE	791.5	5/4/2009	0.07	1.1	0.54	0.094
EVANSVILLE	791.5	5/18/2009	0.04	0.5	1.58	0.473
EVANSVILLE	791.5	6/1/2009	0.08	1.16	0.588	0.12
EVANSVILLE	791.5	6/15/2009	0.05	0.939	0.567	0.135
EVANSVILLE	791.5	7/21/2009	0.06	0.784	0.447	0.078
EVANSVILLE	791.5	8/4/2009	<0.03	0.995	0.755	0.204
EVANSVILLE	791.5	8/18/2009	0.05	0.919	0.493	0.112
EVANSVILLE	791.5	9/14/2009	0.09	0.774	0.73	0.063
EVANSVILLE	791.5	9/21/2009	0.05	0.846	0.533	0.083
EVANSVILLE	791.5	10/5/2009	0.04	1.04	0.754	0.12
EVANSVILLE	791.5	10/20/2009	0.03	0.993	0.801	0.139
EVANSVILLE	791.5	11/2/2009	0.04	0.961	1.05	0.232
EVANSVILLE	791.5	11/17/2009	0.1	1.16	0.644	0.108
EVANSVILLE	791.5	12/1/2009	0.07	1.24	0.539	0.059
EVANSVILLE	791.5	12/15/2009	0.07	1	1.43	0.791
PADUCAH	935.5	1/3/2005	0.17	0.531	0.632	0.152
PADUCAH	935.5	1/24/2005	0.05	0.672	1.28	0.094
PADUCAH	935.5	2/7/2005	0.05	0.57	0.781	0.065

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
PADUCAH	935.5	2/21/2005	<0.03	0.558	0.789	0.024
PADUCAH	935.5	3/8/2005	0.03	0.488	0.913	0.265
PADUCAH	935.5	3/28/2005	0.07	0.498	1.23	0.446
PADUCAH	935.5	4/4/2005	<0.03	0.41	0.694	0.095
PADUCAH	935.5	4/18/2005	<0.03	0.437	0.825	0.191
PADUCAH	935.5	5/2/2005	0.04	0.347	0.937	0.09
PADUCAH	935.5	5/16/2005	0.06	0.375	1.29	0.022
PADUCAH	935.5	6/6/2005	<0.03	0.1	2.11	0.022
PADUCAH	935.5	6/20/2005	<0.03	0.217	2.14	0.016
PADUCAH	935.5	7/5/2005	<0.03	0.58	<0.10	0.097
PADUCAH	935.5	7/18/2005	<0.03	<0.100	0.452	0.031
PADUCAH	935.5	8/1/2005	<0.03	0.178	0.694	0.154
PADUCAH	935.5	8/15/2005	<0.03	0.103	0.614	0.034
PADUCAH	935.5	9/6/2005	0.04	0.142	0.9	0.127
PADUCAH	935.5	9/19/2005	0.04	0.147	1.04	0.065
PADUCAH	935.5	10/18/2005	<0.03	0.348	0.407	0.108
PADUCAH	935.5	11/7/2005	<0.03	0.527	0.355	0.064
PADUCAH	935.5	11/21/2005	0.07	0.316	0.53	0.081
PADUCAH	935.5	12/5/2005	0.08	0.364	1.02	0.091
PADUCAH	935.5	12/19/2005	0.06	0.339	0.459	0.076
PADUCAH	935.5	1/9/2006	0.04	0.399	0.432	0.139
PADUCAH	935.5	1/17/2006	0.06	0.372	0.646	0.156
PADUCAH	935.5	2/6/2006	0.08	0.529	0.588	0.147
PADUCAH	935.5	2/21/2006	0.07	0.546	1.03	0.121
PADUCAH	935.5	3/6/2006	0.03	0.557	0.298	0.099
PADUCAH	935.5	3/21/2006	0.05	0.787	0.843	0.221
PADUCAH	935.5	4/3/2006	<0.03	0.772	1.37	0.639
PADUCAH	935.5	4/19/2006	0.05	0.375	0.828	0.502
PADUCAH	935.5	5/2/2006	0.1	0.456	0.911	0.203
PADUCAH	935.5	5/15/2006	0.04	0.387	0.583	0.203
PADUCAH	935.5	6/5/2006	0.03	0.376	0.565	0.145
PADUCAH	935.5	6/20/2006	0.03	0.191	0.754	0.151
PADUCAH	935.5	7/24/2006	0.04	0.151	0.609	0.075
PADUCAH	935.5	8/7/2006	0.05	0.103	0.475	0.076
PADUCAH	935.5	8/21/2006	0.1	0.283	0.656	0.075
PADUCAH	935.5	9/5/2006	<0.03	0.146	0.634	0.126
PADUCAH	935.5	9/18/2006	0.09	0.168	0.99	0.331
PADUCAH	935.5	10/3/2006	0.03	0.344	0.733	0.175
PADUCAH	935.5	10/16/2006	0.14	0.401	0.487	0.106
PADUCAH	935.5	11/6/2006	0.07	0.411	0.602	0.141
PADUCAH	935.5	11/20/2006	0.05	0.476	0.356	0.098
PADUCAH	935.5	12/7/2006	0.08	0.376	0.306	0.072
PADUCAH	935.5	12/18/2006	0.06	0.759	0.304	0.086
PADUCAH	935.5	1/8/2007	0.05	0.409	0.769	0.081
PADUCAH	935.5	1/22/2007	0.04	0.594	0.657	0.099
PADUCAH	935.5	2/5/2007	<0.03	0.905	0.302	0.069
PADUCAH	935.5	2/19/2007	<0.03	0.792	0.613	0.084
PADUCAH	935.5	3/5/2007	<0.03	0.459	0.637	0.025

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
PADUCAH	935.5	3/20/2007	0.05	0.755	0.556	0.126
PADUCAH	935.5	4/2/2007	0.04	0.623	0.61	0.113
PADUCAH	935.5	4/16/2007	0.05	0.628	0.844	0.085
PADUCAH	935.5	5/7/2007	0.18	0.394	0.549	0.098
PADUCAH	935.5	6/4/2007	0.08	0.556	0.803	0.064
PADUCAH	935.5	6/19/2007	<0.03	0.297	0.533	0.066
PADUCAH	935.5	7/11/2007	0.08	0.334	0.502	0.046
PADUCAH	935.5	7/23/2007	0.07	0.15	0.455	0.09
PADUCAH	935.5	8/6/2007	0.13	<0.100	0.366	0.088
PADUCAH	935.5	8/20/2007	0.23	<0.100	0.571	0.074
PADUCAH	935.5	9/5/2007	0.04	0.515	0.523	0.118
PADUCAH	935.5	9/17/2007	0.11	0.258	0.533	0.1
PADUCAH	935.5	11/5/2007	0.05	0.776	0.684	0.113
PADUCAH	935.5	11/26/2007	0.07	0.711	0.926	0.175
PADUCAH	935.5	12/11/2007	0.1	1.09	0.9	0.269
PADUCAH	935.5	12/17/2007	0.1	0.963	1.52	0.412
PADUCAH	935.5	1/7/2008	0.08	1.2	1.56	0.435
PADUCAH	935.5	1/28/2008	<0.03	0.826	1.03	0.343
PADUCAH	935.5	2/7/2008	<0.03	0.894	0.837	0.413
PADUCAH	935.5	2/20/2008	<0.03	0.995	1.55	0.649
PADUCAH	935.5	3/5/2008	0.04	0.583	0.671	0.165
PADUCAH	935.5	3/19/2008	<0.03	0.497	0.386	0.11
PADUCAH	935.5	5/6/2008	0.1	0.565	1.43	0.359
PADUCAH	935.5	5/21/2008	0.03	0.485	2.77	0.486
PADUCAH	935.5	6/3/2008	0.15	0.627	1.16	0.541
PADUCAH	935.5	6/19/2008	0.07	1.12	0.906	0.173
PADUCAH	935.5	7/7/2008	0.16	1.69	1.38	0.523
PADUCAH	935.5	8/4/2008	0.1	0.631	0.607	0.157
PADUCAH	935.5	8/18/2008	0.04	<0.100	0.577	0.058
PADUCAH	935.5	9/8/2008	0.06	0.192	0.674	0.06
PADUCAH	935.5	9/22/2008	0.03	0.733	0.86	0.066
PADUCAH	935.5	10/6/2008	0.07	0.483	1.01	0.159
PADUCAH	935.5	10/20/2008	0.07	0.51	0.577	0.071
PADUCAH	935.5	11/3/2008	0.11	<0.100	0.733	0.062
PADUCAH	935.5	11/17/2008	0.1	0.602	0.507	0.077
PADUCAH	935.5	12/1/2008	0.06	1.08	0.429	0.091
PADUCAH	935.5	1/6/2009	0.13	0.909	1.1	0.389
PADUCAH	935.5	1/20/2009	0.06	0.706	4.46	1.5
PADUCAH	935.5	2/10/2009	0.14	1.11	4.46	1.85
PADUCAH	935.5	2/18/2009	0.07	1.15	4.29	1.97
PADUCAH	935.5	3/4/2009	0.07	1.44	1.87	1.17
PADUCAH	935.5	3/16/2009	0.11	1.81	2.02	1.55
PADUCAH	935.5	4/7/2009	0.08	0.53	0.573	0.109
PADUCAH	935.5	4/20/2009	0.06	0.858	0.37	0.333
PADUCAH	935.5	5/18/2009	0.06	0.71	3.63	1.39
PADUCAH	935.5	6/16/2009	<0.03	0.67	1.43	1.3
PADUCAH	935.5	7/6/2009	0.22	1	1.03	0.582
PADUCAH	935.5	7/20/2009	0.06	0.398	1.94	0.258

Appendix N: 2005-2009 Nutrient Data

Sample Location	Mile Point	Date	Ammonia-Nitrogen (mg/L)	Nitrate/Nitrite-Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Phosphorous (mg/L)
PADUCAH	935.5	8/19/2009	0.07	0.603	0.727	0.122
PADUCAH	935.5	9/15/2009	0.18	0.259	1.06	0.87
PADUCAH	935.5	10/5/2009	0.04	0.585	0.726	0.354
PADUCAH	935.5	10/20/2009	0.03	0.425	0.799	0.134
PADUCAH	935.5	11/2/2009	0.07	0.451	0.571	0.098
PADUCAH	935.5	11/16/2009	0.05	0.367	0.566	0.077
PADUCAH	935.5	12/7/2009	0.05	0.37	0.441	0.058
PADUCAH	935.5	12/17/2009	0.05	0.509	0.671	0.1

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Dashields	Ag (ug/L)	03-Aug-05	5.6					<0.1	
ORM 19.3	Ag (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 23.2	Ag (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 27.6	Ag (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
Montgomery	Ag (ug/L)	03-Aug-05	6.7					<0.1	
Hannibal	Ag (ug/L)	01-Sep-05	22.3	<0.1					
ORM 132.4	Ag (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Ag (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Ag (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Ag (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Ag (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Ag (ug/L)	01-Sep-05	22.6	<0.1					
Dashields	Ag (ug/L)	14-Sep-05	5.4					<0.1	
ORM 19.3	Ag (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 23.2	Ag (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 27.6	Ag (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
Montgomery	Ag (ug/L)	14-Sep-05	5.6					<0.1	
Hannibal	Ag (ug/L)	15-Sep-05	5.9	<0.1					
ORM 132.4	Ag (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Ag (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Ag (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Ag (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Ag (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Ag (ug/L)	15-Sep-05	11.9	<0.1					
Dashields	Ag (ug/L)	25-Oct-05	12.3					<0.1	
ORM 19.3	Ag (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 23.2	Ag (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 27.6	Ag (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
Montgomery	Ag (ug/L)	25-Oct-05	14.5					<0.1	
Hannibal	Ag (ug/L)	26-Oct-05	31.9	<0.1					
ORM 132.4	Ag (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 138.9	Ag (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 145.2	Ag (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 150.8	Ag (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 157.4	Ag (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
Willow Island	Ag (ug/L)	26-Oct-05	52.5	<0.1					
Cannelton	Ag (ug/L)	09-May-06	51.9	<0.1					
ORM 725.0	Ag (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 736.7	Ag (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 747.3	Ag (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 754.9	Ag (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 762.3	Ag (ug/L)	10-May-06			<0.1	<0.1	<0.1		
ORM 772.0	Ag (ug/L)	10-May-06			<0.1	<0.1	<0.1		
Newburgh	Ag (ug/L)	10-May-06	55.5	<0.1					
Hannibal	Ag (ug/L)	06-Sep-06	43.1	<0.1					
ORM 132.4	Ag (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 138.9	Ag (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 145.2	Ag (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 150.8	Ag (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 157.4	Ag (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
Willow Island	Ag (ug/L)	06-Sep-06	42.9	<0.1					
Dashields	Ag (ug/L)	02-Nov-06	77.7					<0.1	
ORM 19.3	Ag (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 23.2	Ag (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 27.6	Ag (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
Montgomery	Ag (ug/L)	02-Nov-06	89.4					<0.1	
Cannelton	Ag (ug/L)	07-Aug-07	31.8	<0.1					
ORM 725.0	Ag (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 736.7	Ag (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 747.3	Ag (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 754.9	Ag (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 762.3	Ag (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
ORM 772.0	Ag (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
Newburgh	Ag (ug/L)	08-Aug-07	52.7	<0.1					
Racine	Ag (ug/L)	23-Oct-07	12.1					<0.1	
ORM 242.3	Ag (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 251.2	Ag (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 260.8	Ag (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
KRM 1.4	Ag (ug/L)	23-Oct-07							<0.1

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 267.5	Ag (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 273.0	Ag (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
R.C. Byrd	Ag (ug/L)	23-Oct-07	12.1					<0.1	
Cannelton	Ag (ug/L)	01-Apr-08	346	<0.1					
ORM 724.8	Ag (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 736.7	Ag (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 747.3	Ag (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 754.9	Ag (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 762.3	Ag (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
ORM 772.0	Ag (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
Newburgh	Ag (ug/L)	02-Apr-08	381.1	<0.1					
Racine	Ag (ug/L)	30-Apr-08						<0.1	
ORM 242.0	Ag (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 251.2	Ag (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 260.8	Ag (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
K1.3-2	Ag (ug/L)	30-Apr-08							<0.1
ORM 267.5	Ag (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 273.0	Ag (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
R.C. Byrd	Ag (ug/L)	30-Apr-08	107.9					<0.1	
Racine	Ag (ug/L)	22-Oct-08						<0.1	
ORM 242.0	Ag (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 251.2	Ag (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 260.8	Ag (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
K1.3-2	Ag (ug/L)	22-Oct-08							<0.1
ORM 267.5	Ag (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 273.0	Ag (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
R.C. Byrd	Ag (ug/L)	22-Oct-08	12.7					<0.1	
Smithland	Ag (ug/L)	19-May-09	407.8	<0.1					
Cumberland River	Ag (ug/L)	19-May-09							<0.1
ORM 926.2	Ag (ug/L)	19-May-09			<0.1	<0.1	<0.1		
Tennessee River	Ag (ug/L)	19-May-09							<0.1
ORM 935.6	Ag (ug/L)	19-May-09			<0.1	<0.1	<0.1		
L&D 52	Ag (ug/L)	19-May-09		<0.1					
ORM 950.4	Ag (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Olmstead	Ag (ug/L)	20-May-09		<0.1					
ORM 965.3	Ag (ug/L)	20-May-09			<0.1	<0.1	<0.1		
ORN 977.3	Ag (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Smithland	Ag (ug/L)	21-Jul-09	59.8	<0.1					
Cumberland River	Ag (ug/L)	21-Jul-09							<0.1
ORM 926.2	Ag (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
Tennessee River	Ag (ug/L)	21-Jul-09							<0.1
ORM 935.6	Ag (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
L&D 52	Ag (ug/L)	21-Jul-09		<0.1					
ORM 950.4	Ag (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Olmstead	Ag (ug/L)	22-Jul-09		<0.1					
ORM 965.3	Ag (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
ORM 977.3	Ag (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Smithland	Ag (ug/L)	16-Sep-09	33.1	<0.1					
Cumberland River	Ag (ug/L)	16-Sep-09							<0.1
ORM 926.2	Ag (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
Tennessee River	Ag (ug/L)	16-Sep-09							<0.1
ORM 935.6	Ag (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
L&D 52	Ag (ug/L)	16-Sep-09		<0.1					
ORM 950.4	Ag (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
Olmstead	Ag (ug/L)	17-Sep-09		<0.1					
ORM 965.3	Ag (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
ORN 977.3	Ag (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
Dashields	Al (ug/L)	03-Aug-05	5.6					22.44	
ORM 19.3	Al (ug/L)	03-Aug-05			24.75	25.63	27.35		
ORM 23.2	Al (ug/L)	03-Aug-05			28.84	26.54	29.16		
ORM 27.6	Al (ug/L)	03-Aug-05			23.73	24.05	25.66		
Montgomery	Al (ug/L)	03-Aug-05	6.7					28.1	
Hannibal	Al (ug/L)	01-Sep-05	22.3	14.1					
ORM 132.4	Al (ug/L)	01-Sep-05			15.6	14.88	14.99		
ORM 138.9	Al (ug/L)	01-Sep-05			14.94	15.74	16.6		
ORM 145.2	Al (ug/L)	01-Sep-05			13.54	14.23	14.64		
ORM 150.8	Al (ug/L)	01-Sep-05			12.37	14.81	13.79		
ORM 157.4	Al (ug/L)	01-Sep-05			13.59	13.21	12.85		
Willow Island	Al (ug/L)	01-Sep-05	22.6	12.55					

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Dashields	Al (ug/L)	14-Sep-05	5.4					23.37	
ORM 19.3	Al (ug/L)	14-Sep-05			33.34	26.42	24.44		
ORM 23.2	Al (ug/L)	14-Sep-05			20.75	23.82	19.33		
ORM 27.6	Al (ug/L)	14-Sep-05			15.02	14.29	18.71		
Montgomery	Al (ug/L)	14-Sep-05	5.6					15.83	
Hannibal	Al (ug/L)	15-Sep-05	5.9	15.12					
ORM 132.4	Al (ug/L)	15-Sep-05			12.45	15.17	13.31		
ORM 138.9	Al (ug/L)	15-Sep-05			12.8	12.21	11.41		
ORM 145.2	Al (ug/L)	15-Sep-05			11.88	10.34	11.08		
ORM 150.8	Al (ug/L)	15-Sep-05			10.53	9.48	10.73		
ORM 157.4	Al (ug/L)	15-Sep-05			11.23	9.92	11.27		
Willow Island	Al (ug/L)	15-Sep-05	11.9	11.39					
Dashields	Al (ug/L)	25-Oct-05	12.3					11.49	
ORM 19.3	Al (ug/L)	25-Oct-05			10	10.73	11.07		
ORM 23.2	Al (ug/L)	25-Oct-05			9.86	9.78	10.42		
ORM 27.6	Al (ug/L)	25-Oct-05			9.52	9.31	10.08		
Montgomery	Al (ug/L)	25-Oct-05	14.5					8.59	
Hannibal	Al (ug/L)	26-Oct-05	31.9	12.72					
ORM 132.4	Al (ug/L)	26-Oct-05			11.54	12.39	11.05		
ORM 138.9	Al (ug/L)	26-Oct-05			10.91	10.38	9.3		
ORM 145.2	Al (ug/L)	26-Oct-05			9.02	8.78	8.86		
ORM 150.8	Al (ug/L)	26-Oct-05			8.68	6.73	8.41		
ORM 157.4	Al (ug/L)	26-Oct-05			8.83	7.45	8.05		
Willow Island	Al (ug/L)	26-Oct-05	52.5	7.64					
Cannelton	Al (ug/L)	09-May-06	51.9	6.91					
ORM 725.0	Al (ug/L)	09-May-06			6.77	6.84	6.69		
ORM 736.7	Al (ug/L)	09-May-06			6.5	6.77	7.58		
ORM 747.3	Al (ug/L)	09-May-06			7.87	7.55	6.24		
ORM 754.9	Al (ug/L)	09-May-06			7.72	6.32	6.43		
ORM 762.3	Al (ug/L)	10-May-06			6.19	5.98	6.15		
ORM 772.0	Al (ug/L)	10-May-06			6.93	6.65	6.36		
Newburgh	Al (ug/L)	10-May-06	55.5	11.67					
Hannibal	Al (ug/L)	06-Sep-06	43.1	11.98					
ORM 132.4	Al (ug/L)	06-Sep-06			10.76	11.87	11.79		
ORM 138.9	Al (ug/L)	06-Sep-06			10.81	10.85	11.14		
ORM 145.2	Al (ug/L)	06-Sep-06			10.58	10.74	10.6		
ORM 150.8	Al (ug/L)	06-Sep-06			8.85	9.43	9.16		
ORM 157.4	Al (ug/L)	06-Sep-06			9.35	8.23	9.53		
Willow Island	Al (ug/L)	06-Sep-06	42.9	9.79					
Dashields	Al (ug/L)	02-Nov-06	77.7					221.77	
ORM 19.3	Al (ug/L)	02-Nov-06			21.71	23.7	22.75		
ORM 23.2	Al (ug/L)	02-Nov-06			20.26	22.18	20.63		
ORM 27.6	Al (ug/L)	02-Nov-06			17.12	22.39	18.48		
Montgomery	Al (ug/L)	02-Nov-06	89.4					18.45	
Cannelton	Al (ug/L)	07-Aug-07	31.8	5.32					
ORM 725.0	Al (ug/L)	07-Aug-07			5.62	4.81	6.46		
ORM 736.7	Al (ug/L)	07-Aug-07			5.73	5.5	6.2		
ORM 747.3	Al (ug/L)	07-Aug-07			4.51	3.88	4.31		
ORM 754.9	Al (ug/L)	07-Aug-07			5.73	5.78	4.23		
ORM 762.3	Al (ug/L)	08-Aug-07			5.03	5.92	5.14		
ORM 772.0	Al (ug/L)	08-Aug-07			5.66	6.5	5.76		
Newburgh	Al (ug/L)	08-Aug-07	52.7	7.7					
Racine	Al (ug/L)	23-Oct-07	12.1					4.44	
ORM 242.3	Al (ug/L)	23-Oct-07			5.09	5.45	5.45		
ORM 251.2	Al (ug/L)	23-Oct-07			4.83	4.5	4.41		
ORM 260.8	Al (ug/L)	23-Oct-07			36.87	4.84	5		
KRM 1.4	Al (ug/L)	23-Oct-07							2.49
ORM 267.5	Al (ug/L)	23-Oct-07			4.55	4.39	4.55		
ORM 273.0	Al (ug/L)	23-Oct-07			5.13	5.34	5.22		
R.C. Byrd	Al (ug/L)	23-Oct-07	12.1					7.44	
Cannelton	Al (ug/L)	01-Apr-08	346	9.2					
ORM 724.8	Al (ug/L)	01-Apr-08			9.97	9.34	8.92		
ORM 736.7	Al (ug/L)	01-Apr-08			9.74	8.2	9.73		
ORM 747.3	Al (ug/L)	01-Apr-08			9.64	9.95	10.08		
ORM 754.9	Al (ug/L)	01-Apr-08			9.16	9.77	9.05		
ORM 762.3	Al (ug/L)	02-Apr-08			9.21	8.58	9.15		
ORM 772.0	Al (ug/L)	02-Apr-08			8.4	8.19	10.65		
Newburgh	Al (ug/L)	02-Apr-08	381.1	8.73					
Racine	Al (ug/L)	30-Apr-08						26.66	

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 242.0	Al (ug/L)	30-Apr-08			22.49	23.89	19.37		
ORM 251.2	Al (ug/L)	30-Apr-08			20.17	20.58	21.58		
ORM 260.8	Al (ug/L)	30-Apr-08			22.9	22.86	22.4		
K1.3-2	Al (ug/L)	30-Apr-08							7.86
ORM 267.5	Al (ug/L)	30-Apr-08			23.18	15.41	8.19		
ORM 273.0	Al (ug/L)	30-Apr-08			21.45	18.24	8.33		
R.C. Byrd	Al (ug/L)	30-Apr-08	107.9					141.23	
Racine	Al (ug/L)	22-Oct-08						4.87	
ORM 242.0	Al (ug/L)	22-Oct-08			5.38	4.15	4.25		
ORM 251.2	Al (ug/L)	22-Oct-08			4.63	4.55	4.87		
ORM 260.8	Al (ug/L)	22-Oct-08			8.73	17.04	7.49		
K1.3-2	Al (ug/L)	22-Oct-08							2.96
ORM 267.5	Al (ug/L)	22-Oct-08			4.64	4.17	4.39		
ORM 273.0	Al (ug/L)	22-Oct-08			4.92	3.96	4.27		
R.C. Byrd	Al (ug/L)	22-Oct-08	12.7					5.64	
Smithland	Al (ug/L)	19-May-09	407.8	4.17					
Cumberland River	Al (ug/L)	19-May-09							2.2
ORM 926.2	Al (ug/L)	19-May-09			4.77	4.94	3.78		
Tennessee River	Al (ug/L)	19-May-09							2.72
ORM 935.6	Al (ug/L)	19-May-09			4.79	5.55	2.55		
L&D 52	Al (ug/L)	19-May-09		3.31					
ORM 950.4	Al (ug/L)	20-May-09			4.27	4.22	3.59		
Olmstead	Al (ug/L)	20-May-09		4.82					
ORM 965.3	Al (ug/L)	20-May-09			4.51	4.13	3.26		
ORN 977.3	Al (ug/L)	20-May-09			5.14	4.48	3.89		
Smithland	Al (ug/L)	21-Jul-09	59.8	5.02					
Cumberland River	Al (ug/L)	21-Jul-09							5.46
ORM 926.2	Al (ug/L)	21-Jul-09			5.54	6.97	6.37		
Tennessee River	Al (ug/L)	21-Jul-09							2.55
ORM 935.6	Al (ug/L)	21-Jul-09			5.65	4.42	7.97		
L&D 52	Al (ug/L)	21-Jul-09		7.1					
ORM 950.4	Al (ug/L)	22-Jul-09			5.57	10.86	7.99		
Olmstead	Al (ug/L)	22-Jul-09		8.02					
ORM 965.3	Al (ug/L)	22-Jul-09			8.95	5.73	5.49		
ORM 977.3	Al (ug/L)	22-Jul-09			6.21	5.15	5.19		
Smithland	Al (ug/L)	16-Sep-09	33.1	3.07					
Cumberland River	Al (ug/L)	16-Sep-09							2.55
ORM 926.2	Al (ug/L)	16-Sep-09			3.02	2.8	2.72		
Tennessee River	Al (ug/L)	16-Sep-09							1.63
ORM 935.6	Al (ug/L)	16-Sep-09			2.41	2.3	2.35		
L&D 52	Al (ug/L)	16-Sep-09		2.18					
ORM 950.4	Al (ug/L)	17-Sep-09			2.24	2.67	2.95		
Olmstead	Al (ug/L)	17-Sep-09		2.31					
ORM 965.3	Al (ug/L)	17-Sep-09			2.46	2.49	2.92		
ORN 977.3	Al (ug/L)	17-Sep-09			2.96	2.05	2.91		
Dashields	As (ug/L)	03-Aug-05	5.6					0.57	
ORM 19.3	As (ug/L)	03-Aug-05			0.57	0.59	0.55		
ORM 23.2	As (ug/L)	03-Aug-05			0.51	0.51	0.54		
ORM 27.6	As (ug/L)	03-Aug-05			0.74	0.69	0.71		
Montgomery	As (ug/L)	03-Aug-05	6.7					0.73	
Hannibal	As (ug/L)	01-Sep-05	22.3	0.75					
ORM 132.4	As (ug/L)	01-Sep-05			0.79	0.72	0.79		
ORM 138.9	As (ug/L)	01-Sep-05			0.79	0.74	0.79		
ORM 145.2	As (ug/L)	01-Sep-05			0.78	0.81	0.74		
ORM 150.8	As (ug/L)	01-Sep-05			0.74	0.73	0.76		
ORM 157.4	As (ug/L)	01-Sep-05			0.71	0.77	0.75		
Willow Island	As (ug/L)	01-Sep-05	22.6	0.77					
Dashields	As (ug/L)	14-Sep-05	5.4					0.56	
ORM 19.3	As (ug/L)	14-Sep-05			0.55	0.55	0.53		
ORM 23.2	As (ug/L)	14-Sep-05			0.55	0.6	0.63		
ORM 27.6	As (ug/L)	14-Sep-05			0.95	0.84	0.71		
Montgomery	As (ug/L)	14-Sep-05	5.6					0.73	
Hannibal	As (ug/L)	15-Sep-05	5.9	0.78					
ORM 132.4	As (ug/L)	15-Sep-05			0.72	0.9	0.72		
ORM 138.9	As (ug/L)	15-Sep-05			0.77	0.73	0.82		
ORM 145.2	As (ug/L)	15-Sep-05			0.86	0.84	0.82		
ORM 150.8	As (ug/L)	15-Sep-05			0.8	0.8	0.83		
ORM 157.4	As (ug/L)	15-Sep-05			0.83	0.81	0.79		
Willow Island	As (ug/L)	15-Sep-05	11.9	0.81					

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Dashields	As (ug/L)	25-Oct-05	12.3					0.6	
ORM 19.3	As (ug/L)	25-Oct-05			0.6	0.68	0.6		
ORM 23.2	As (ug/L)	25-Oct-05			0.65	0.62	0.57		
ORM 27.6	As (ug/L)	25-Oct-05			0.69	0.7	0.76		
Montgomery	As (ug/L)	25-Oct-05	14.5					0.73	
Hannibal	As (ug/L)	26-Oct-05	31.9	0.98					
ORM 132.4	As (ug/L)	26-Oct-05			0.8	0.81	0.81		
ORM 138.9	As (ug/L)	26-Oct-05			0.99	0.93	0.8		
ORM 145.2	As (ug/L)	26-Oct-05			0.9	0.87	0.89		
ORM 150.8	As (ug/L)	26-Oct-05			0.92	0.77	0.84		
ORM 157.4	As (ug/L)	26-Oct-05			0.77	0.87	0.8		
Willow Island	As (ug/L)	26-Oct-05	52.5	0.83					
Cannelton	As (ug/L)	09-May-06	51.9	0.54					
ORM 725.0	As (ug/L)	09-May-06			0.51	0.51	0.61		
ORM 736.7	As (ug/L)	09-May-06			0.58	0.55	0.55		
ORM 747.3	As (ug/L)	09-May-06			0.58	0.58	0.54		
ORM 754.9	As (ug/L)	09-May-06			0.57	0.52	0.6		
ORM 762.3	As (ug/L)	10-May-06			0.6	0.42	0.53		
ORM 772.0	As (ug/L)	10-May-06			0.52	0.59	0.57		
Newburgh	As (ug/L)	10-May-06	55.5	0.67					
Hannibal	As (ug/L)	06-Sep-06	43.1	0.73					
ORM 132.4	As (ug/L)	06-Sep-06			0.72	0.72	0.74		
ORM 138.9	As (ug/L)	06-Sep-06			0.71	0.75	0.71		
ORM 145.2	As (ug/L)	06-Sep-06			0.71	0.74	0.73		
ORM 150.8	As (ug/L)	06-Sep-06			0.77	0.77	0.73		
ORM 157.4	As (ug/L)	06-Sep-06			0.75	0.76	0.69		
Willow Island	As (ug/L)	06-Sep-06	42.9	0.76					
Dashields	As (ug/L)	02-Nov-06	77.7					0.36	
ORM 19.3	As (ug/L)	02-Nov-06			0.36	0.4	0.34		
ORM 23.2	As (ug/L)	02-Nov-06			0.33	0.52	0.26		
ORM 27.6	As (ug/L)	02-Nov-06			0.58	0.38	0.41		
Montgomery	As (ug/L)	02-Nov-06	89.4					0.4	
Cannelton	As (ug/L)	07-Aug-07	31.8	1.1					
ORM 725.0	As (ug/L)	07-Aug-07			0.97	0.96	1.11		
ORM 736.7	As (ug/L)	07-Aug-07			1.05	1.05	0.92		
ORM 747.3	As (ug/L)	07-Aug-07			0.88	0.91	1.01		
ORM 754.9	As (ug/L)	07-Aug-07			1.03	1.02	0.85		
ORM 762.3	As (ug/L)	08-Aug-07			0.89	0.89	1.07		
ORM 772.0	As (ug/L)	08-Aug-07			0.96	1.01	0.87		
Newburgh	As (ug/L)	08-Aug-07	52.7	0.99					
Racine	As (ug/L)	23-Oct-07	12.1					0.94	
ORM 242.3	As (ug/L)	23-Oct-07			1.04	1.04	1.1		
ORM 251.2	As (ug/L)	23-Oct-07			0.97	0.92	0.86		
ORM 260.8	As (ug/L)	23-Oct-07			2.55	0.88	1.09		
KRM 1.4	As (ug/L)	23-Oct-07							0.48
ORM 267.5	As (ug/L)	23-Oct-07			0.76	0.83	0.88		
ORM 273.0	As (ug/L)	23-Oct-07			0.96	0.99	1.24		
R.C. Byrd	As (ug/L)	23-Oct-07	12.1					0.86	
Cannelton	As (ug/L)	01-Apr-08	346	0.49					
ORM 724.8	As (ug/L)	01-Apr-08			0.46	0.44	0.51		
ORM 736.7	As (ug/L)	01-Apr-08			0.43	0.46	0.47		
ORM 747.3	As (ug/L)	01-Apr-08			0.51	0.49	0.52		
ORM 754.9	As (ug/L)	01-Apr-08			0.41	0.44	0.55		
ORM 762.3	As (ug/L)	02-Apr-08			0.36	0.44	0.47		
ORM 772.0	As (ug/L)	02-Apr-08			0.39	0.4	0.48		
Newburgh	As (ug/L)	02-Apr-08	381.1	0.5					
Racine	As (ug/L)	30-Apr-08						0.4	
ORM 242.0	As (ug/L)	30-Apr-08			0.32	0.48	0.36		
ORM 251.2	As (ug/L)	30-Apr-08			0.36	0.23	0.38		
ORM 260.8	As (ug/L)	30-Apr-08			0.5	0.36	0.43		
K1.3-2	As (ug/L)	30-Apr-08							0.22
ORM 267.5	As (ug/L)	30-Apr-08			0.36	0.33	0.24		
ORM 273.0	As (ug/L)	30-Apr-08			0.4	0.41	0.34		
R.C. Byrd	As (ug/L)	30-Apr-08	107.9					<0.1	
Racine	As (ug/L)	22-Oct-08						0.97	
ORM 242.0	As (ug/L)	22-Oct-08			1.04	0.85	0.85		
ORM 251.2	As (ug/L)	22-Oct-08			0.92	0.85	0.85		
ORM 260.8	As (ug/L)	22-Oct-08			0.91	0.93	1		
K1.3-2	As (ug/L)	22-Oct-08							0.39

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 267.5	As (ug/L)	22-Oct-08			0.76	0.62	0.75		
ORM 273.0	As (ug/L)	22-Oct-08			0.74	0.62	0.61		
R.C. Byrd	As (ug/L)	22-Oct-08	12.7					0.65	
Smithland	As (ug/L)	19-May-09	407.8	0.84					
Cumberland River	As (ug/L)	19-May-09							0.46
ORM 926.2	As (ug/L)	19-May-09			0.82	0.59	0.44		
Tennessee River	As (ug/L)	19-May-09							0.53
ORM 935.6	As (ug/L)	19-May-09			0.85	0.65	0.56		
L&D 52	As (ug/L)	19-May-09		0.86					
ORM 950.4	As (ug/L)	20-May-09			0.72	0.55	0.59		
Olmstead	As (ug/L)	20-May-09		0.75					
ORM 965.3	As (ug/L)	20-May-09			0.77	0.63	0.56		
ORN 977.3	As (ug/L)	20-May-09			0.79	0.65	0.39		
Smithland	As (ug/L)	21-Jul-09	59.8	0.85					
Cumberland River	As (ug/L)	21-Jul-09							1.72
ORM 926.2	As (ug/L)	21-Jul-09			0.76	0.99	1.08		
Tennessee River	As (ug/L)	21-Jul-09							1.21
ORM 935.6	As (ug/L)	21-Jul-09			0.75	0.71	0.93		
L&D 52	As (ug/L)	21-Jul-09		0.8					
ORM 950.4	As (ug/L)	22-Jul-09			1.05	1.1	1.04		
Olmstead	As (ug/L)	22-Jul-09		1.01					
ORM 965.3	As (ug/L)	22-Jul-09			1.06	0.96	1.06		
ORM 977.3	As (ug/L)	22-Jul-09			0.82	1.09	0.96		
Smithland	As (ug/L)	16-Sep-09	33.1	0.9					
Cumberland River	As (ug/L)	16-Sep-09							1.45
ORM 926.2	As (ug/L)	16-Sep-09			1.09	1.21	1.33		
Tennessee River	As (ug/L)	16-Sep-09							1.75
ORM 935.6	As (ug/L)	16-Sep-09			1.07	1.39	1.43		
L&D 52	As (ug/L)	16-Sep-09		1					
ORM 950.4	As (ug/L)	17-Sep-09			1.19	1.25	1.4		
Olmstead	As (ug/L)	17-Sep-09		1.1					
ORM 965.3	As (ug/L)	17-Sep-09			1.3	1.21	1.23		
ORN 977.3	As (ug/L)	17-Sep-09			1.42	1.25	1.23		
Dashields	Ba (ug/L)	03-Aug-05	5.6					48.26	
ORM 19.3	Ba (ug/L)	03-Aug-05			47.34	48.72	48.87		
ORM 23.2	Ba (ug/L)	03-Aug-05			44.62	42.73	46.75		
ORM 27.6	Ba (ug/L)	03-Aug-05			43.27	45.15	41.42		
Montgomery	Ba (ug/L)	03-Aug-05	6.7					44.28	
Hannibal	Ba (ug/L)	01-Sep-05	22.3	47.02					
ORM 132.4	Ba (ug/L)	01-Sep-05			52.06	50.87	51.35		
ORM 138.9	Ba (ug/L)	01-Sep-05			53.03	51.58	52.19		
ORM 145.2	Ba (ug/L)	01-Sep-05			48.5	52.74	50.48		
ORM 150.8	Ba (ug/L)	01-Sep-05			44.56	52.45	47.79		
ORM 157.4	Ba (ug/L)	01-Sep-05			47.85	53.68	53.97		
Willow Island	Ba (ug/L)	01-Sep-05	22.6	51.5					
Dashields	Ba (ug/L)	14-Sep-05	5.4					38.12	
ORM 19.3	Ba (ug/L)	14-Sep-05			32.54	39.89	43.39		
ORM 23.2	Ba (ug/L)	14-Sep-05			37.58	32.86	30.81		
ORM 27.6	Ba (ug/L)	14-Sep-05			30.79	34.4	34.98		
Montgomery	Ba (ug/L)	14-Sep-05	5.6					36.67	
Hannibal	Ba (ug/L)	15-Sep-05	5.9	49.18					
ORM 132.4	Ba (ug/L)	15-Sep-05			36.93	44.52	44.3		
ORM 138.9	Ba (ug/L)	15-Sep-05			41.41	42.65	42.49		
ORM 145.2	Ba (ug/L)	15-Sep-05			41.85	40.15	42.17		
ORM 150.8	Ba (ug/L)	15-Sep-05			42.79	39.95	38.72		
ORM 157.4	Ba (ug/L)	15-Sep-05			42.85	41.7	39.96		
Willow Island	Ba (ug/L)	15-Sep-05	11.9	48.47					
Dashields	Ba (ug/L)	25-Oct-05	12.3					42.74	
ORM 19.3	Ba (ug/L)	25-Oct-05			44.18	45.99	47.13		
ORM 23.2	Ba (ug/L)	25-Oct-05			42.38	42.86	43.81		
ORM 27.6	Ba (ug/L)	25-Oct-05			43.33	43.16	42.63		
Montgomery	Ba (ug/L)	25-Oct-05	14.5					40.32	
Hannibal	Ba (ug/L)	26-Oct-05	31.9	38.3					
ORM 132.4	Ba (ug/L)	26-Oct-05			39.77	39.92	40.21		
ORM 138.9	Ba (ug/L)	26-Oct-05			40.51	40.06	37.62		
ORM 145.2	Ba (ug/L)	26-Oct-05			42.11	42.63	42.47		
ORM 150.8	Ba (ug/L)	26-Oct-05			42.36	36.35	43.23		
ORM 157.4	Ba (ug/L)	26-Oct-05			43.21	43.67	44.12		
Willow Island	Ba (ug/L)	26-Oct-05	52.5	40.55					

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Cannelton	Ba (ug/L)	09-May-06	51.9	31.51					
ORM 725.0	Ba (ug/L)	09-May-06			32.18	32.07	33.05		
ORM 736.7	Ba (ug/L)	09-May-06			32.63	33.47	33.42		
ORM 747.3	Ba (ug/L)	09-May-06			32.28	33.21	32.38		
ORM 754.9	Ba (ug/L)	09-May-06			34.01	33.07	33.85		
ORM 762.3	Ba (ug/L)	10-May-06			35.13	33.72	34.61		
ORM 772.0	Ba (ug/L)	10-May-06			34.19	34.36	33.55		
Newburgh	Ba (ug/L)	10-May-06	55.5	35.59					
Hannibal	Ba (ug/L)	06-Sep-06	43.1	41.83					
ORM 132.4	Ba (ug/L)	06-Sep-06			41.61	40.93	41.57		
ORM 138.9	Ba (ug/L)	06-Sep-06			40.31	42.57	42.96		
ORM 145.2	Ba (ug/L)	06-Sep-06			44.76	43.99	45.22		
ORM 150.8	Ba (ug/L)	06-Sep-06			46.1	45.28	45.73		
ORM 157.4	Ba (ug/L)	06-Sep-06			46.54	45.88	46.14		
Willow Island	Ba (ug/L)	06-Sep-06	42.9	45.46					
Dashields	Ba (ug/L)	02-Nov-06	77.7					35.98	
ORM 19.3	Ba (ug/L)	02-Nov-06			31.16	32.66	32.88		
ORM 23.2	Ba (ug/L)	02-Nov-06			28.39	31.62	30.28		
ORM 27.6	Ba (ug/L)	02-Nov-06			28.88	33.25	30.39		
Montgomery	Ba (ug/L)	02-Nov-06	89.4					35.54	
Cannelton	Ba (ug/L)	07-Aug-07	31.8	54.34					
ORM 725.0	Ba (ug/L)	07-Aug-07			52.05	45.83	54.96		
ORM 736.7	Ba (ug/L)	07-Aug-07			51.27	50.29	47.51		
ORM 747.3	Ba (ug/L)	07-Aug-07			48.81	48.08	51.87		
ORM 754.9	Ba (ug/L)	07-Aug-07			49.96	52.01	43.75		
ORM 762.3	Ba (ug/L)	08-Aug-07			45.51	46.93	51.3		
ORM 772.0	Ba (ug/L)	08-Aug-07			45.57	52.81	47.59		
Newburgh	Ba (ug/L)	08-Aug-07	52.7	50.19					
Racine	Ba (ug/L)	23-Oct-07	12.1					50.28	
ORM 242.3	Ba (ug/L)	23-Oct-07			48.22	51.43	50.7		
ORM 251.2	Ba (ug/L)	23-Oct-07			48.63	46.58	48.62		
ORM 260.8	Ba (ug/L)	23-Oct-07			63.85	44.97	50.99		
KRM 1.4	Ba (ug/L)	23-Oct-07							39.58
ORM 267.5	Ba (ug/L)	23-Oct-07			41.34	41.38	43.51		
ORM 273.0	Ba (ug/L)	23-Oct-07			48.68	48.35	49.13		
R.C. Byrd	Ba (ug/L)	23-Oct-07	12.1					49.04	
Cannelton	Ba (ug/L)	01-Apr-08	346	26.05					
ORM 724.8	Ba (ug/L)	01-Apr-08			24.8	25.35	26.15		
ORM 736.7	Ba (ug/L)	01-Apr-08			25.15	22.64	25.51		
ORM 747.3	Ba (ug/L)	01-Apr-08			25.79	24.68	24.84		
ORM 754.9	Ba (ug/L)	01-Apr-08			24.21	26.64	24.09		
ORM 762.3	Ba (ug/L)	02-Apr-08			24.01	23.45	25.65		
ORM 772.0	Ba (ug/L)	02-Apr-08			26.22	26.69	26.33		
Newburgh	Ba (ug/L)	02-Apr-08	381.1	24.9					
Racine	Ba (ug/L)	30-Apr-08						38.97	
ORM 242.0	Ba (ug/L)	30-Apr-08			38.14	39.51	31.8		
ORM 251.2	Ba (ug/L)	30-Apr-08			34.02	35.47	36.36		
ORM 260.8	Ba (ug/L)	30-Apr-08			39.33	38.42	39.26		
K1.3-2	Ba (ug/L)	30-Apr-08							34.01
ORM 267.5	Ba (ug/L)	30-Apr-08			39.56	35.57	35.63		
ORM 273.0	Ba (ug/L)	30-Apr-08			39.43	37.28	29.98		
Racine	Ba (ug/L)	22-Oct-08						54.95	
ORM 242.0	Ba (ug/L)	22-Oct-08			55.71	47.93	49.41		
ORM 251.2	Ba (ug/L)	22-Oct-08			53.6	54.92	55.1		
ORM 260.8	Ba (ug/L)	22-Oct-08			52.72	54.34	50.3		
K1.3-2	Ba (ug/L)	22-Oct-08							38.75
ORM 267.5	Ba (ug/L)	22-Oct-08			51.35	49.97	48.72		
ORM 273.0	Ba (ug/L)	22-Oct-08			45.52	39.12	40.54		
R.C. Byrd	Ba (ug/L)	22-Oct-08	12.7					49.94	
Smithland	Ba (ug/L)	19-May-09	407.8	33.11					
Cumberland River	Ba (ug/L)	19-May-09							23.7
ORM 926.2	Ba (ug/L)	19-May-09			33.34	29.73	26.1		
Tennessee River	Ba (ug/L)	19-May-09							22.95
ORM 935.6	Ba (ug/L)	19-May-09			33.8	31.25	23.2		
L&D 52	Ba (ug/L)	19-May-09		32.75					
ORM 950.4	Ba (ug/L)	20-May-09			31.43	25.17	24.65		
Olmstead	Ba (ug/L)	20-May-09		32.25					
ORM 965.3	Ba (ug/L)	20-May-09			30.76	24.82	25.76		
ORN 977.3	Ba (ug/L)	20-May-09			30.05	26.25	24.91		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Smithland	Ba (ug/L)	21-Jul-09	59.8	42.41					
Cumberland River	Ba (ug/L)	21-Jul-09							22.55
ORM 926.2	Ba (ug/L)	21-Jul-09			43.47	38.22	36.05		
Tennessee River	Ba (ug/L)	21-Jul-09							19.58
ORM 935.6	Ba (ug/L)	21-Jul-09			41.77	28.34	27.12		
L&D 52	Ba (ug/L)	21-Jul-09		43.74					
ORM 950.4	Ba (ug/L)	22-Jul-09			32.83	34.87	38.65		
Olmstead	Ba (ug/L)	22-Jul-09		37.92					
ORM 965.3	Ba (ug/L)	22-Jul-09			37.2	32.86	30.76		
ORM 977.3	Ba (ug/L)	22-Jul-09			36.66	30.17	30.19		
Smithland	Ba (ug/L)	16-Sep-09	33.1	38.88					
Cumberland River	Ba (ug/L)	16-Sep-09							23.54
ORM 926.2	Ba (ug/L)	16-Sep-09			39.16	32.48	32.15		
Tennessee River	Ba (ug/L)	16-Sep-09							20.73
ORM 935.6	Ba (ug/L)	16-Sep-09			36.59	28.66	25.24		
L&D 52	Ba (ug/L)	16-Sep-09		31.51					
ORM 950.4	Ba (ug/L)	17-Sep-09			31.67	30.16	31.15		
Olmstead	Ba (ug/L)	17-Sep-09		33.42					
ORM 965.3	Ba (ug/L)	17-Sep-09			34.61	31.85	32.19		
ORN 977.3	Ba (ug/L)	17-Sep-09			32.18	30.53	30.97		
Dashields	Ca (mg/L)	03-Aug-05	5.6					36.53	
ORM 19.3	Ca (mg/L)	03-Aug-05			38.67	40.88	43.72		
ORM 23.2	Ca (mg/L)	03-Aug-05			42.15	36.76	38.45		
ORM 27.6	Ca (mg/L)	03-Aug-05			36.21	34.04	36.65		
Montgomery	Ca (mg/L)	03-Aug-05	6.7					35.71	
Hannibal	Ca (mg/L)	01-Sep-05	22.3	38.35					
ORM 132.4	Ca (mg/L)	01-Sep-05			47.93	48.46	51.25		
ORM 138.9	Ca (mg/L)	01-Sep-05			46.06	39.34	49.11		
ORM 145.2	Ca (mg/L)	01-Sep-05			49.8	51.98	50.64		
ORM 150.8	Ca (mg/L)	01-Sep-05			49.05	51.28	38.17		
ORM 157.4	Ca (mg/L)	01-Sep-05			49.93	52.66	50.37		
Willow Island	Ca (mg/L)	01-Sep-05	22.6	39.77					
Dashields	Ca (mg/L)	14-Sep-05	5.4					33.47	
ORM 19.3	Ca (mg/L)	14-Sep-05			40.83	41.49	40.69		
ORM 23.2	Ca (mg/L)	14-Sep-05			33.51	39.22	36.36		
ORM 27.6	Ca (mg/L)	14-Sep-05			39.8	41.57	42.62		
Montgomery	Ca (mg/L)	14-Sep-05	5.6					31.38	
Hannibal	Ca (mg/L)	15-Sep-05	5.9	42.83					
ORM 132.4	Ca (mg/L)	15-Sep-05			50.09	55	40.53		
ORM 138.9	Ca (mg/L)	15-Sep-05			54.68	54.94	54.04		
ORM 145.2	Ca (mg/L)	15-Sep-05			53.25	58.88	54.53		
ORM 150.8	Ca (mg/L)	15-Sep-05			56.3	54.07	54.15		
ORM 157.4	Ca (mg/L)	15-Sep-05			56.57	53.25	54.06		
Willow Island	Ca (mg/L)	15-Sep-05	11.9	42.06					
Dashields	Ca (mg/L)	25-Oct-05	12.3					46.2	
ORM 19.3	Ca (mg/L)	25-Oct-05			38	38.19	38.77		
ORM 23.2	Ca (mg/L)	25-Oct-05			38.35	38.2	39.19		
ORM 27.6	Ca (mg/L)	25-Oct-05			39.19	38.27	40.5		
Montgomery	Ca (mg/L)	25-Oct-05	14.5					46.08	
Hannibal	Ca (mg/L)	26-Oct-05	31.9	47.65					
ORM 132.4	Ca (mg/L)	26-Oct-05			40.6	38.59	37.81		
ORM 138.9	Ca (mg/L)	26-Oct-05			39.02	40.35	37.14		
ORM 145.2	Ca (mg/L)	26-Oct-05			40.57	40.33	39.08		
ORM 150.8	Ca (mg/L)	26-Oct-05			41.02	35.11	43.47		
ORM 157.4	Ca (mg/L)	26-Oct-05			40.68	40.23	40.94		
Willow Island	Ca (mg/L)	26-Oct-05	52.5	43.18					
Cannelton	Ca (mg/L)	09-May-06	51.9	32					
ORM 725.0	Ca (mg/L)	09-May-06			32.35	32.13	30.85		
ORM 736.7	Ca (mg/L)	09-May-06			33.05	34.45	33.55		
ORM 747.3	Ca (mg/L)	09-May-06			32.39	32.53	32.55		
ORM 754.9	Ca (mg/L)	09-May-06			33.86	33.71	32.57		
ORM 762.3	Ca (mg/L)	10-May-06			34.63	34.96	33.8		
ORM 772.0	Ca (mg/L)	10-May-06			35.33	34.62	34.29		
Newburgh	Ca (mg/L)	10-May-06	55.5	35.47					
Hannibal	Ca (mg/L)	06-Sep-06	43.1	31.85					
ORM 132.4	Ca (mg/L)	06-Sep-06			30.64	31.65	31.09		
ORM 138.9	Ca (mg/L)	06-Sep-06			28.96	31.2	30.64		
ORM 145.2	Ca (mg/L)	06-Sep-06			35.24	32.11	33.17		
ORM 150.8	Ca (mg/L)	06-Sep-06			33.98	32.47	32.7		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 157.4	Ca (mg/L)	06-Sep-06			34.02	33.68	35.47		
Willow Island	Ca (mg/L)	06-Sep-06	42.9	35.48					
Dashields	Ca (mg/L)	02-Nov-06	77.7					22.22	
ORM 19.3	Ca (mg/L)	02-Nov-06			17.51	19	21.85		
ORM 23.2	Ca (mg/L)	02-Nov-06			15.06	18.46	20.58		
ORM 27.6	Ca (mg/L)	02-Nov-06			25.17	21.52	20.72		
Montgomery	Ca (mg/L)	02-Nov-06	89.4					19.7	
Cannelton	Ca (mg/L)	07-Aug-07	31.8	36.82					
ORM 725.0	Ca (mg/L)	07-Aug-07			35.21	30.78	37.09		
ORM 736.7	Ca (mg/L)	07-Aug-07			34.25	33.69	31.75		
ORM 747.3	Ca (mg/L)	07-Aug-07			32.17	30.9	34.51		
ORM 754.9	Ca (mg/L)	07-Aug-07			32.54	34.29	28.79		
ORM 762.3	Ca (mg/L)	08-Aug-07			29.53	30.56	33.7		
ORM 772.0	Ca (mg/L)	08-Aug-07			29.71	34.78	31.16		
Newburgh	Ca (mg/L)	08-Aug-07	52.7	33.01					
Racine	Ca (mg/L)	23-Oct-07	12.1					40.1	
ORM 242.3	Ca (mg/L)	23-Oct-07			39.38	42.74	42.23		
ORM 251.2	Ca (mg/L)	23-Oct-07			36.34	36.93	38.57		
ORM 260.8	Ca (mg/L)	23-Oct-07			43.84	36.44	41.55		
KRM 1.4	Ca (mg/L)	23-Oct-07							17.03
ORM 267.5	Ca (mg/L)	23-Oct-07			29.98	30.35	31.31		
ORM 273.0	Ca (mg/L)	23-Oct-07			36.35	36.24	38.28		
R.C. Byrd	Ca (mg/L)	23-Oct-07	12.1					32.81	
Cannelton	Ca (mg/L)	01-Apr-08	346	31.44					
ORM 724.8	Ca (mg/L)	01-Apr-08			29.8	30.36	31.54		
ORM 736.7	Ca (mg/L)	01-Apr-08			30.2	27.08	30.61		
ORM 747.3	Ca (mg/L)	01-Apr-08			30.33	29.25	28.89		
ORM 754.9	Ca (mg/L)	01-Apr-08			27.88	31.32	28.38		
ORM 762.3	Ca (mg/L)	02-Apr-08			28.47	28.09	30.94		
ORM 772.0	Ca (mg/L)	02-Apr-08			31.41	31.61	31.39		
Newburgh	Ca (mg/L)	02-Apr-08	381.1	29.77					
Racine	Ca (mg/L)	30-Apr-08						37.73	
ORM 242.0	Ca (mg/L)	30-Apr-08			37.67	38.98	31.11		
ORM 251.2	Ca (mg/L)	30-Apr-08			32.88	34.67	35.66		
ORM 260.8	Ca (mg/L)	30-Apr-08			38.47	38.51	37.97		
K1.3-2	Ca (mg/L)	30-Apr-08							17.94
ORM 267.5	Ca (mg/L)	30-Apr-08			38.94	28.59	18.66		
ORM 273.0	Ca (mg/L)	30-Apr-08			35.93	31.65	17.59		
R.C. Byrd	Ca (mg/L)	30-Apr-08	107.9					40.89	
Racine	Ca (mg/L)	22-Oct-08						39.97	
ORM 242.0	Ca (mg/L)	22-Oct-08			42.15	36.02	36.63		
ORM 251.2	Ca (mg/L)	22-Oct-08			40.33	40.55	39.54		
ORM 260.8	Ca (mg/L)	22-Oct-08			40.07	39.97	39.41		
K1.3-2	Ca (mg/L)	22-Oct-08							16.44
ORM 267.5	Ca (mg/L)	22-Oct-08			35.15	33.65	33.49		
ORM 273.0	Ca (mg/L)	22-Oct-08			31.82	28	27.79		
R.C. Byrd	Ca (mg/L)	22-Oct-08	12.7					33.05	
Smithland	Ca (mg/L)	19-May-09	407.8	32.51					
Cumberland River	Ca (mg/L)	19-May-09							31.27
ORM 926.2	Ca (mg/L)	19-May-09			32.7	29.59	31.29		
Tennessee River	Ca (mg/L)	19-May-09							21.91
ORM 935.6	Ca (mg/L)	19-May-09			33.11	30.39	24.76		
L&D 52	Ca (mg/L)	19-May-09		33.12					
ORM 950.4	Ca (mg/L)	20-May-09			30.63	26.01	26.9		
Olmstead	Ca (mg/L)	20-May-09		31.21					
ORM 965.3	Ca (mg/L)	20-May-09			30.45	25.26	27.15		
ORN 977.3	Ca (mg/L)	20-May-09			29.16	26.86	26.95		
Smithland	Ca (mg/L)	21-Jul-09	59.8	43.15					
Cumberland River	Ca (mg/L)	21-Jul-09							25.21
ORM 926.2	Ca (mg/L)	21-Jul-09			44.3	40.59	36.93		
Tennessee River	Ca (mg/L)	21-Jul-09							14.11
ORM 935.6	Ca (mg/L)	21-Jul-09			42.97	28.2	26.39		
L&D 52	Ca (mg/L)	21-Jul-09		43.24					
ORM 950.4	Ca (mg/L)	22-Jul-09			31.75	31.31	29.67		
Olmstead	Ca (mg/L)	22-Jul-09		37.72					
ORM 965.3	Ca (mg/L)	22-Jul-09			36.78	32.86	28.77		
ORM 977.3	Ca (mg/L)	22-Jul-09			36.47	29.82	29.65		
Smithland	Ca (mg/L)	16-Sep-09	33.1	35.09					
Cumberland River	Ca (mg/L)	16-Sep-09							24.16

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 926.2	Ca (mg/L)	16-Sep-09			36.47	31.94	31.55		
Tennessee River	Ca (mg/L)	16-Sep-09							14.97
ORM 935.6	Ca (mg/L)	16-Sep-09			35.07	25.37	20.09		
L&D 52	Ca (mg/L)	16-Sep-09		29.91					
ORM 950.4	Ca (mg/L)	17-Sep-09			29.34	27.26	27.39		
Olmstead	Ca (mg/L)	17-Sep-09		30.26					
ORM 965.3	Ca (mg/L)	17-Sep-09			30.72	29.69	28.39		
ORN 977.3	Ca (mg/L)	17-Sep-09			28.59	27.8	28.77		
Dashields	Cd (ug/L)	03-Aug-05	5.6					<0.1	
ORM 19.3	Cd (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 23.2	Cd (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 27.6	Cd (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
Montgomery	Cd (ug/L)	03-Aug-05	6.7					<0.1	
Hannibal	Cd (ug/L)	01-Sep-05	22.3	<0.1					
ORM 132.4	Cd (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Cd (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Cd (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Cd (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Cd (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Cd (ug/L)	01-Sep-05	22.6	<0.1					
Dashields	Cd (ug/L)	14-Sep-05	5.4					<0.1	
ORM 19.3	Cd (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 23.2	Cd (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 27.6	Cd (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
Montgomery	Cd (ug/L)	14-Sep-05	5.6					<0.1	
Hannibal	Cd (ug/L)	15-Sep-05	5.9	<0.1					
ORM 132.4	Cd (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Cd (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Cd (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Cd (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Cd (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Cd (ug/L)	15-Sep-05	11.9	<0.1					
Dashields	Cd (ug/L)	25-Oct-05	12.3					<0.1	
ORM 19.3	Cd (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 23.2	Cd (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 27.6	Cd (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
Montgomery	Cd (ug/L)	25-Oct-05	14.5					<0.1	
Hannibal	Cd (ug/L)	26-Oct-05	31.9	<0.1					
ORM 132.4	Cd (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 138.9	Cd (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 145.2	Cd (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 150.8	Cd (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 157.4	Cd (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
Willow Island	Cd (ug/L)	26-Oct-05	52.5	<0.1					
Cannelton	Cd (ug/L)	09-May-06	51.9	<0.1					
ORM 725.0	Cd (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 736.7	Cd (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 747.3	Cd (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 754.9	Cd (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 762.3	Cd (ug/L)	10-May-06			<0.1	<0.1	<0.1		
ORM 772.0	Cd (ug/L)	10-May-06			<0.1	<0.1	<0.1		
Newburgh	Cd (ug/L)	10-May-06	55.5	<0.1					
Hannibal	Cd (ug/L)	06-Sep-06	43.1	<0.1					
ORM 132.4	Cd (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 138.9	Cd (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 145.2	Cd (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 150.8	Cd (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 157.4	Cd (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
Willow Island	Cd (ug/L)	06-Sep-06	42.9	<0.1					
Dashields	Cd (ug/L)	02-Nov-06	77.7					<0.1	
ORM 19.3	Cd (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 23.2	Cd (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 27.6	Cd (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
Montgomery	Cd (ug/L)	02-Nov-06	89.4					<0.1	
Cannelton	Cd (ug/L)	07-Aug-07	31.8	<0.1					
ORM 725.0	Cd (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 736.7	Cd (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 747.3	Cd (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 754.9	Cd (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 762.3	Cd (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
ORM 772.0	Cd (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
Newburgh	Cd (ug/L)	08-Aug-07	52.7	<0.1					
Racine	Cd (ug/L)	23-Oct-07	12.1					<0.1	
ORM 242.3	Cd (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 251.2	Cd (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 260.8	Cd (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
KRM 1.4	Cd (ug/L)	23-Oct-07							<0.1
ORM 267.5	Cd (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 273.0	Cd (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
R.C. Byrd	Cd (ug/L)	23-Oct-07	12.1					<0.1	
Cannelton	Cd (ug/L)	01-Apr-08	346	<0.1					
ORM 724.8	Cd (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 736.7	Cd (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 747.3	Cd (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 754.9	Cd (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 762.3	Cd (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
ORM 772.0	Cd (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
Newburgh	Cd (ug/L)	02-Apr-08	381.1	<0.1					
Racine	Cd (ug/L)	30-Apr-08						<0.1	
ORM 242.0	Cd (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 251.2	Cd (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 260.8	Cd (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
K1.3-2	Cd (ug/L)	30-Apr-08							<0.1
ORM 267.5	Cd (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 273.0	Cd (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
R.C. Byrd	Cd (ug/L)	30-Apr-08	107.9					<0.1	
Racine	Cd (ug/L)	22-Oct-08						<0.1	
ORM 242.0	Cd (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 251.2	Cd (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 260.8	Cd (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
K1.3-2	Cd (ug/L)	22-Oct-08							<0.1
ORM 267.5	Cd (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 273.0	Cd (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
R.C. Byrd	Cd (ug/L)	22-Oct-08	12.7					<0.1	
Smithland	Cd (ug/L)	19-May-09	407.8	<0.1					
Cumberland River	Cd (ug/L)	19-May-09							<0.1
ORM 926.2	Cd (ug/L)	19-May-09			<0.1	<0.1	<0.1		
Tennessee River	Cd (ug/L)	19-May-09							<0.1
ORM 935.6	Cd (ug/L)	19-May-09			<0.1	<0.1	<0.1		
L&D 52	Cd (ug/L)	19-May-09		<0.1					
ORM 950.4	Cd (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Olmstead	Cd (ug/L)	20-May-09		<0.1					
ORM 965.3	Cd (ug/L)	20-May-09			<0.1	<0.1	<0.1		
ORN 977.3	Cd (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Smithland	Cd (ug/L)	21-Jul-09	59.8	<0.1					
Cumberland River	Cd (ug/L)	21-Jul-09							<0.1
ORM 926.2	Cd (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
Tennessee River	Cd (ug/L)	21-Jul-09							<0.1
ORM 935.6	Cd (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
L&D 52	Cd (ug/L)	21-Jul-09		<0.1					
ORM 950.4	Cd (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Olmstead	Cd (ug/L)	22-Jul-09		<0.1					
ORM 965.3	Cd (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
ORM 977.3	Cd (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Smithland	Cd (ug/L)	16-Sep-09	33.1	<0.1					
Cumberland River	Cd (ug/L)	16-Sep-09							<0.1
ORM 926.2	Cd (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
Tennessee River	Cd (ug/L)	16-Sep-09							<0.1
ORM 935.6	Cd (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
L&D 52	Cd (ug/L)	16-Sep-09		<0.1					
ORM 950.4	Cd (ug/L)	17-Sep-09			<0.1	<0.1	0.11		
Olmstead	Cd (ug/L)	17-Sep-09		<0.1					
ORM 965.3	Cd (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
ORN 977.3	Cd (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
Dashields	Cr (ug/L)	03-Aug-05	5.6					<0.1	
ORM 19.3	Cr (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 23.2	Cr (ug/L)	03-Aug-05			0.1	0.14	<0.1		
ORM 27.6	Cr (ug/L)	03-Aug-05			0.18	0.37	0.26		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Montgomery	Cr (ug/L)	03-Aug-05	6.7					0.22	
Hannibal	Cr (ug/L)	01-Sep-05	22.3	0.37					
ORM 132.4	Cr (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Cr (ug/L)	01-Sep-05			0.17	<0.1	<0.1		
ORM 145.2	Cr (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Cr (ug/L)	01-Sep-05			0.14	<0.1	<0.1		
ORM 157.4	Cr (ug/L)	01-Sep-05			0.11	0.15	0.15		
Willow Island	Cr (ug/L)	01-Sep-05	22.6	0.14					
Dashields	Cr (ug/L)	14-Sep-05	5.4					<0.1	
ORM 19.3	Cr (ug/L)	14-Sep-05			0.11	<0.1	<0.1		
ORM 23.2	Cr (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 27.6	Cr (ug/L)	14-Sep-05			0.14	<0.1	<0.1		
Montgomery	Cr (ug/L)	14-Sep-05	5.6					<0.1	
Hannibal	Cr (ug/L)	15-Sep-05	5.9	0.22					
ORM 132.4	Cr (ug/L)	15-Sep-05			0.21	0.65	<0.1		
ORM 138.9	Cr (ug/L)	15-Sep-05			0.27	<0.1	0.12		
ORM 145.2	Cr (ug/L)	15-Sep-05			0.26	0.22	<0.1		
ORM 150.8	Cr (ug/L)	15-Sep-05			0.14	<0.1	0.31		
ORM 157.4	Cr (ug/L)	15-Sep-05			0.17	0.13	<0.1		
Willow Island	Cr (ug/L)	15-Sep-05	11.9	0.11					
Dashields	Cr (ug/L)	25-Oct-05	12.3					0.18	
ORM 19.3	Cr (ug/L)	25-Oct-05			0.13	0.19	0.41		
ORM 23.2	Cr (ug/L)	25-Oct-05			<0.1	0.1	0.12		
ORM 27.6	Cr (ug/L)	25-Oct-05			0.18	0.22	0.15		
Montgomery	Cr (ug/L)	25-Oct-05	14.5					0.16	
Hannibal	Cr (ug/L)	26-Oct-05	31.9	0.28					
ORM 132.4	Cr (ug/L)	26-Oct-05			<0.1	0.11	0.1		
ORM 138.9	Cr (ug/L)	26-Oct-05			0.13	0.16	<0.1		
ORM 145.2	Cr (ug/L)	26-Oct-05			0.12	0.21	0.15		
ORM 150.8	Cr (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 157.4	Cr (ug/L)	26-Oct-05			0.2	0.16	<0.1		
Willow Island	Cr (ug/L)	26-Oct-05	52.5	0.34					
Cannelton	Cr (ug/L)	09-May-06	51.9	0.12					
ORM 725.0	Cr (ug/L)	09-May-06			0.23	0.21	0.19		
ORM 736.7	Cr (ug/L)	09-May-06			<0.1	0.11	0.15		
ORM 747.3	Cr (ug/L)	09-May-06			0.37	0.37	0.28		
ORM 754.9	Cr (ug/L)	09-May-06			0.14	<0.1	0.16		
ORM 762.3	Cr (ug/L)	10-May-06			0.12	<0.1	0.11		
ORM 772.0	Cr (ug/L)	10-May-06			0.11	0.11	0.13		
Newburgh	Cr (ug/L)	10-May-06	55.5	0.12					
Hannibal	Cr (ug/L)	06-Sep-06	43.1	0.78					
ORM 132.4	Cr (ug/L)	06-Sep-06			0.56	0.79	0.14		
ORM 138.9	Cr (ug/L)	06-Sep-06			0.11	<0.1	0.1		
ORM 145.2	Cr (ug/L)	06-Sep-06			0.13	0.13	0.4		
ORM 150.8	Cr (ug/L)	06-Sep-06			0.41	0.59	0.75		
ORM 157.4	Cr (ug/L)	06-Sep-06			0.34	0.56	0.71		
Willow Island	Cr (ug/L)	06-Sep-06	42.9	0.23					
Dashields	Cr (ug/L)	02-Nov-06	77.7					0.16	
ORM 19.3	Cr (ug/L)	02-Nov-06			<0.1	<0.1	0.11		
ORM 23.2	Cr (ug/L)	02-Nov-06			0.12	0.15	0.34		
ORM 27.6	Cr (ug/L)	02-Nov-06			0.11	0.11	0.26		
Montgomery	Cr (ug/L)	02-Nov-06	89.4					0.58	
Cannelton	Cr (ug/L)	07-Aug-07	31.8	0.27					
ORM 725.0	Cr (ug/L)	07-Aug-07			0.52	0.43	0.28		
ORM 736.7	Cr (ug/L)	07-Aug-07			0.29	0.64	0.56		
ORM 747.3	Cr (ug/L)	07-Aug-07			0.28	0.2	0.22		
ORM 754.9	Cr (ug/L)	07-Aug-07			0.85	0.62	0.5		
ORM 762.3	Cr (ug/L)	08-Aug-07			0.52	0.22	0.38		
ORM 772.0	Cr (ug/L)	08-Aug-07			0.34	0.25	0.6		
Newburgh	Cr (ug/L)	08-Aug-07	52.7	0.26					
Racine	Cr (ug/L)	23-Oct-07	12.1					0.17	
ORM 242.3	Cr (ug/L)	23-Oct-07			1.09	0.54	0.59		
ORM 251.2	Cr (ug/L)	23-Oct-07			0.26	0.18	0.21		
ORM 260.8	Cr (ug/L)	23-Oct-07			2.78	0.7	1.78		
KRM 1.4	Cr (ug/L)	23-Oct-07							0.19
ORM 267.5	Cr (ug/L)	23-Oct-07			1.41	0.26	0.43		
ORM 273.0	Cr (ug/L)	23-Oct-07			0.23	0.23	0.25		
R.C. Byrd	Cr (ug/L)	23-Oct-07	12.1					0.18	
Cannelton	Cr (ug/L)	01-Apr-08	346	0.85					

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 724.8	Cr (ug/L)	01-Apr-08			1.46	1.73	1.42		
ORM 736.7	Cr (ug/L)	01-Apr-08			0.76	1.46	1.33		
ORM 747.3	Cr (ug/L)	01-Apr-08			2.15	1.94	1.57		
ORM 754.9	Cr (ug/L)	01-Apr-08			2.99	2.61	1.78		
ORM 762.3	Cr (ug/L)	02-Apr-08			0.49	0.76	0.99		
ORM 772.0	Cr (ug/L)	02-Apr-08			0.51	0.24	0.7		
Newburgh	Cr (ug/L)	02-Apr-08	381.1	1.05					
Racine	Cr (ug/L)	30-Apr-08						0.67	
ORM 242.0	Cr (ug/L)	30-Apr-08			0.43	0.5	<0.1		
ORM 251.2	Cr (ug/L)	30-Apr-08			0.12	<0.1	<0.1		
ORM 260.8	Cr (ug/L)	30-Apr-08			0.95	0.7	0.63		
K1.3-2	Cr (ug/L)	30-Apr-08							0.83
ORM 267.5	Cr (ug/L)	30-Apr-08			1.51	1.53	0.66		
ORM 273.0	Cr (ug/L)	30-Apr-08			0.97	0.4	0.84		
R.C. Byrd	Cr (ug/L)	30-Apr-08	107.9					1.29	
Racine	Cr (ug/L)	22-Oct-08						0.31	
ORM 242.0	Cr (ug/L)	22-Oct-08			0.37	0.68	0.4		
ORM 251.2	Cr (ug/L)	22-Oct-08			0.61	0.35	0.84		
ORM 260.8	Cr (ug/L)	22-Oct-08			0.58	0.95	0.72		
K1.3-2	Cr (ug/L)	22-Oct-08							0.34
ORM 267.5	Cr (ug/L)	22-Oct-08			0.11	0.61	0.58		
ORM 273.0	Cr (ug/L)	22-Oct-08			0.4	0.45	0.66		
R.C. Byrd	Cr (ug/L)	22-Oct-08	12.7					0.37	
Smithland	Cr (ug/L)	19-May-09	407.8	0.36					
Cumberland River	Cr (ug/L)	19-May-09							1.37
ORM 926.2	Cr (ug/L)	19-May-09			1.82	1.52	1.89		
Tennessee River	Cr (ug/L)	19-May-09							0.97
ORM 935.6	Cr (ug/L)	19-May-09			1.12	1	0.23		
L&D 52	Cr (ug/L)	19-May-09		0.4					
ORM 950.4	Cr (ug/L)	20-May-09			0.6	0.65	0.5		
Olmstead	Cr (ug/L)	20-May-09		1.18					
ORM 965.3	Cr (ug/L)	20-May-09			<0.1	0.43	0.19		
ORN 977.3	Cr (ug/L)	20-May-09			0.64	0.89	0.29		
Smithland	Cr (ug/L)	21-Jul-09	59.8	0.4					
Cumberland River	Cr (ug/L)	21-Jul-09							0.42
ORM 926.2	Cr (ug/L)	21-Jul-09			0.6	0.62	0.58		
Tennessee River	Cr (ug/L)	21-Jul-09							0.17
ORM 935.6	Cr (ug/L)	21-Jul-09			0.6	0.39	0.38		
L&D 52	Cr (ug/L)	21-Jul-09		0.29					
ORM 950.4	Cr (ug/L)	22-Jul-09			0.4	0.38	0.56		
Olmstead	Cr (ug/L)	22-Jul-09		0.59					
ORM 965.3	Cr (ug/L)	22-Jul-09			0.67	0.34	0.39		
ORM 977.3	Cr (ug/L)	22-Jul-09			0.44	0.45	0.29		
Smithland	Cr (ug/L)	16-Sep-09	33.1	0.74					
Cumberland River	Cr (ug/L)	16-Sep-09							0.27
ORM 926.2	Cr (ug/L)	16-Sep-09			0.69	0.46	0.63		
Tennessee River	Cr (ug/L)	16-Sep-09							0.4
ORM 935.6	Cr (ug/L)	16-Sep-09			0.68	0.61	0.47		
L&D 52	Cr (ug/L)	16-Sep-09		0.92					
ORM 950.4	Cr (ug/L)	17-Sep-09			1.33	1.02	1.5		
Olmstead	Cr (ug/L)	17-Sep-09		0.21					
ORM 965.3	Cr (ug/L)	17-Sep-09			0.52	0.38	0.48		
ORN 977.3	Cr (ug/L)	17-Sep-09			0.99	0.53	0.78		
Dashields	Cu (ug/L)	03-Aug-05	5.6					1.3	
ORM 19.3	Cu (ug/L)	03-Aug-05			1.45	1.37	1.34		
ORM 23.2	Cu (ug/L)	03-Aug-05			1.3	1.29	1.45		
ORM 27.6	Cu (ug/L)	03-Aug-05			1.47	1.56	1.46		
Montgomery	Cu (ug/L)	03-Aug-05	6.7					1.87	
Hannibal	Cu (ug/L)	01-Sep-05	22.3	2.63					
ORM 132.4	Cu (ug/L)	01-Sep-05			2.68	2.55	3.17		
ORM 138.9	Cu (ug/L)	01-Sep-05			2.87	2.85	2.81		
ORM 145.2	Cu (ug/L)	01-Sep-05			2.86	3.21	3.48		
ORM 150.8	Cu (ug/L)	01-Sep-05			2.69	2.76	2.39		
ORM 157.4	Cu (ug/L)	01-Sep-05			3.15	2.63	2.65		
Willow Island	Cu (ug/L)	01-Sep-05	22.6	2.39					
Dashields	Cu (ug/L)	14-Sep-05	5.4					1.52	
ORM 19.3	Cu (ug/L)	14-Sep-05			1.77	1.57	1.55		
ORM 23.2	Cu (ug/L)	14-Sep-05			1.69	1.59	1.44		
ORM 27.6	Cu (ug/L)	14-Sep-05			1.75	1.78	1.78		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Montgomery	Cu (ug/L)	14-Sep-05	5.6					1.71	
Hannibal	Cu (ug/L)	15-Sep-05	5.9	2.47					
ORM 132.4	Cu (ug/L)	15-Sep-05			2.27	2.9	2.41		
ORM 138.9	Cu (ug/L)	15-Sep-05			2.44	2.34	2.36		
ORM 145.2	Cu (ug/L)	15-Sep-05			2.34	2.25	2.49		
ORM 150.8	Cu (ug/L)	15-Sep-05			2.26	2.02	2.17		
ORM 157.4	Cu (ug/L)	15-Sep-05			2.32	2.22	2.15		
Willow Island	Cu (ug/L)	15-Sep-05	11.9	2.34					
Dashields	Cu (ug/L)	25-Oct-05	12.3					1.62	
ORM 19.3	Cu (ug/L)	25-Oct-05			1.91	1.68	1.74		
ORM 23.2	Cu (ug/L)	25-Oct-05			1.71	1.65	1.75		
ORM 27.6	Cu (ug/L)	25-Oct-05			1.76	1.76	1.66		
Montgomery	Cu (ug/L)	25-Oct-05	14.5					1.79	
Hannibal	Cu (ug/L)	26-Oct-05	31.9	2.87					
ORM 132.4	Cu (ug/L)	26-Oct-05			2.86	2.9	2.71		
ORM 138.9	Cu (ug/L)	26-Oct-05			3	2.89	2.71		
ORM 145.2	Cu (ug/L)	26-Oct-05			2.92	2.91	2.82		
ORM 150.8	Cu (ug/L)	26-Oct-05			2.78	2.16	2.66		
ORM 157.4	Cu (ug/L)	26-Oct-05			2.85	2.63	2.67		
Willow Island	Cu (ug/L)	26-Oct-05	52.5	3.2					
Cannelton	Cu (ug/L)	09-May-06	51.9	1.22					
ORM 725.0	Cu (ug/L)	09-May-06			1.12	1.38	1.28		
ORM 736.7	Cu (ug/L)	09-May-06			1.3	1.35	1.35		
ORM 747.3	Cu (ug/L)	09-May-06			1.47	1.36	1.31		
ORM 754.9	Cu (ug/L)	09-May-06			1.29	1.28	1.32		
ORM 762.3	Cu (ug/L)	10-May-06			1.32	1.35	1.43		
ORM 772.0	Cu (ug/L)	10-May-06			1.62	1.54	1.45		
Newburgh	Cu (ug/L)	10-May-06	55.5	1.45					
Hannibal	Cu (ug/L)	06-Sep-06	43.1	1.89					
ORM 132.4	Cu (ug/L)	06-Sep-06			1.86	2.02	1.98		
ORM 138.9	Cu (ug/L)	06-Sep-06			1.8	1.81	1.74		
ORM 145.2	Cu (ug/L)	06-Sep-06			1.82	1.89	2.13		
ORM 150.8	Cu (ug/L)	06-Sep-06			1.92	1.83	1.86		
ORM 157.4	Cu (ug/L)	06-Sep-06			1.95	1.95	2.14		
Willow Island	Cu (ug/L)	06-Sep-06	42.9	2.05					
Dashields	Cu (ug/L)	02-Nov-06	77.7					0.94	
ORM 19.3	Cu (ug/L)	02-Nov-06			0.99	0.86	0.9		
ORM 23.2	Cu (ug/L)	02-Nov-06			0.88	1.11	0.84		
ORM 27.6	Cu (ug/L)	02-Nov-06			1.18	0.93	0.89		
Montgomery	Cu (ug/L)	02-Nov-06	89.4					1	
Cannelton	Cu (ug/L)	07-Aug-07	31.8	1.75					
ORM 725.0	Cu (ug/L)	07-Aug-07			1.94	1.85	1.84		
ORM 736.7	Cu (ug/L)	07-Aug-07			2.14	1.8	2.2		
ORM 747.3	Cu (ug/L)	07-Aug-07			1.77	1.85	1.88		
ORM 754.9	Cu (ug/L)	07-Aug-07			1.82	1.95	1.44		
ORM 762.3	Cu (ug/L)	08-Aug-07			2.01	2.1	1.93		
ORM 772.0	Cu (ug/L)	08-Aug-07			1.74	1.87	1.58		
Newburgh	Cu (ug/L)	08-Aug-07	52.7	1.96					
Racine	Cu (ug/L)	23-Oct-07	12.1					2.73	
ORM 242.3	Cu (ug/L)	23-Oct-07			2.48	2.5	2.62		
ORM 251.2	Cu (ug/L)	23-Oct-07			2.51	2.43	2.42		
ORM 260.8	Cu (ug/L)	23-Oct-07			3.63	3.2	3.91		
KRM 1.4	Cu (ug/L)	23-Oct-07							0.97
ORM 267.5	Cu (ug/L)	23-Oct-07			2.44	2.53	2.37		
ORM 273.0	Cu (ug/L)	23-Oct-07			2.81	2.76	2.61		
R.C. Byrd	Cu (ug/L)	23-Oct-07	12.1					2.6	
Cannelton	Cu (ug/L)	01-Apr-08	346	1.26					
ORM 724.8	Cu (ug/L)	01-Apr-08			1.25	1.18	1.3		
ORM 736.7	Cu (ug/L)	01-Apr-08			1.32	1.12	1.24		
ORM 747.3	Cu (ug/L)	01-Apr-08			1.28	1.21	1.34		
ORM 754.9	Cu (ug/L)	01-Apr-08			1.22	1.27	1.19		
ORM 762.3	Cu (ug/L)	02-Apr-08			1.48	1.16	1.98		
ORM 772.0	Cu (ug/L)	02-Apr-08			1.18	1.3	1.33		
Newburgh	Cu (ug/L)	02-Apr-08	381.1	1.2					
Racine	Cu (ug/L)	30-Apr-08						1.18	
ORM 242.0	Cu (ug/L)	30-Apr-08			0.99	1.02	1		
ORM 251.2	Cu (ug/L)	30-Apr-08			0.82	1.42	0.98		
ORM 260.8	Cu (ug/L)	30-Apr-08			1.13	1.04	1.59		
K1.3-2	Cu (ug/L)	30-Apr-08							0.61

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 267.5	Cu (ug/L)	30-Apr-08			1.03	0.96	0.67		
ORM 273.0	Cu (ug/L)	30-Apr-08			1.1	0.96	0.88		
R.C. Byrd	Cu (ug/L)	30-Apr-08	107.9					0.45	
Racine	Cu (ug/L)	22-Oct-08						2.31	
ORM 242.0	Cu (ug/L)	22-Oct-08			2.72	2.44	2.32		
ORM 251.2	Cu (ug/L)	22-Oct-08			2.35	2.41	2.39		
ORM 260.8	Cu (ug/L)	22-Oct-08			3.25	3.44	3.72		
K1.3-2	Cu (ug/L)	22-Oct-08							0.74
ORM 267.5	Cu (ug/L)	22-Oct-08			2.36	2.18	2.42		
ORM 273.0	Cu (ug/L)	22-Oct-08			2.22	2.21	1.98		
R.C. Byrd	Cu (ug/L)	22-Oct-08	12.7					2.42	
Smithland	Cu (ug/L)	19-May-09	407.8	1.79					
Cumberland River	Cu (ug/L)	19-May-09							0.65
ORM 926.2	Cu (ug/L)	19-May-09			1.64	1.57	0.97		
Tennessee River	Cu (ug/L)	19-May-09							0.87
ORM 935.6	Cu (ug/L)	19-May-09			1.61	1.43	0.97		
L&D 52	Cu (ug/L)	19-May-09		1.62					
ORM 950.4	Cu (ug/L)	20-May-09			1.71	1.28	1.03		
Olmstead	Cu (ug/L)	20-May-09		1.56					
ORM 965.3	Cu (ug/L)	20-May-09			1.49	1.14	0.9		
ORN 977.3	Cu (ug/L)	20-May-09			1.88	1.36	1.16		
Smithland	Cu (ug/L)	21-Jul-09	59.8	1.37					
Cumberland River	Cu (ug/L)	21-Jul-09							0.79
ORM 926.2	Cu (ug/L)	21-Jul-09			1.21	1.26	1.17		
Tennessee River	Cu (ug/L)	21-Jul-09							0.41
ORM 935.6	Cu (ug/L)	21-Jul-09			1.25	0.84	0.78		
L&D 52	Cu (ug/L)	21-Jul-09		1.33					
ORM 950.4	Cu (ug/L)	22-Jul-09			0.97	1.05	1.06		
Olmstead	Cu (ug/L)	22-Jul-09		1.16					
ORM 965.3	Cu (ug/L)	22-Jul-09			1.19	0.86	1.05		
ORM 977.3	Cu (ug/L)	22-Jul-09			1.07	0.97	0.84		
Smithland	Cu (ug/L)	16-Sep-09	33.1	1.24					
Cumberland River	Cu (ug/L)	16-Sep-09							0.59
ORM 926.2	Cu (ug/L)	16-Sep-09			1.38	1.13	2.33		
Tennessee River	Cu (ug/L)	16-Sep-09							0.54
ORM 935.6	Cu (ug/L)	16-Sep-09			1.27	0.88	0.7		
L&D 52	Cu (ug/L)	16-Sep-09		1.1					
ORM 950.4	Cu (ug/L)	17-Sep-09			1.03	1.04	1.27		
Olmstead	Cu (ug/L)	17-Sep-09		1.12					
ORM 965.3	Cu (ug/L)	17-Sep-09			1.16	1.01	1.02		
ORN 977.3	Cu (ug/L)	17-Sep-09			2.05	1.11	1.1		
Dashields	Fe (ug/L)	03-Aug-05	5.6					<50	
ORM 19.3	Fe (ug/L)	03-Aug-05			<50	<50	<50		
ORM 23.2	Fe (ug/L)	03-Aug-05			<50	<50	<50		
ORM 27.6	Fe (ug/L)	03-Aug-05			67	53	57		
Montgomery	Fe (ug/L)	03-Aug-05	6.7					<50	
Hannibal	Fe (ug/L)	01-Sep-05	22.3	<50					
ORM 132.4	Fe (ug/L)	01-Sep-05			<50	<50	<50		
ORM 138.9	Fe (ug/L)	01-Sep-05			<50	<50	<50		
ORM 145.2	Fe (ug/L)	01-Sep-05			<50	<50	<50		
ORM 150.8	Fe (ug/L)	01-Sep-05			<50	<50	<50		
ORM 157.4	Fe (ug/L)	01-Sep-05			<50	<50	<50		
Willow Island	Fe (ug/L)	01-Sep-05	22.6	<50					
Dashields	Fe (ug/L)	14-Sep-05	5.4					69	
ORM 19.3	Fe (ug/L)	14-Sep-05			<50	<50	<50		
ORM 23.2	Fe (ug/L)	14-Sep-05			<50	51	<50		
ORM 27.6	Fe (ug/L)	14-Sep-05			<50	<50	<50		
Montgomery	Fe (ug/L)	14-Sep-05	5.6					<50	
Hannibal	Fe (ug/L)	15-Sep-05	5.9	<50					
ORM 132.4	Fe (ug/L)	15-Sep-05			<50	<50	<50		
ORM 138.9	Fe (ug/L)	15-Sep-05			<50	<50	<50		
ORM 145.2	Fe (ug/L)	15-Sep-05			<50	<50	<50		
ORM 150.8	Fe (ug/L)	15-Sep-05			<50	50	<50		
ORM 157.4	Fe (ug/L)	15-Sep-05			51	50	<50		
Willow Island	Fe (ug/L)	15-Sep-05	11.9	<50					
Dashields	Fe (ug/L)	25-Oct-05	12.3					<50	
ORM 19.3	Fe (ug/L)	25-Oct-05			<50	<50	<50		
ORM 23.2	Fe (ug/L)	25-Oct-05			<50	<50	<50		
ORM 27.6	Fe (ug/L)	25-Oct-05			<50	<50	<50		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Montgomery	Fe (ug/L)	25-Oct-05	14.5					<50	
Hannibal	Fe (ug/L)	26-Oct-05	31.9	<50					
ORM 132.4	Fe (ug/L)	26-Oct-05			<50	<50	<50		
ORM 138.9	Fe (ug/L)	26-Oct-05			<50	<50	<50		
ORM 145.2	Fe (ug/L)	26-Oct-05			<50	<50	<50		
ORM 150.8	Fe (ug/L)	26-Oct-05			<50	<50	<50		
ORM 157.4	Fe (ug/L)	26-Oct-05			<50	<50	<50		
Willow Island	Fe (ug/L)	26-Oct-05	52.5	<50					
Cannelton	Fe (ug/L)	09-May-06	51.9	<50					
ORM 725.0	Fe (ug/L)	09-May-06			<50	<50	<50		
ORM 736.7	Fe (ug/L)	09-May-06			<50	<50	<50		
ORM 747.3	Fe (ug/L)	09-May-06			<50	<50	<50		
ORM 754.9	Fe (ug/L)	09-May-06			<50	<50	<50		
ORM 762.3	Fe (ug/L)	10-May-06			<50	<50	<50		
ORM 772.0	Fe (ug/L)	10-May-06			<50	<50	<50		
Newburgh	Fe (ug/L)	10-May-06	55.5	<50					
Hannibal	Fe (ug/L)	06-Sep-06	43.1	<50					
ORM 132.4	Fe (ug/L)	06-Sep-06			<50	<50	<50		
ORM 138.9	Fe (ug/L)	06-Sep-06			<50	<50	<50		
ORM 145.2	Fe (ug/L)	06-Sep-06			<50	<50	133.1		
ORM 150.8	Fe (ug/L)	06-Sep-06			<50	<50	<50		
ORM 157.4	Fe (ug/L)	06-Sep-06			<50	<50	<50		
Willow Island	Fe (ug/L)	06-Sep-06	42.9	<50					
Dashields	Fe (ug/L)	02-Nov-06	77.7					79.8	
ORM 19.3	Fe (ug/L)	02-Nov-06			80.2	85.2	70.1		
ORM 23.2	Fe (ug/L)	02-Nov-06			88.1	90.9	80.6		
ORM 27.6	Fe (ug/L)	02-Nov-06			90	72.3	53.2		
Montgomery	Fe (ug/L)	02-Nov-06	89.4					80.2	
Cannelton	Fe (ug/L)	07-Aug-07	31.8	<50					
ORM 725.0	Fe (ug/L)	07-Aug-07			<50	<50	<50		
ORM 736.7	Fe (ug/L)	07-Aug-07			<50	<50	<50		
ORM 747.3	Fe (ug/L)	07-Aug-07			<50	<50	<50		
ORM 754.9	Fe (ug/L)	07-Aug-07			<50	<50	<50		
ORM 762.3	Fe (ug/L)	08-Aug-07			<50	<50	<50		
ORM 772.0	Fe (ug/L)	08-Aug-07			<50	<50	<50		
Newburgh	Fe (ug/L)	08-Aug-07	52.7	<50					
Racine	Fe (ug/L)	23-Oct-07	12.1					<50	
ORM 242.3	Fe (ug/L)	23-Oct-07			<50	<50	<50		
ORM 251.2	Fe (ug/L)	23-Oct-07			<50	<50	<50		
ORM 260.8	Fe (ug/L)	23-Oct-07			<50	<50	<50		
KRM 1.4	Fe (ug/L)	23-Oct-07							<50
ORM 267.5	Fe (ug/L)	23-Oct-07			<50	<50	<50		
ORM 273.0	Fe (ug/L)	23-Oct-07			<50	<50	<50		
R.C. Byrd	Fe (ug/L)	23-Oct-07	12.1					<50	
Cannelton	Fe (ug/L)	01-Apr-08	346	<50					
ORM 724.8	Fe (ug/L)	01-Apr-08			<50	<50	<50		
ORM 736.7	Fe (ug/L)	01-Apr-08			<50	<50	<50		
ORM 747.3	Fe (ug/L)	01-Apr-08			<50	<50	<50		
ORM 754.9	Fe (ug/L)	01-Apr-08			<50	<50	<50		
ORM 762.3	Fe (ug/L)	02-Apr-08			<50	<50	<50		
ORM 772.0	Fe (ug/L)	02-Apr-08			<50	<50	<50		
Newburgh	Fe (ug/L)	02-Apr-08	381.1	<50					
Racine	Fe (ug/L)	30-Apr-08						<50	
ORM 242.0	Fe (ug/L)	30-Apr-08			<50	<50	<50		
ORM 251.2	Fe (ug/L)	30-Apr-08			<50	<50	<50		
ORM 260.8	Fe (ug/L)	30-Apr-08			<50	<50	<50		
K1.3-2	Fe (ug/L)	30-Apr-08							<50
ORM 267.5	Fe (ug/L)	30-Apr-08			<50	<50	<50		
ORM 273.0	Fe (ug/L)	30-Apr-08			<50	<50	<50		
Racine	Fe (ug/L)	22-Oct-08						<50	
ORM 242.0	Fe (ug/L)	22-Oct-08			<50	<50	<50		
ORM 251.2	Fe (ug/L)	22-Oct-08			<50	<50	<50		
ORM 260.8	Fe (ug/L)	22-Oct-08			<50	<50	<50		
K1.3-2	Fe (ug/L)	22-Oct-08							<50
ORM 267.5	Fe (ug/L)	22-Oct-08			<50	<50	<50		
ORM 273.0	Fe (ug/L)	22-Oct-08			<50	<50	<50		
R.C. Byrd	Fe (ug/L)	22-Oct-08	12.7					<50	
Smithland	Fe (ug/L)	19-May-09	407.8	<50					
Cumberland River	Fe (ug/L)	19-May-09							<50

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 926.2	Fe (ug/L)	19-May-09			<50	<50	<50		
Tennessee River	Fe (ug/L)	19-May-09							<50
ORM 935.6	Fe (ug/L)	19-May-09			<50	<50	<50		
L&D 52	Fe (ug/L)	19-May-09		<50					
ORM 950.4	Fe (ug/L)	20-May-09			<50	<50	<50		
Olmstead	Fe (ug/L)	20-May-09		<50					
ORM 965.3	Fe (ug/L)	20-May-09			<50	<50	<50		
ORN 977.3	Fe (ug/L)	20-May-09			<50	<50	<50		
Smithland	Fe (ug/L)	21-Jul-09	59.8	<50					
Cumberland River	Fe (ug/L)	21-Jul-09							<50
ORM 926.2	Fe (ug/L)	21-Jul-09			<50	<50	<50		
Tennessee River	Fe (ug/L)	21-Jul-09							<50
ORM 935.6	Fe (ug/L)	21-Jul-09			<50	<50	<50		
L&D 52	Fe (ug/L)	21-Jul-09		<50					
ORM 950.4	Fe (ug/L)	22-Jul-09			<50	<50	<50		
Olmstead	Fe (ug/L)	22-Jul-09		<50					
ORM 965.3	Fe (ug/L)	22-Jul-09			<50	<50	<50		
ORM 977.3	Fe (ug/L)	22-Jul-09			<50	<50	<50		
Smithland	Fe (ug/L)	16-Sep-09	33.1	<50					
Cumberland River	Fe (ug/L)	16-Sep-09							<50
ORM 926.2	Fe (ug/L)	16-Sep-09			<50	<50	<50		
Tennessee River	Fe (ug/L)	16-Sep-09							<50
ORM 935.6	Fe (ug/L)	16-Sep-09			<50	<50	<50		
L&D 52	Fe (ug/L)	16-Sep-09		<50					
ORM 950.4	Fe (ug/L)	17-Sep-09			<50	<50	<50		
Olmstead	Fe (ug/L)	17-Sep-09		<50					
ORM 965.3	Fe (ug/L)	17-Sep-09			<50	<50	<50		
ORN 977.3	Fe (ug/L)	17-Sep-09			<50	<50	<50		
Dashields	Hg (ng/L)	03-Aug-05	5.6					<1.5	
ORM 19.3	Hg (ng/L)	03-Aug-05			<1.5	<1.5	<1.5		
ORM 23.2	Hg (ng/L)	03-Aug-05			<1.5	<1.5	<1.5		
ORM 27.6	Hg (ng/L)	03-Aug-05			<1.5	<1.5	<1.5		
Montgomery	Hg (ng/L)	03-Aug-05	6.7					<1.5	
Hannibal	Hg (ng/L)	01-Sep-05	22.3	<1.5					
ORM 132.4	Hg (ng/L)	01-Sep-05			<1.5	<1.5	<1.5		
ORM 138.9	Hg (ng/L)	01-Sep-05			<1.5	<1.5	<1.5		
ORM 145.2	Hg (ng/L)	01-Sep-05			<1.5	<1.5	<1.5		
ORM 150.8	Hg (ng/L)	01-Sep-05				<1.5	<1.5		
ORM 157.4	Hg (ng/L)	01-Sep-05			<1.5	<1.5	<1.5		
Willow Island	Hg (ng/L)	01-Sep-05	22.6	<1.5					
Dashields	Hg (ng/L)	14-Sep-05	5.4					<1.5	
ORM 19.3	Hg (ng/L)	14-Sep-05			<1.5	<1.5	<1.5		
ORM 23.2	Hg (ng/L)	14-Sep-05			<1.5	<1.5	<1.5		
ORM 27.6	Hg (ng/L)	14-Sep-05			<1.5	<1.5	<1.5		
Montgomery	Hg (ng/L)	14-Sep-05	5.6					<1.5	
Hannibal	Hg (ng/L)	15-Sep-05	5.9	<1.5					
ORM 132.4	Hg (ng/L)	15-Sep-05			<1.5	<1.5	<1.5		
ORM 138.9	Hg (ng/L)	15-Sep-05			<1.5	<1.5	<1.5		
ORM 145.2	Hg (ng/L)	15-Sep-05			<1.5	1.53	<1.5		
ORM 150.8	Hg (ng/L)	15-Sep-05			<1.5	<1.5	<1.5		
ORM 157.4	Hg (ng/L)	15-Sep-05			<1.5	<1.5	<1.5		
Willow Island	Hg (ng/L)	15-Sep-05	11.9	<1.5					
Dashields	Hg (ng/L)	25-Oct-05	12.3					<1.5	
ORM 19.3	Hg (ng/L)	25-Oct-05			<1.5	<1.5	<1.5		
ORM 23.2	Hg (ng/L)	25-Oct-05			<1.5	<1.5	<1.5		
ORM 27.6	Hg (ng/L)	25-Oct-05			<1.5	<1.5	1.76		
Montgomery	Hg (ng/L)	25-Oct-05	14.5					<1.5	
Hannibal	Hg (ng/L)	26-Oct-05	31.9	<1.5					
ORM 132.4	Hg (ng/L)	26-Oct-05			<1.5	<1.5	<1.5		
ORM 138.9	Hg (ng/L)	26-Oct-05			<1.5	<1.5	<1.5		
ORM 145.2	Hg (ng/L)	26-Oct-05			<1.5	<1.5	<1.5		
ORM 150.8	Hg (ng/L)	26-Oct-05			<1.5	<1.5	<1.5		
ORM 157.4	Hg (ng/L)	26-Oct-05			<1.5	<1.5	<1.5		
Willow Island	Hg (ng/L)	26-Oct-05	52.5	<1.5					
Cannelton	Hg (ng/L)	09-May-06	51.9	<1.5					
ORM 725.0	Hg (ng/L)	09-May-06			<1.5	<1.5	<1.5		
ORM 736.7	Hg (ng/L)	09-May-06			<1.5	<1.5	<1.5		
ORM 747.3	Hg (ng/L)	09-May-06			<1.5	<1.5	<1.5		
ORM 754.9	Hg (ng/L)	09-May-06			<1.5	<1.5	<1.5		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 762.3	Hg (ng/L)	10-May-06			<1.5	<1.5	<1.5		
ORM 772.0	Hg (ng/L)	10-May-06			<1.5	<1.5	<1.5		
Newburgh	Hg (ng/L)	10-May-06	55.5	<1.5					
Hannibal	Hg (ng/L)	06-Sep-06	43.1	5.27					
ORM 132.4	Hg (ng/L)	06-Sep-06			<1.5	<1.5	<1.5		
ORM 138.9	Hg (ng/L)	06-Sep-06			<1.5	<1.5	<1.5		
ORM 145.2	Hg (ng/L)	06-Sep-06			<1.5	<1.5	<1.5		
ORM 150.8	Hg (ng/L)	06-Sep-06			2.73	<1.5	<1.5		
ORM 157.4	Hg (ng/L)	06-Sep-06			<1.5	<1.5	<1.5		
Willow Island	Hg (ng/L)	06-Sep-06	42.9	<1.5					
Dashields	Hg (ng/L)	02-Nov-06	77.7					4.07	
ORM 19.3	Hg (ng/L)	02-Nov-06			<1.5	<1.5	<1.5		
ORM 23.2	Hg (ng/L)	02-Nov-06			<1.5	<1.5	<1.5		
ORM 27.6	Hg (ng/L)	02-Nov-06			<1.5	2.33	<1.5		
Montgomery	Hg (ng/L)	02-Nov-06	89.4					<1.5	
Cannelton	Hg (ng/L)	07-Aug-07	31.8	<1.5					
ORM 725.0	Hg (ng/L)	07-Aug-07			<1.5	<1.5	<1.5		
ORM 736.7	Hg (ng/L)	07-Aug-07			<1.5	<1.5	<1.5		
ORM 747.3	Hg (ng/L)	07-Aug-07			<1.5	<1.5	<1.5		
ORM 754.9	Hg (ng/L)	07-Aug-07			<1.5	<1.5	<1.5		
ORM 762.3	Hg (ng/L)	08-Aug-07			<1.5	<1.5	<1.5		
ORM 772.0	Hg (ng/L)	08-Aug-07			<1.5	<1.5	<1.5		
Newburgh	Hg (ng/L)	08-Aug-07	52.7	<1.5					
Racine	Hg (ng/L)	23-Oct-07	12.1					<1.5	
ORM 242.3	Hg (ng/L)	23-Oct-07			<1.5	<1.5	<1.5		
ORM 251.2	Hg (ng/L)	23-Oct-07			<1.5	<1.5	<1.5		
ORM 260.8	Hg (ng/L)	23-Oct-07			<1.5	<1.5	<1.5		
KRM 1.4	Hg (ng/L)	23-Oct-07							<1.5
ORM 267.5	Hg (ng/L)	23-Oct-07			<1.5	<1.5	<1.5		
ORM 273.0	Hg (ng/L)	23-Oct-07			<1.5	<1.5	<1.5		
R.C. Byrd	Hg (ng/L)	23-Oct-07	12.1					<1.5	
Cannelton	Hg (ng/L)	01-Apr-08	346	1.76					
ORM 724.8	Hg (ng/L)	01-Apr-08			<1.5	2.33	2.36		
ORM 736.7	Hg (ng/L)	01-Apr-08			<1.5	1.96	<1.5		
ORM 747.3	Hg (ng/L)	01-Apr-08			<1.5	<1.5	<1.5		
ORM 754.9	Hg (ng/L)	01-Apr-08			<1.5	1.76	<1.5		
ORM 762.3	Hg (ng/L)	02-Apr-08			<1.5	<1.5	<1.5		
ORM 772.0	Hg (ng/L)	02-Apr-08			<1.5	<1.5	<1.5		
Newburgh	Hg (ng/L)	02-Apr-08	381.1	<1.5					
Racine	Hg (ng/L)	30-Apr-08						<1.5	
ORM 242.0	Hg (ng/L)	30-Apr-08			<1.5	<1.5	<1.5		
ORM 251.2	Hg (ng/L)	30-Apr-08			<1.5	<1.5	<1.5		
ORM 260.8	Hg (ng/L)	30-Apr-08			2.45	<1.5	<1.5		
K1.3-2	Hg (ng/L)	30-Apr-08							<1.5
ORM 267.5	Hg (ng/L)	30-Apr-08			<1.5	<1.5	<1.5		
ORM 273.0	Hg (ng/L)	30-Apr-08			<1.5	<1.5	<1.5		
R.C. Byrd	Hg (ng/L)	30-Apr-08	107.9					<1.5	
Racine	Hg (ng/L)	22-Oct-08						<1.5	
R.C. Byrd	Hg (ng/L)	22-Oct-08	12.7					<1.5	
Smithland	Hg (ng/L)	19-May-09	407.8	<1.5					
Cumberland River	Hg (ng/L)	19-May-09							<1.5
ORM 926.2	Hg (ng/L)	19-May-09			<1.5	1.55	<1.5		
Tennessee River	Hg (ng/L)	19-May-09							<1.5
ORM 935.6	Hg (ng/L)	19-May-09			<1.5	<1.5	<1.5		
L&D 52	Hg (ng/L)	19-May-09		<1.5					
ORM 950.4	Hg (ng/L)	20-May-09			<1.5	<1.5	<1.5		
Olmstead	Hg (ng/L)	20-May-09		<1.5					
ORM 965.3	Hg (ng/L)	20-May-09			2.21	<1.5	<1.5		
ORN 977.3	Hg (ng/L)	20-May-09			1.92	<1.5	<1.5		
Smithland	Hg (ng/L)	21-Jul-09	59.8	<1.5					
Cumberland River	Hg (ng/L)	21-Jul-09							<1.5
ORM 926.2	Hg (ng/L)	21-Jul-09			<1.5	<1.5	<1.5		
Tennessee River	Hg (ng/L)	21-Jul-09							<1.5
ORM 935.6	Hg (ng/L)	21-Jul-09			<1.5	<1.5	<1.5		
L&D 52	Hg (ng/L)	21-Jul-09		<1.5					
ORM 950.4	Hg (ng/L)	22-Jul-09			<1.5	<1.5	<1.5		
Olmstead	Hg (ng/L)	22-Jul-09		<1.5					
ORM 965.3	Hg (ng/L)	22-Jul-09			<1.5	<1.5	<1.5		
ORM 977.3	Hg (ng/L)	22-Jul-09			<1.5	<1.5	<1.5		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Smithland	Hg (ng/L)	16-Sep-09	33.1	<1.5					
Cumberland River	Hg (ng/L)	16-Sep-09							<1.5
ORM 926.2	Hg (ng/L)	16-Sep-09			<1.5	<1.5	<1.5		
Tennessee River	Hg (ng/L)	16-Sep-09							<1.5
ORM 935.6	Hg (ng/L)	16-Sep-09			<1.5	<1.5	<1.5		
L&D 52	Hg (ng/L)	16-Sep-09		<1.5					
ORM 950.4	Hg (ng/L)	17-Sep-09			<1.5	<1.5	<1.5		
Olmstead	Hg (ng/L)	17-Sep-09		<1.5					
ORM 965.3	Hg (ng/L)	17-Sep-09			<1.5	<1.5	<1.5		
ORN 977.3	Hg (ng/L)	17-Sep-09			<1.5	<1.5	<1.5		
Dashields	Mg (mg/L)	03-Aug-05	5.6					10.92	
ORM 19.3	Mg (mg/L)	03-Aug-05			10.57	10.44	10.62		
ORM 23.2	Mg (mg/L)	03-Aug-05			9.7	9.01	10.13		
ORM 27.6	Mg (mg/L)	03-Aug-05			10.3	9.99	10.15		
Montgomery	Mg (mg/L)	03-Aug-05	6.7					10.1	
Hannibal	Mg (mg/L)	01-Sep-05	22.3	12.3					
ORM 132.4	Mg (mg/L)	01-Sep-05			12.1	12.09	12.38		
ORM 138.9	Mg (mg/L)	01-Sep-05			11.98	11.56	12.78		
ORM 145.2	Mg (mg/L)	01-Sep-05			12.66	12.39	12.66		
ORM 150.8	Mg (mg/L)	01-Sep-05			12.02	12.5	11.19		
ORM 157.4	Mg (mg/L)	01-Sep-05			11.62	12.39	12.11		
Willow Island	Mg (mg/L)	01-Sep-05	22.6	12.14					
Dashields	Mg (mg/L)	14-Sep-05	5.4					10.69	
ORM 19.3	Mg (mg/L)	14-Sep-05			10.74	9.92	10.1		
ORM 23.2	Mg (mg/L)	14-Sep-05			8.24	10.21	9.01		
ORM 27.6	Mg (mg/L)	14-Sep-05			8.95	9.74	9.13		
Montgomery	Mg (mg/L)	14-Sep-05	5.6					9.17	
Hannibal	Mg (mg/L)	15-Sep-05	5.9	13.37					
ORM 132.4	Mg (mg/L)	15-Sep-05			11.81	13.2	12.14		
ORM 138.9	Mg (mg/L)	15-Sep-05			13.22	14.15	13.18		
ORM 145.2	Mg (mg/L)	15-Sep-05			13.6	13.87	13.41		
ORM 150.8	Mg (mg/L)	15-Sep-05			16.02	14.82	13.43		
ORM 157.4	Mg (mg/L)	15-Sep-05			16.32	16.86	12.9		
Willow Island	Mg (mg/L)	15-Sep-05	11.9	14.46					
Dashields	Mg (mg/L)	25-Oct-05	12.3					13.72	
ORM 19.3	Mg (mg/L)	25-Oct-05			10.3	14.27	13.71		
ORM 23.2	Mg (mg/L)	25-Oct-05			11.71	12.19	12.95		
ORM 27.6	Mg (mg/L)	25-Oct-05			13.9	12.24	13.5		
Montgomery	Mg (mg/L)	25-Oct-05	14.5					13.74	
Hannibal	Mg (mg/L)	26-Oct-05	31.9	13.2					
ORM 132.4	Mg (mg/L)	26-Oct-05			12.98	11.81	11.89		
ORM 138.9	Mg (mg/L)	26-Oct-05			10.13	10.44	11.4		
ORM 145.2	Mg (mg/L)	26-Oct-05			14.21	13.73	13.59		
ORM 150.8	Mg (mg/L)	26-Oct-05			15.35	11.88	13.35		
ORM 157.4	Mg (mg/L)	26-Oct-05			14.76	14.31	13.79		
Willow Island	Mg (mg/L)	26-Oct-05	52.5	14.11					
Cannelton	Mg (mg/L)	09-May-06	51.9	10.56					
ORM 725.0	Mg (mg/L)	09-May-06			11.37	11.25	11.1		
ORM 736.7	Mg (mg/L)	09-May-06			10.5	10.62	10.62		
ORM 747.3	Mg (mg/L)	09-May-06			10.93	10.71	10.44		
ORM 754.9	Mg (mg/L)	09-May-06			10.59	10.68	10.73		
ORM 762.3	Mg (mg/L)	10-May-06			10.84	10.34	10.63		
ORM 772.0	Mg (mg/L)	10-May-06			10.67	10.63	10.61		
Newburgh	Mg (mg/L)	10-May-06	55.5	11.85					
Hannibal	Mg (mg/L)	06-Sep-06	43.1	8.79					
ORM 132.4	Mg (mg/L)	06-Sep-06			9.01	8.94	8.92		
ORM 138.9	Mg (mg/L)	06-Sep-06			8.87	9.21	9.31		
ORM 145.2	Mg (mg/L)	06-Sep-06			9.67	9.49	9.7		
ORM 150.8	Mg (mg/L)	06-Sep-06			9.8	9.8	9.93		
ORM 157.4	Mg (mg/L)	06-Sep-06			10.05	9.94	9.93		
Willow Island	Mg (mg/L)	06-Sep-06	42.9	9.61					
Dashields	Mg (mg/L)	02-Nov-06	77.7					5.24	
ORM 19.3	Mg (mg/L)	02-Nov-06			4.1	4.32	4.92		
ORM 23.2	Mg (mg/L)	02-Nov-06			3.95	4.18	4.49		
ORM 27.6	Mg (mg/L)	02-Nov-06			5.63	4.83	4.7		
Montgomery	Mg (mg/L)	02-Nov-06	89.4					4.98	
Cannelton	Mg (mg/L)	07-Aug-07	31.8	14.63					
ORM 725.0	Mg (mg/L)	07-Aug-07			14.15	12.3	14.73		
ORM 736.7	Mg (mg/L)	07-Aug-07			13.78	13.9	12.91		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 747.3	Mg (mg/L)	07-Aug-07			13.02	12.9	14.05		
ORM 754.9	Mg (mg/L)	07-Aug-07			13.66	14.37	12.15		
ORM 762.3	Mg (mg/L)	08-Aug-07			12.38	12.86	14.38		
ORM 772.0	Mg (mg/L)	08-Aug-07			12.59	14.47	12.92		
Newburgh	Mg (mg/L)	08-Aug-07	52.7	13.72					
Racine	Mg (mg/L)	23-Oct-07	12.1					12.58	
ORM 242.3	Mg (mg/L)	23-Oct-07			12.76	13.59	13.46		
ORM 251.2	Mg (mg/L)	23-Oct-07			12.42	12.24	12.29		
ORM 260.8	Mg (mg/L)	23-Oct-07			13.62	11.83	13.75		
KRM 1.4	Mg (mg/L)	23-Oct-07							8.93
ORM 267.5	Mg (mg/L)	23-Oct-07			10.56	10.8	11.2		
ORM 273.0	Mg (mg/L)	23-Oct-07			12.34	12.28	12.38		
R.C. Byrd	Mg (mg/L)	23-Oct-07	12.1					11.05	
Cannelton	Mg (mg/L)	01-Apr-08	346	8.02					
ORM 724.8	Mg (mg/L)	01-Apr-08			7.53	7.71	7.99		
ORM 736.7	Mg (mg/L)	01-Apr-08			7.72	6.97	7.88		
ORM 747.3	Mg (mg/L)	01-Apr-08			7.77	7.46	7.43		
ORM 754.9	Mg (mg/L)	01-Apr-08			7.17	7.92	7.22		
ORM 762.3	Mg (mg/L)	02-Apr-08			7.29	7.15	7.81		
ORM 772.0	Mg (mg/L)	02-Apr-08			7.95	7.96	7.95		
Newburgh	Mg (mg/L)	02-Apr-08	381.1	8.02					
Racine	Mg (mg/L)	30-Apr-08						11.45	
ORM 242.0	Mg (mg/L)	30-Apr-08			11.05	11.73	9.37		
ORM 251.2	Mg (mg/L)	30-Apr-08			10.09	10.33	10.6		
ORM 260.8	Mg (mg/L)	30-Apr-08			12.1	11.85	11.24		
K1.3-2	Mg (mg/L)	30-Apr-08							7.44
ORM 267.5	Mg (mg/L)	30-Apr-08			11.6	9.48	7.85		
ORM 273.0	Mg (mg/L)	30-Apr-08			11.38	10.29	6.76		
R.C. Byrd	Mg (mg/L)	30-Apr-08	107.9					9.08	
Racine	Mg (mg/L)	22-Oct-08						12.38	
ORM 242.0	Mg (mg/L)	22-Oct-08			14.53	11.35	11.55		
ORM 251.2	Mg (mg/L)	22-Oct-08			12.6	12.65	12.54		
ORM 260.8	Mg (mg/L)	22-Oct-08			12.97	12.45	12.52		
K1.3-2	Mg (mg/L)	22-Oct-08							9.16
ORM 267.5	Mg (mg/L)	22-Oct-08			12.27	11.9	11.99		
ORM 273.0	Mg (mg/L)	22-Oct-08			10.73	9.44	9.29		
R.C. Byrd	Mg (mg/L)	22-Oct-08	12.7					11.66	
Smithland	Mg (mg/L)	19-May-09	407.8	9.37					
Cumberland River	Mg (mg/L)	19-May-09							4.55
ORM 926.2	Mg (mg/L)	19-May-09			9.55	7.86	5.73		
Tennessee River	Mg (mg/L)	19-May-09							3.38
ORM 935.6	Mg (mg/L)	19-May-09			9.64	8.41	4.18		
L&D 52	Mg (mg/L)	19-May-09		9.49					
ORM 950.4	Mg (mg/L)	20-May-09			8.55	5.84	4.97		
Olmstead	Mg (mg/L)	20-May-09		8.52					
ORM 965.3	Mg (mg/L)	20-May-09			8.58	5.96	4.93		
ORN 977.3	Mg (mg/L)	20-May-09			8.05	6.49	5.2		
Smithland	Mg (mg/L)	21-Jul-09	59.8	14.39					
Cumberland River	Mg (mg/L)	21-Jul-09							5.26
ORM 926.2	Mg (mg/L)	21-Jul-09			14.73	13.57	11.25		
Tennessee River	Mg (mg/L)	21-Jul-09							3.3
ORM 935.6	Mg (mg/L)	21-Jul-09			14.3	9.02	7.97		
L&D 52	Mg (mg/L)	21-Jul-09		14.29					
ORM 950.4	Mg (mg/L)	22-Jul-09			9.78	9.76	9.06		
Olmstead	Mg (mg/L)	22-Jul-09		12.39					
ORM 965.3	Mg (mg/L)	22-Jul-09			11.72	10.26	8.49		
ORM 977.3	Mg (mg/L)	22-Jul-09			11.55	8.9	8.58		
Smithland	Mg (mg/L)	16-Sep-09	33.1	11.72					
Cumberland River	Mg (mg/L)	16-Sep-09							5.25
ORM 926.2	Mg (mg/L)	16-Sep-09			11.83	9.25	8.95		
Tennessee River	Mg (mg/L)	16-Sep-09							4.41
ORM 935.6	Mg (mg/L)	16-Sep-09			11.5	7.43	5.94		
L&D 52	Mg (mg/L)	16-Sep-09		9.7					
ORM 950.4	Mg (mg/L)	17-Sep-09			9.17	8.39	8.42		
Olmstead	Mg (mg/L)	17-Sep-09		9.65					
ORM 965.3	Mg (mg/L)	17-Sep-09			9.64	9.31	8.96		
ORN 977.3	Mg (mg/L)	17-Sep-09			9.11	8.82	9.29		
Dashields	Mn (ug/L)	03-Aug-05	5.6					0.78	
ORM 19.3	Mn (ug/L)	03-Aug-05			0.89	0.68	1.16		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 23.2	Mn (ug/L)	03-Aug-05			0.96	1.22	0.88		
ORM 27.6	Mn (ug/L)	03-Aug-05			1.58	2.97	1.43		
Montgomery	Mn (ug/L)	03-Aug-05	6.7					1.29	
Hannibal	Mn (ug/L)	01-Sep-05	22.3	0.68					
ORM 132.4	Mn (ug/L)	01-Sep-05			6.16	2.68	4.7		
ORM 138.9	Mn (ug/L)	01-Sep-05			5.82	2.11	4.09		
ORM 145.2	Mn (ug/L)	01-Sep-05			2.45	1.57	1.14		
ORM 150.8	Mn (ug/L)	01-Sep-05			2.5	1.65	2.22		
ORM 157.4	Mn (ug/L)	01-Sep-05			3.24	3.84	2.67		
Willow Island	Mn (ug/L)	01-Sep-05	22.6	2.51					
Dashields	Mn (ug/L)	14-Sep-05	5.4					1.1	
ORM 19.3	Mn (ug/L)	14-Sep-05			1.8	1.31	1.73		
ORM 23.2	Mn (ug/L)	14-Sep-05			1.47	1.3	2.43		
ORM 27.6	Mn (ug/L)	14-Sep-05			0.88	1.45	1.08		
Montgomery	Mn (ug/L)	14-Sep-05	5.6					0.84	
Hannibal	Mn (ug/L)	15-Sep-05	5.9	0.59					
ORM 132.4	Mn (ug/L)	15-Sep-05			2.28	1.54	1.59		
ORM 138.9	Mn (ug/L)	15-Sep-05			1.24	0.92	3.06		
ORM 145.2	Mn (ug/L)	15-Sep-05			2.55	0.53	1.74		
ORM 150.8	Mn (ug/L)	15-Sep-05			1.26	1.13	1.06		
ORM 157.4	Mn (ug/L)	15-Sep-05			2.26	2.25	3.14		
Willow Island	Mn (ug/L)	15-Sep-05	11.9	0.65					
Dashields	Mn (ug/L)	25-Oct-05	12.3					1.19	
ORM 19.3	Mn (ug/L)	25-Oct-05			3.81	4.11	3.51		
ORM 23.2	Mn (ug/L)	25-Oct-05			5.96	6.94	4.18		
ORM 27.6	Mn (ug/L)	25-Oct-05			7.39	7.04	10.17		
Montgomery	Mn (ug/L)	25-Oct-05	14.5					5.65	
Hannibal	Mn (ug/L)	26-Oct-05	31.9	5.75					
ORM 132.4	Mn (ug/L)	26-Oct-05			13.32	8.95	10.6		
ORM 138.9	Mn (ug/L)	26-Oct-05			12.07	7.33	8.43		
ORM 145.2	Mn (ug/L)	26-Oct-05			7.13	4.53	8.27		
ORM 150.8	Mn (ug/L)	26-Oct-05			4.66	4.02	4.16		
ORM 157.4	Mn (ug/L)	26-Oct-05			7.52	10.02	15.79		
Willow Island	Mn (ug/L)	26-Oct-05	52.5	7.34					
Cannelton	Mn (ug/L)	09-May-06	51.9	13.66					
ORM 725.0	Mn (ug/L)	09-May-06			15.09	16.85	18.54		
ORM 736.7	Mn (ug/L)	09-May-06			12.86	12.49	13.47		
ORM 747.3	Mn (ug/L)	09-May-06			16.21	12.87	11.38		
ORM 754.9	Mn (ug/L)	09-May-06			12.41	9.6	10.11		
ORM 762.3	Mn (ug/L)	10-May-06			15.34	9.62	10.15		
ORM 772.0	Mn (ug/L)	10-May-06			9.08	8.62	8.33		
Newburgh	Mn (ug/L)	10-May-06	55.5	21.55					
Hannibal	Mn (ug/L)	06-Sep-06	43.1	2.69					
ORM 132.4	Mn (ug/L)	06-Sep-06			9.23	5.82	7.84		
ORM 138.9	Mn (ug/L)	06-Sep-06			13.22	4.71	15.31		
ORM 145.2	Mn (ug/L)	06-Sep-06			11.7	4.32	19.15		
ORM 150.8	Mn (ug/L)	06-Sep-06			6.45	3.98	17.05		
ORM 157.4	Mn (ug/L)	06-Sep-06			22.13	6.87	22.2		
Willow Island	Mn (ug/L)	06-Sep-06	42.9	15.96					
Dashields	Mn (ug/L)	02-Nov-06	77.7					73.87	
ORM 19.3	Mn (ug/L)	02-Nov-06			80.06	77.96	73.95		
ORM 23.2	Mn (ug/L)	02-Nov-06			74.4	81.09	70.13		
ORM 27.6	Mn (ug/L)	02-Nov-06			58.95	75.26	76.73		
Montgomery	Mn (ug/L)	02-Nov-06	89.4					92.42	
Cannelton	Mn (ug/L)	07-Aug-07	31.8	0.27					
ORM 725.0	Mn (ug/L)	07-Aug-07			1.25	0.99	2.18		
ORM 736.7	Mn (ug/L)	07-Aug-07			0.9	1.17	2.03		
ORM 747.3	Mn (ug/L)	07-Aug-07			3.03	0.93	1.67		
ORM 754.9	Mn (ug/L)	07-Aug-07			7.35	2.15	1.03		
ORM 762.3	Mn (ug/L)	08-Aug-07			7.63	6.04	1.08		
ORM 772.0	Mn (ug/L)	08-Aug-07			2.86	0.86	6.07		
Newburgh	Mn (ug/L)	08-Aug-07	52.7	1.99					
Racine	Mn (ug/L)	23-Oct-07	12.1					35.42	
ORM 242.3	Mn (ug/L)	23-Oct-07			26.14	29.92	32.21		
ORM 251.2	Mn (ug/L)	23-Oct-07			22.61	22.32	20.82		
ORM 260.8	Mn (ug/L)	23-Oct-07			19.87	14.75	17.5		
KRM 1.4	Mn (ug/L)	23-Oct-07							3.3
ORM 267.5	Mn (ug/L)	23-Oct-07			9.05	6.73	9.69		
ORM 273.0	Mn (ug/L)	23-Oct-07			8.95	12.27	18.02		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
R.C. Byrd	Mn (ug/L)	23-Oct-07	12.1					99.09	
Cannelton	Mn (ug/L)	01-Apr-08	346	1.02					
ORM 724.8	Mn (ug/L)	01-Apr-08			2.16	1.18	1.47		
ORM 736.7	Mn (ug/L)	01-Apr-08			2.08	1.15	2.73		
ORM 747.3	Mn (ug/L)	01-Apr-08			3.46	1.25	5.1		
ORM 754.9	Mn (ug/L)	01-Apr-08			2.92	1.37	1.54		
ORM 762.3	Mn (ug/L)	02-Apr-08			1.55	0.98	1.57		
ORM 772.0	Mn (ug/L)	02-Apr-08			2.01	0.97	2.13		
Newburgh	Mn (ug/L)	02-Apr-08	381.1	9.16					
Racine	Mn (ug/L)	30-Apr-08						1.66	
ORM 242.0	Mn (ug/L)	30-Apr-08			1.27	1.14	1.53		
ORM 251.2	Mn (ug/L)	30-Apr-08			1.21	0.76	1.39		
ORM 260.8	Mn (ug/L)	30-Apr-08			1.38	0.92	4.87		
K1.3-2	Mn (ug/L)	30-Apr-08							13.85
ORM 267.5	Mn (ug/L)	30-Apr-08			2.01	6.92	15.46		
ORM 273.0	Mn (ug/L)	30-Apr-08			2.88	3.46	13.55		
R.C. Byrd	Mn (ug/L)	30-Apr-08	107.9					0.86	
Racine	Mn (ug/L)	22-Oct-08						33.83	
ORM 242.0	Mn (ug/L)	22-Oct-08			53.77	32.89	35.93		
ORM 251.2	Mn (ug/L)	22-Oct-08			38.34	39.61	38.62		
ORM 260.8	Mn (ug/L)	22-Oct-08			22.53	24.67	22.86		
K1.3-2	Mn (ug/L)	22-Oct-08							5.14
ORM 267.5	Mn (ug/L)	22-Oct-08			16	17.47	15.74		
ORM 273.0	Mn (ug/L)	22-Oct-08			11.53	9.67	12.92		
R.C. Byrd	Mn (ug/L)	22-Oct-08	12.7					26.03	
Smithland	Mn (ug/L)	19-May-09	407.8	0.67					
Cumberland River	Mn (ug/L)	19-May-09							1.39
ORM 926.2	Mn (ug/L)	19-May-09			1.39	0.94	0.62		
Tennessee River	Mn (ug/L)	19-May-09							0.6
ORM 935.6	Mn (ug/L)	19-May-09			6.41	0.86	1.31		
L&D 52	Mn (ug/L)	19-May-09		0.71					
ORM 950.4	Mn (ug/L)	20-May-09			1.4	0.59	0.61		
Olmstead	Mn (ug/L)	20-May-09		0.95					
ORM 965.3	Mn (ug/L)	20-May-09			1.1	0.55	0.81		
ORN 977.3	Mn (ug/L)	20-May-09			2.28	0.63	0.61		
Smithland	Mn (ug/L)	21-Jul-09	59.8	0.19					
Cumberland River	Mn (ug/L)	21-Jul-09							1.56
ORM 926.2	Mn (ug/L)	21-Jul-09			<0.1	0.74	0.4		
Tennessee River	Mn (ug/L)	21-Jul-09							2.84
ORM 935.6	Mn (ug/L)	21-Jul-09			0.41	0.31	5.24		
L&D 52	Mn (ug/L)	21-Jul-09		0.89					
ORM 950.4	Mn (ug/L)	22-Jul-09			9.79	17.1	138.81		
Olmstead	Mn (ug/L)	22-Jul-09		0.21					
ORM 965.3	Mn (ug/L)	22-Jul-09			0.79	0.38	12.86		
ORM 977.3	Mn (ug/L)	22-Jul-09			0.19	0.44	8.36		
Smithland	Mn (ug/L)	16-Sep-09	33.1	8.12					
Cumberland River	Mn (ug/L)	16-Sep-09							1.58
ORM 926.2	Mn (ug/L)	16-Sep-09			4.4	1.41	0.83		
Tennessee River	Mn (ug/L)	16-Sep-09							3.52
ORM 935.6	Mn (ug/L)	16-Sep-09			0.84	1.08	7.16		
L&D 52	Mn (ug/L)	16-Sep-09		0.21					
ORM 950.4	Mn (ug/L)	17-Sep-09			0.24	1.4	12.41		
Olmstead	Mn (ug/L)	17-Sep-09		<0.1					
ORM 965.3	Mn (ug/L)	17-Sep-09			4.21	0.52	7.62		
ORN 977.3	Mn (ug/L)	17-Sep-09			2.96	0.3	0.61		
Dashields	Ni (ug/L)	03-Aug-05	5.6					1.81	
ORM 19.3	Ni (ug/L)	03-Aug-05			1.75	1.8	1.82		
ORM 23.2	Ni (ug/L)	03-Aug-05			1.77	1.79	1.82		
ORM 27.6	Ni (ug/L)	03-Aug-05			1.72	1.95	1.6		
Montgomery	Ni (ug/L)	03-Aug-05	6.7					1.64	
Hannibal	Ni (ug/L)	01-Sep-05	22.3	2.42					
ORM 132.4	Ni (ug/L)	01-Sep-05			2.43	2.27	2.59		
ORM 138.9	Ni (ug/L)	01-Sep-05			2.46	2.57	2.38		
ORM 145.2	Ni (ug/L)	01-Sep-05			2.66	2.37	2.45		
ORM 150.8	Ni (ug/L)	01-Sep-05			2.21	2.46	2.07		
ORM 157.4	Ni (ug/L)	01-Sep-05			2.37	2.43	2.4		
Willow Island	Ni (ug/L)	01-Sep-05	22.6	2.3					
Dashields	Ni (ug/L)	14-Sep-05	5.4					2.19	
ORM 19.3	Ni (ug/L)	14-Sep-05			1.8	1.84	1.87		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 23.2	Ni (ug/L)	14-Sep-05			1.39	1.48	1.41		
ORM 27.6	Ni (ug/L)	14-Sep-05			1.68	1.93	1.74		
Montgomery	Ni (ug/L)	14-Sep-05	5.6					1.56	
Hannibal	Ni (ug/L)	15-Sep-05	5.9	2.6					
ORM 132.4	Ni (ug/L)	15-Sep-05			2.19	2.78	2.46		
ORM 138.9	Ni (ug/L)	15-Sep-05			2.69	2.46	2.33		
ORM 145.2	Ni (ug/L)	15-Sep-05			2.45	2.43	2.33		
ORM 150.8	Ni (ug/L)	15-Sep-05			2.38	2.28	2.58		
ORM 157.4	Ni (ug/L)	15-Sep-05			2.27	2.46	2		
Willow Island	Ni (ug/L)	15-Sep-05	11.9	2.18					
Dashields	Ni (ug/L)	25-Oct-05	12.3					2.88	
ORM 19.3	Ni (ug/L)	25-Oct-05			2.66	2.66	2.75		
ORM 23.2	Ni (ug/L)	25-Oct-05			2.6	2.66	2.79		
ORM 27.6	Ni (ug/L)	25-Oct-05			2.51	2.71	2.56		
Montgomery	Ni (ug/L)	25-Oct-05	14.5					2.51	
Hannibal	Ni (ug/L)	26-Oct-05	31.9	2.07					
ORM 132.4	Ni (ug/L)	26-Oct-05			1.99	2.13	2.17		
ORM 138.9	Ni (ug/L)	26-Oct-05			2.24	2.13	2.08		
ORM 145.2	Ni (ug/L)	26-Oct-05			2.14	2.44	2.4		
ORM 150.8	Ni (ug/L)	26-Oct-05			2.29	1.95	2.17		
ORM 157.4	Ni (ug/L)	26-Oct-05			2.35	2.13	2.35		
Willow Island	Ni (ug/L)	26-Oct-05	52.5	2.54					
Cannelton	Ni (ug/L)	09-May-06	51.9	1.09					
ORM 725.0	Ni (ug/L)	09-May-06			0.95	1.19	1.2		
ORM 736.7	Ni (ug/L)	09-May-06			1.1	1.16	1.19		
ORM 747.3	Ni (ug/L)	09-May-06			1.31	1.2	1.14		
ORM 754.9	Ni (ug/L)	09-May-06			1.11	1.05	1.12		
ORM 762.3	Ni (ug/L)	10-May-06			1.18	0.99	1.17		
ORM 772.0	Ni (ug/L)	10-May-06			1.13	1.25	1.16		
Newburgh	Ni (ug/L)	10-May-06	55.5	1.27					
Hannibal	Ni (ug/L)	06-Sep-06	43.1	1.4					
ORM 132.4	Ni (ug/L)	06-Sep-06			1.33	1.28	1.35		
ORM 138.9	Ni (ug/L)	06-Sep-06			1.39	1.3	1.39		
ORM 145.2	Ni (ug/L)	06-Sep-06			1.44	1.51	1.51		
ORM 150.8	Ni (ug/L)	06-Sep-06			1.62	1.47	1.5		
ORM 157.4	Ni (ug/L)	06-Sep-06			1.47	1.52	1.49		
Willow Island	Ni (ug/L)	06-Sep-06	42.9	1.67					
Dashields	Ni (ug/L)	02-Nov-06	77.7					2.67	
ORM 19.3	Ni (ug/L)	02-Nov-06			2.79	2.6	2.91		
ORM 23.2	Ni (ug/L)	02-Nov-06			2.33	2.86	2.8		
ORM 27.6	Ni (ug/L)	02-Nov-06			2.02	2.47	2.47		
Montgomery	Ni (ug/L)	02-Nov-06	89.4					2.62	
Cannelton	Ni (ug/L)	07-Aug-07	31.8	2.08					
ORM 725.0	Ni (ug/L)	07-Aug-07			2.28	1.73	2.15		
ORM 736.7	Ni (ug/L)	07-Aug-07			2.04	1.88	2.09		
ORM 747.3	Ni (ug/L)	07-Aug-07			1.76	1.74	1.86		
ORM 754.9	Ni (ug/L)	07-Aug-07			1.88	2.06	1.5		
ORM 762.3	Ni (ug/L)	08-Aug-07			2.02	1.69	1.88		
ORM 772.0	Ni (ug/L)	08-Aug-07			1.63	1.86	1.51		
Newburgh	Ni (ug/L)	08-Aug-07	52.7	1.95					
Racine	Ni (ug/L)	23-Oct-07	12.1					2.15	
ORM 242.3	Ni (ug/L)	23-Oct-07			2.12	2.09	2.06		
ORM 251.2	Ni (ug/L)	23-Oct-07			1.88	2	1.88		
ORM 260.8	Ni (ug/L)	23-Oct-07			1.98	1.73	1.93		
KRM 1.4	Ni (ug/L)	23-Oct-07							1.15
ORM 267.5	Ni (ug/L)	23-Oct-07			1.5	1.92	1.53		
ORM 273.0	Ni (ug/L)	23-Oct-07			1.74	1.76	1.96		
R.C. Byrd	Ni (ug/L)	23-Oct-07	12.1					1.88	
Cannelton	Ni (ug/L)	01-Apr-08	346	1.19					
ORM 724.8	Ni (ug/L)	01-Apr-08			1.19	1.15	1.23		
ORM 736.7	Ni (ug/L)	01-Apr-08			1.15	1.04	1.21		
ORM 747.3	Ni (ug/L)	01-Apr-08			1.15	1.12	1.28		
ORM 754.9	Ni (ug/L)	01-Apr-08			1.08	1.16	1.09		
ORM 762.3	Ni (ug/L)	02-Apr-08			1.23	1.09	1.22		
ORM 772.0	Ni (ug/L)	02-Apr-08			1.11	1.16	1.16		
Newburgh	Ni (ug/L)	02-Apr-08	381.1	1.2					
Racine	Ni (ug/L)	30-Apr-08						1.57	
ORM 242.0	Ni (ug/L)	30-Apr-08			1.43	1.45	1.26		
ORM 251.2	Ni (ug/L)	30-Apr-08			1.17	1.4	1.39		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 260.8	Ni (ug/L)	30-Apr-08			1.56	1.51	1.66		
K1.3-2	Ni (ug/L)	30-Apr-08							0.73
ORM 267.5	Ni (ug/L)	30-Apr-08			1.47	1.2	0.79		
ORM 273.0	Ni (ug/L)	30-Apr-08			1.49	1.24	0.88		
R.C. Byrd	Ni (ug/L)	30-Apr-08	107.9					0.7	
Racine	Ni (ug/L)	22-Oct-08						2.67	
ORM 242.0	Ni (ug/L)	22-Oct-08			2.95	2.67	2.66		
ORM 251.2	Ni (ug/L)	22-Oct-08			2.77	2.75	2.69		
ORM 260.8	Ni (ug/L)	22-Oct-08			2.59	2.6	2.78		
K1.3-2	Ni (ug/L)	22-Oct-08							1.1
ORM 267.5	Ni (ug/L)	22-Oct-08			2.29	2.15	2.28		
ORM 273.0	Ni (ug/L)	22-Oct-08			2.18	2.06	1.82		
R.C. Byrd	Ni (ug/L)	22-Oct-08	12.7					2.21	
Smithland	Ni (ug/L)	19-May-09	407.8	1.33					
Cumberland River	Ni (ug/L)	19-May-09							0.44
ORM 926.2	Ni (ug/L)	19-May-09			1.21	1.31	0.54		
Tennessee River	Ni (ug/L)	19-May-09							0.42
ORM 935.6	Ni (ug/L)	19-May-09			1.36	1.01	0.66		
L&D 52	Ni (ug/L)	19-May-09		1.35					
ORM 950.4	Ni (ug/L)	20-May-09			1.27	0.94	0.69		
Olmstead	Ni (ug/L)	20-May-09		1.18					
ORM 965.3	Ni (ug/L)	20-May-09			1.15	0.7	0.68		
ORN 977.3	Ni (ug/L)	20-May-09			1.26	0.92	0.68		
Smithland	Ni (ug/L)	21-Jul-09	59.8	1.83					
Cumberland River	Ni (ug/L)	21-Jul-09							0.53
ORM 926.2	Ni (ug/L)	21-Jul-09			0.84	0.85	0.76		
Tennessee River	Ni (ug/L)	21-Jul-09							0.29
ORM 935.6	Ni (ug/L)	21-Jul-09			0.96	0.58	0.49		
L&D 52	Ni (ug/L)	21-Jul-09		0.91					
ORM 950.4	Ni (ug/L)	22-Jul-09			0.77	0.73	0.85		
Olmstead	Ni (ug/L)	22-Jul-09		0.88					
ORM 965.3	Ni (ug/L)	22-Jul-09			0.87	0.65	0.62		
ORM 977.3	Ni (ug/L)	22-Jul-09			0.69	0.63	0.53		
Smithland	Ni (ug/L)	16-Sep-09	33.1	1.53					
Cumberland River	Ni (ug/L)	16-Sep-09							0.55
ORM 926.2	Ni (ug/L)	16-Sep-09			1.12	0.9	1.01		
Tennessee River	Ni (ug/L)	16-Sep-09							0.38
ORM 935.6	Ni (ug/L)	16-Sep-09			1.21	0.85	0.61		
L&D 52	Ni (ug/L)	16-Sep-09		1.29					
ORM 950.4	Ni (ug/L)	17-Sep-09			0.93	0.79	0.88		
Olmstead	Ni (ug/L)	17-Sep-09		0.98					
ORM 965.3	Ni (ug/L)	17-Sep-09			0.84	0.82	0.85		
ORN 977.3	Ni (ug/L)	17-Sep-09			1.03	0.84	0.85		
Dashields	Pb (ug/L)	03-Aug-05	5.6					<0.1	
ORM 19.3	Pb (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 23.2	Pb (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 27.6	Pb (ug/L)	03-Aug-05			<0.1	0.18	<0.1		
Montgomery	Pb (ug/L)	03-Aug-05	6.7					<0.1	
Hannibal	Pb (ug/L)	01-Sep-05	22.3	0.1					
ORM 132.4	Pb (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Pb (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Pb (ug/L)	01-Sep-05			<0.1	0.11	<0.1		
ORM 150.8	Pb (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Pb (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Pb (ug/L)	01-Sep-05	22.6	<0.1					
Dashields	Pb (ug/L)	14-Sep-05	5.4					<0.1	
ORM 19.3	Pb (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 23.2	Pb (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 27.6	Pb (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
Montgomery	Pb (ug/L)	14-Sep-05	5.6					<0.1	
Hannibal	Pb (ug/L)	15-Sep-05	5.9	<0.1					
ORM 132.4	Pb (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Pb (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Pb (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Pb (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Pb (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Pb (ug/L)	15-Sep-05	11.9	<0.1					
Dashields	Pb (ug/L)	25-Oct-05	12.3					0.17	
ORM 19.3	Pb (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 23.2	Pb (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 27.6	Pb (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
Montgomery	Pb (ug/L)	25-Oct-05	14.5					<0.1	
Hannibal	Pb (ug/L)	26-Oct-05	31.9	<0.1					
ORM 132.4	Pb (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 138.9	Pb (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 145.2	Pb (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 150.8	Pb (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 157.4	Pb (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
Willow Island	Pb (ug/L)	26-Oct-05	52.5	<0.1					
Cannelton	Pb (ug/L)	09-May-06	51.9	<0.1					
ORM 725.0	Pb (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 736.7	Pb (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 747.3	Pb (ug/L)	09-May-06			0.14	<0.1	<0.1		
ORM 754.9	Pb (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 762.3	Pb (ug/L)	10-May-06			<0.1	<0.1	<0.1		
ORM 772.0	Pb (ug/L)	10-May-06			<0.1	<0.1	<0.1		
Newburgh	Pb (ug/L)	10-May-06	55.5	<0.1					
Hannibal	Pb (ug/L)	06-Sep-06	43.1	<0.1					
ORM 132.4	Pb (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 138.9	Pb (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 145.2	Pb (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 150.8	Pb (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 157.4	Pb (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
Willow Island	Pb (ug/L)	06-Sep-06	42.9	<0.1					
Dashields	Pb (ug/L)	02-Nov-06	77.7					0.16	
ORM 19.3	Pb (ug/L)	02-Nov-06			<0.1	0.11	<0.1		
ORM 23.2	Pb (ug/L)	02-Nov-06			<0.1	0.12	<0.1		
ORM 27.6	Pb (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
Montgomery	Pb (ug/L)	02-Nov-06	89.4					0.11	
Cannelton	Pb (ug/L)	07-Aug-07	31.8	<0.1					
ORM 725.0	Pb (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 736.7	Pb (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 747.3	Pb (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 754.9	Pb (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 762.3	Pb (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
ORM 772.0	Pb (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		
Newburgh	Pb (ug/L)	08-Aug-07	52.7	<0.1					
Racine	Pb (ug/L)	23-Oct-07	12.1					<0.1	
ORM 242.3	Pb (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 251.2	Pb (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 260.8	Pb (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
KRM 1.4	Pb (ug/L)	23-Oct-07							<0.1
ORM 267.5	Pb (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 273.0	Pb (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
R.C. Byrd	Pb (ug/L)	23-Oct-07	12.1					<0.1	
Cannelton	Pb (ug/L)	01-Apr-08	346	<0.1					
ORM 724.8	Pb (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 736.7	Pb (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 747.3	Pb (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 754.9	Pb (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 762.3	Pb (ug/L)	02-Apr-08			<0.1	<0.1	0.11		
ORM 772.0	Pb (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
Newburgh	Pb (ug/L)	02-Apr-08	381.1	<0.1					
Racine	Pb (ug/L)	30-Apr-08						<0.1	
ORM 242.0	Pb (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 251.2	Pb (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 260.8	Pb (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
K1.3-2	Pb (ug/L)	30-Apr-08							<0.1
ORM 267.5	Pb (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 273.0	Pb (ug/L)	30-Apr-08			0.1	<0.1	0.12		
R.C. Byrd	Pb (ug/L)	30-Apr-08	107.9					27.97	
Racine	Pb (ug/L)	22-Oct-08						<0.1	
ORM 242.0	Pb (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 251.2	Pb (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 260.8	Pb (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
K1.3-2	Pb (ug/L)	22-Oct-08							<0.1
ORM 267.5	Pb (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 273.0	Pb (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
R.C. Byrd	Pb (ug/L)	22-Oct-08	12.7					<0.1	
Smithland	Pb (ug/L)	19-May-09	407.8	<0.1					
Cumberland River	Pb (ug/L)	19-May-09							<0.1
ORM 926.2	Pb (ug/L)	19-May-09			<0.1	<0.1	<0.1		
Tennessee River	Pb (ug/L)	19-May-09							<0.1
ORM 935.6	Pb (ug/L)	19-May-09			<0.1	<0.1	<0.1		
L&D 52	Pb (ug/L)	19-May-09		<0.1					
ORM 950.4	Pb (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Olmstead	Pb (ug/L)	20-May-09		<0.1					
ORM 965.3	Pb (ug/L)	20-May-09			<0.1	<0.1	<0.1		
ORN 977.3	Pb (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Smithland	Pb (ug/L)	21-Jul-09	59.8	<0.1					
Cumberland River	Pb (ug/L)	21-Jul-09							<0.1
ORM 926.2	Pb (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
Tennessee River	Pb (ug/L)	21-Jul-09							<0.1
ORM 935.6	Pb (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
L&D 52	Pb (ug/L)	21-Jul-09		<0.1					
ORM 950.4	Pb (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Olmstead	Pb (ug/L)	22-Jul-09		<0.1					
ORM 965.3	Pb (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
ORM 977.3	Pb (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Smithland	Pb (ug/L)	16-Sep-09	33.1	<0.1					
Cumberland River	Pb (ug/L)	16-Sep-09							<0.1
ORM 926.2	Pb (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
Tennessee River	Pb (ug/L)	16-Sep-09							<0.1
ORM 935.6	Pb (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
L&D 52	Pb (ug/L)	16-Sep-09		<0.1					
ORM 950.4	Pb (ug/L)	17-Sep-09			0.12	<0.1	0.12		
Olmstead	Pb (ug/L)	17-Sep-09		<0.1					
ORM 965.3	Pb (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
ORN 977.3	Pb (ug/L)	17-Sep-09			0.1	<0.1	<0.1		
Dashields	Sb (ug/L)	03-Aug-05	5.6					<0.5	
ORM 19.3	Sb (ug/L)	03-Aug-05			<0.5	<0.5	<0.5		
ORM 23.2	Sb (ug/L)	03-Aug-05			<0.5	<0.5	<0.5		
ORM 27.6	Sb (ug/L)	03-Aug-05			<0.5	<0.5	<0.5		
Montgomery	Sb (ug/L)	03-Aug-05	6.7					<0.5	
Hannibal	Sb (ug/L)	01-Sep-05	22.3	<0.5					
ORM 132.4	Sb (ug/L)	01-Sep-05			<0.5	<0.5	<0.5		
ORM 138.9	Sb (ug/L)	01-Sep-05			<0.5	<0.5	<0.5		
ORM 145.2	Sb (ug/L)	01-Sep-05			<0.5	<0.5	<0.5		
ORM 150.8	Sb (ug/L)	01-Sep-05			<0.5	<0.5	<0.5		
ORM 157.4	Sb (ug/L)	01-Sep-05			<0.5	<0.5	<0.5		
Willow Island	Sb (ug/L)	01-Sep-05	22.6	<0.5					
Dashields	Sb (ug/L)	14-Sep-05	5.4					<0.5	
ORM 19.3	Sb (ug/L)	14-Sep-05			<0.5	<0.5	<0.5		
ORM 23.2	Sb (ug/L)	14-Sep-05			<0.5	<0.5	<0.5		
ORM 27.6	Sb (ug/L)	14-Sep-05			<0.5	<0.5	<0.5		
Montgomery	Sb (ug/L)	14-Sep-05	5.6					<0.5	
Hannibal	Sb (ug/L)	15-Sep-05	5.9	<0.5					
ORM 132.4	Sb (ug/L)	15-Sep-05			<0.5	<0.5	<0.5		
ORM 138.9	Sb (ug/L)	15-Sep-05			<0.5	<0.5	<0.5		
ORM 145.2	Sb (ug/L)	15-Sep-05			<0.5	<0.5	<0.5		
ORM 150.8	Sb (ug/L)	15-Sep-05			<0.5	<0.5	<0.5		
ORM 157.4	Sb (ug/L)	15-Sep-05			<0.5	<0.5	<0.5		
Willow Island	Sb (ug/L)	15-Sep-05	11.9	<0.5					
Dashields	Sb (ug/L)	25-Oct-05	12.3					<0.5	
ORM 19.3	Sb (ug/L)	25-Oct-05			<0.5	<0.5	<0.5		
ORM 23.2	Sb (ug/L)	25-Oct-05			<0.5	<0.5	<0.5		
ORM 27.6	Sb (ug/L)	25-Oct-05			<0.5	<0.5	<0.5		
Montgomery	Sb (ug/L)	25-Oct-05	14.5					<0.5	
Hannibal	Sb (ug/L)	26-Oct-05	31.9	<0.5					
ORM 132.4	Sb (ug/L)	26-Oct-05			<0.5	<0.5	<0.5		
ORM 138.9	Sb (ug/L)	26-Oct-05			<0.5	<0.5	<0.5		
ORM 145.2	Sb (ug/L)	26-Oct-05			<0.5	<0.5	<0.5		
ORM 150.8	Sb (ug/L)	26-Oct-05			<0.5	<0.5	<0.5		
ORM 157.4	Sb (ug/L)	26-Oct-05			<0.5	<0.5	<0.5		
Willow Island	Sb (ug/L)	26-Oct-05	52.5	<0.5					
Cannelton	Sb (ug/L)	09-May-06	51.9	<0.5					
ORM 725.0	Sb (ug/L)	09-May-06			<0.5	<0.5	<0.5		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 736.7	Sb (ug/L)	09-May-06			<0.5	<0.5	<0.5		
ORM 747.3	Sb (ug/L)	09-May-06			<0.5	<0.5	<0.5		
ORM 754.9	Sb (ug/L)	09-May-06			<0.5	<0.5	<0.5		
ORM 762.3	Sb (ug/L)	10-May-06			<0.5	<0.5	<0.5		
ORM 772.0	Sb (ug/L)	10-May-06			<0.5	<0.5	<0.5		
Newburgh	Sb (ug/L)	10-May-06	55.5	<0.5					
Hannibal	Sb (ug/L)	06-Sep-06	43.1	<0.5					
ORM 132.4	Sb (ug/L)	06-Sep-06			<0.5	<0.5	<0.5		
ORM 138.9	Sb (ug/L)	06-Sep-06			<0.5	<0.5	<0.5		
ORM 145.2	Sb (ug/L)	06-Sep-06			<0.5	<0.5	<0.5		
ORM 150.8	Sb (ug/L)	06-Sep-06			<0.5	<0.5	<0.5		
ORM 157.4	Sb (ug/L)	06-Sep-06			<0.5	<0.5	<0.5		
Willow Island	Sb (ug/L)	06-Sep-06	42.9	<0.5					
Dashields	Sb (ug/L)	02-Nov-06	77.7					<0.5	
ORM 19.3	Sb (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
ORM 23.2	Sb (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
ORM 27.6	Sb (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
Montgomery	Sb (ug/L)	02-Nov-06	89.4					<0.5	
Cannelton	Sb (ug/L)	07-Aug-07	31.8	<0.5					
ORM 725.0	Sb (ug/L)	07-Aug-07			<0.5	<0.5	<0.5		
ORM 736.7	Sb (ug/L)	07-Aug-07			<0.5	<0.5	<0.5		
ORM 747.3	Sb (ug/L)	07-Aug-07			<0.5	<0.5	<0.5		
ORM 754.9	Sb (ug/L)	07-Aug-07			<0.5	<0.5	<0.5		
ORM 762.3	Sb (ug/L)	08-Aug-07			<0.5	<0.5	<0.5		
ORM 772.0	Sb (ug/L)	08-Aug-07			<0.5	<0.5	<0.5		
Newburgh	Sb (ug/L)	08-Aug-07	52.7	<0.5					
Racine	Sb (ug/L)	23-Oct-07	12.1					<0.5	
ORM 242.3	Sb (ug/L)	23-Oct-07			<0.5	<0.5	<0.5		
ORM 251.2	Sb (ug/L)	23-Oct-07			<0.5	<0.5	<0.5		
ORM 260.8	Sb (ug/L)	23-Oct-07			<0.5	<0.5	<0.5		
KRM 1.4	Sb (ug/L)	23-Oct-07							<0.5
ORM 267.5	Sb (ug/L)	23-Oct-07			<0.5	<0.5	<0.5		
ORM 273.0	Sb (ug/L)	23-Oct-07			<0.5	<0.5	<0.5		
R.C. Byrd	Sb (ug/L)	23-Oct-07	12.1					<0.5	
Cannelton	Sb (ug/L)	01-Apr-08	346	<0.5					
ORM 724.8	Sb (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 736.7	Sb (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 747.3	Sb (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 754.9	Sb (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 762.3	Sb (ug/L)	02-Apr-08			<0.5	<0.5	<0.5		
ORM 772.0	Sb (ug/L)	02-Apr-08			<0.5	<0.5	<0.5		
Newburgh	Sb (ug/L)	02-Apr-08	381.1	<0.5					
Racine	Sb (ug/L)	30-Apr-08						<0.5	
ORM 242.0	Sb (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
ORM 251.2	Sb (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
ORM 260.8	Sb (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
K1.3-2	Sb (ug/L)	30-Apr-08							<0.5
ORM 267.5	Sb (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
ORM 273.0	Sb (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
R.C. Byrd	Sb (ug/L)	30-Apr-08	107.9					<0.5	
Racine	Sb (ug/L)	22-Oct-08						<0.5	
ORM 242.0	Sb (ug/L)	22-Oct-08			<0.5	<0.5	<0.5		
ORM 251.2	Sb (ug/L)	22-Oct-08			<0.5	<0.5	<0.5		
ORM 260.8	Sb (ug/L)	22-Oct-08			<0.5	<0.5	<0.5		
K1.3-2	Sb (ug/L)	22-Oct-08							<0.5
ORM 267.5	Sb (ug/L)	22-Oct-08			<0.5	<0.5	<0.5		
ORM 273.0	Sb (ug/L)	22-Oct-08			<0.5	<0.5	<0.5		
R.C. Byrd	Sb (ug/L)	22-Oct-08	12.7					<0.5	
Smithland	Sb (ug/L)	19-May-09	407.8	<0.5					
Cumberland River	Sb (ug/L)	19-May-09							<0.5
ORM 926.2	Sb (ug/L)	19-May-09			<0.5	<0.5	<0.5		
Tennessee River	Sb (ug/L)	19-May-09							<0.5
ORM 935.6	Sb (ug/L)	19-May-09			<0.5	<0.5	<0.5		
L&D 52	Sb (ug/L)	19-May-09		<0.5					
ORM 950.4	Sb (ug/L)	20-May-09			<0.5	<0.5	<0.5		
Olmstead	Sb (ug/L)	20-May-09		<0.5					
ORM 965.3	Sb (ug/L)	20-May-09			<0.5	<0.5	<0.5		
ORN 977.3	Sb (ug/L)	20-May-09			<0.5	<0.5	<0.5		
Smithland	Sb (ug/L)	21-Jul-09	59.8	<0.5					

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Cumberland River	Sb (ug/L)	21-Jul-09							<0.5
ORM 926.2	Sb (ug/L)	21-Jul-09			<0.5	<0.5	<0.5		
Tennessee River	Sb (ug/L)	21-Jul-09							<0.5
ORM 935.6	Sb (ug/L)	21-Jul-09			<0.5	<0.5	<0.5		
L&D 52	Sb (ug/L)	21-Jul-09		<0.5					
ORM 950.4	Sb (ug/L)	22-Jul-09			<0.5	<0.5	<0.5		
Olmstead	Sb (ug/L)	22-Jul-09		<0.5					
ORM 965.3	Sb (ug/L)	22-Jul-09			<0.5	<0.5	<0.5		
ORM 977.3	Sb (ug/L)	22-Jul-09			<0.5	<0.5	<0.5		
Smithland	Sb (ug/L)	16-Sep-09	33.1	<0.5					
Cumberland River	Sb (ug/L)	16-Sep-09							<0.5
ORM 926.2	Sb (ug/L)	16-Sep-09			<0.5	<0.5	<0.5		
Tennessee River	Sb (ug/L)	16-Sep-09							<0.5
ORM 935.6	Sb (ug/L)	16-Sep-09			<0.5	<0.5	<0.5		
L&D 52	Sb (ug/L)	16-Sep-09		<0.5					
ORM 950.4	Sb (ug/L)	17-Sep-09			<0.5	<0.5	<0.5		
Olmstead	Sb (ug/L)	17-Sep-09		<0.5					
ORM 965.3	Sb (ug/L)	17-Sep-09			<0.5	<0.5	<0.5		
ORN 977.3	Sb (ug/L)	17-Sep-09			<0.5	<0.5	<0.5		
Dashields	Se (ug/L)	03-Aug-05	5.6					0.81	
ORM 19.3	Se (ug/L)	03-Aug-05			0.67	0.78	0.79		
ORM 23.2	Se (ug/L)	03-Aug-05			0.73	0.66	0.72		
ORM 27.6	Se (ug/L)	03-Aug-05			0.62	0.69	0.61		
Montgomery	Se (ug/L)	03-Aug-05	6.7					0.92	
Hannibal	Se (ug/L)	01-Sep-05	22.3	0.81					
ORM 132.4	Se (ug/L)	01-Sep-05			0.9	0.99	0.84		
ORM 138.9	Se (ug/L)	01-Sep-05			1.06	0.97	0.89		
ORM 145.2	Se (ug/L)	01-Sep-05			0.88	1.07	1.09		
ORM 150.8	Se (ug/L)	01-Sep-05			1.08	0.98	0.88		
ORM 157.4	Se (ug/L)	01-Sep-05			1.05	1.1	0.98		
Willow Island	Se (ug/L)	01-Sep-05	22.6	0.93					
Dashields	Se (ug/L)	14-Sep-05	5.4					0.73	
ORM 19.3	Se (ug/L)	14-Sep-05			0.8	0.72	0.54		
ORM 23.2	Se (ug/L)	14-Sep-05			0.65	0.7	0.62		
ORM 27.6	Se (ug/L)	14-Sep-05			0.81	0.85	0.7		
Montgomery	Se (ug/L)	14-Sep-05	5.6					0.77	
Hannibal	Se (ug/L)	15-Sep-05	5.9	0.96					
ORM 132.4	Se (ug/L)	15-Sep-05			0.95	1.27	1.01		
ORM 138.9	Se (ug/L)	15-Sep-05			1.05	0.83	1.06		
ORM 145.2	Se (ug/L)	15-Sep-05			1.06	1.07	0.95		
ORM 150.8	Se (ug/L)	15-Sep-05			1	1.18	1.16		
ORM 157.4	Se (ug/L)	15-Sep-05			1.15	1.18	0.94		
Willow Island	Se (ug/L)	15-Sep-05	11.9	0.88					
Dashields	Se (ug/L)	25-Oct-05	12.3					0.96	
ORM 19.3	Se (ug/L)	25-Oct-05			0.79	0.81	0.82		
ORM 23.2	Se (ug/L)	25-Oct-05			0.83	0.84	0.72		
ORM 27.6	Se (ug/L)	25-Oct-05			0.78	0.79	0.79		
Montgomery	Se (ug/L)	25-Oct-05	14.5					0.82	
Hannibal	Se (ug/L)	26-Oct-05	31.9	0.93					
ORM 132.4	Se (ug/L)	26-Oct-05			0.93	0.74	0.84		
ORM 138.9	Se (ug/L)	26-Oct-05			1.22	1	0.92		
ORM 145.2	Se (ug/L)	26-Oct-05			0.74	0.93	0.84		
ORM 150.8	Se (ug/L)	26-Oct-05			1.03	0.92	1.03		
ORM 157.4	Se (ug/L)	26-Oct-05			0.84	0.92	0.92		
Willow Island	Se (ug/L)	26-Oct-05	52.5	0.9					
Cannelton	Se (ug/L)	09-May-06	51.9	0.61					
ORM 725.0	Se (ug/L)	09-May-06			0.51	<0.5	0.56		
ORM 736.7	Se (ug/L)	09-May-06			<0.5	<0.5	0.52		
ORM 747.3	Se (ug/L)	09-May-06			<0.5	0.7	0.74		
ORM 754.9	Se (ug/L)	09-May-06			0.51	<0.5	<0.5		
ORM 762.3	Se (ug/L)	10-May-06			0.54	0.53	0.65		
ORM 772.0	Se (ug/L)	10-May-06			0.77	0.59	<0.5		
Newburgh	Se (ug/L)	10-May-06	55.5	0.54					
Hannibal	Se (ug/L)	06-Sep-06	43.1	0.75					
ORM 132.4	Se (ug/L)	06-Sep-06			0.91	0.97	<0.5		
ORM 138.9	Se (ug/L)	06-Sep-06			0.58	<0.5	<0.5		
ORM 145.2	Se (ug/L)	06-Sep-06			0.78	0.9	0.88		
ORM 150.8	Se (ug/L)	06-Sep-06			<0.5	0.99	<0.5		
ORM 157.4	Se (ug/L)	06-Sep-06			0.82	0.73	0.7		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Willow Island	Se (ug/L)	06-Sep-06	42.9	0.96					
Dashields	Se (ug/L)	02-Nov-06	77.7					<0.5	
ORM 19.3	Se (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
ORM 23.2	Se (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
ORM 27.6	Se (ug/L)	02-Nov-06			<0.5	<0.5	<0.5		
Montgomery	Se (ug/L)	02-Nov-06	89.4					<0.5	
Cannelton	Se (ug/L)	07-Aug-07	31.8	0.93					
ORM 725.0	Se (ug/L)	07-Aug-07			0.9	0.81	0.99		
ORM 736.7	Se (ug/L)	07-Aug-07			0.98	0.92	0.83		
ORM 747.3	Se (ug/L)	07-Aug-07			0.89	0.83	0.97		
ORM 754.9	Se (ug/L)	07-Aug-07			0.9	0.86	0.71		
ORM 762.3	Se (ug/L)	08-Aug-07			0.85	0.76	0.97		
ORM 772.0	Se (ug/L)	08-Aug-07			0.85	0.82	0.7		
Newburgh	Se (ug/L)	08-Aug-07	52.7	0.99					
Racine	Se (ug/L)	23-Oct-07	12.1					1	
ORM 242.3	Se (ug/L)	23-Oct-07			1.07	1.27	1.19		
ORM 251.2	Se (ug/L)	23-Oct-07			1.06	0.95	0.87		
ORM 260.8	Se (ug/L)	23-Oct-07			2.38	0.96	1.17		
KRM 1.4	Se (ug/L)	23-Oct-07							0.54
ORM 267.5	Se (ug/L)	23-Oct-07			0.89	0.78	0.95		
ORM 273.0	Se (ug/L)	23-Oct-07			1.03	0.88	0.96		
R.C. Byrd	Se (ug/L)	23-Oct-07	12.1					0.87	
Cannelton	Se (ug/L)	01-Apr-08	346	<0.5					
ORM 724.8	Se (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 736.7	Se (ug/L)	01-Apr-08			0.51	0.6	<0.5		
ORM 747.3	Se (ug/L)	01-Apr-08			<0.5	<0.5	<0.5		
ORM 754.9	Se (ug/L)	01-Apr-08			<0.5	<0.5	0.59		
ORM 762.3	Se (ug/L)	02-Apr-08			<0.5	0.51	<0.5		
ORM 772.0	Se (ug/L)	02-Apr-08			<0.5	<0.5	<0.5		
Newburgh	Se (ug/L)	02-Apr-08	381.1	<0.5					
Racine	Se (ug/L)	30-Apr-08						<0.5	
ORM 242.0	Se (ug/L)	30-Apr-08			<0.5	0.78	<0.5		
ORM 251.2	Se (ug/L)	30-Apr-08			<0.5	<0.5	<0.5		
ORM 260.8	Se (ug/L)	30-Apr-08			0.69	<0.5	0.58		
K1.3-2	Se (ug/L)	30-Apr-08							<0.5
ORM 267.5	Se (ug/L)	30-Apr-08			<0.5	<0.5	0.52		
ORM 273.0	Se (ug/L)	30-Apr-08			<0.5	<0.5	0.7		
R.C. Byrd	Se (ug/L)	30-Apr-08	107.9					<0.5	
Racine	Se (ug/L)	22-Oct-08						1.03	
ORM 242.0	Se (ug/L)	22-Oct-08			2.21	1.48	1.45		
ORM 251.2	Se (ug/L)	22-Oct-08			1.49	1.59	1.36		
ORM 260.8	Se (ug/L)	22-Oct-08			1.4	1.26	1.4		
K1.3-2	Se (ug/L)	22-Oct-08							<0.5
ORM 267.5	Se (ug/L)	22-Oct-08			1.23	1.08	1.1		
ORM 273.0	Se (ug/L)	22-Oct-08			1.11	1.04	1.03		
R.C. Byrd	Se (ug/L)	22-Oct-08	12.7					0.76	
Smithland	Se (ug/L)	19-May-09	407.8	0.53					
Cumberland River	Se (ug/L)	19-May-09							<0.5
ORM 926.2	Se (ug/L)	19-May-09			<0.5	<0.5	<0.5		
Tennessee River	Se (ug/L)	19-May-09							<0.5
ORM 935.6	Se (ug/L)	19-May-09			0.64	<0.5	<0.5		
L&D 52	Se (ug/L)	19-May-09		<0.5					
ORM 950.4	Se (ug/L)	20-May-09			<0.5	<0.5	<0.5		
Olmstead	Se (ug/L)	20-May-09		0.59					
ORM 965.3	Se (ug/L)	20-May-09			<0.5	<0.5	0.52		
ORN 977.3	Se (ug/L)	20-May-09			0.52	<0.5	<0.5		
Smithland	Se (ug/L)	21-Jul-09	59.8	0.77					
Cumberland River	Se (ug/L)	21-Jul-09							0.56
ORM 926.2	Se (ug/L)	21-Jul-09			<0.5	0.67	<0.5		
Tennessee River	Se (ug/L)	21-Jul-09							<0.5
ORM 935.6	Se (ug/L)	21-Jul-09			<0.5	<0.5	<0.5		
L&D 52	Se (ug/L)	21-Jul-09		<0.5					
ORM 950.4	Se (ug/L)	22-Jul-09			<0.5	<0.5	<0.5		
Olmstead	Se (ug/L)	22-Jul-09		0.52					
ORM 965.3	Se (ug/L)	22-Jul-09			0.51	<0.5	<0.5		
ORM 977.3	Se (ug/L)	22-Jul-09			<0.5	<0.5	<0.5		
Smithland	Se (ug/L)	16-Sep-09	33.1	<0.5					
Cumberland River	Se (ug/L)	16-Sep-09							0.63
ORM 926.2	Se (ug/L)	16-Sep-09			0.87	<0.5	0.83		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Tennessee River	Se (ug/L)	16-Sep-09							<0.5
ORM 935.6	Se (ug/L)	16-Sep-09			<0.5	<0.5	<0.5		
L&D 52	Se (ug/L)	16-Sep-09		<0.5					
ORM 950.4	Se (ug/L)	17-Sep-09			0.51	<0.5	<0.5		
Olmstead	Se (ug/L)	17-Sep-09		<0.5					
ORM 965.3	Se (ug/L)	17-Sep-09			<0.5	<0.5	0.55		
ORN 977.3	Se (ug/L)	17-Sep-09			0.52	0.56	0.58		
Dashields	Tl (ug/L)	03-Aug-05	5.6					<0.1	
ORM 19.3	Tl (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 23.2	Tl (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
ORM 27.6	Tl (ug/L)	03-Aug-05			<0.1	<0.1	<0.1		
Montgomery	Tl (ug/L)	03-Aug-05	6.7					<0.1	
Hannibal	Tl (ug/L)	01-Sep-05	22.3	<0.1					
ORM 132.4	Tl (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 138.9	Tl (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Tl (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Tl (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Tl (ug/L)	01-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Tl (ug/L)	01-Sep-05	22.6	<0.1					
Dashields	Tl (ug/L)	14-Sep-05	5.4					<0.1	
ORM 19.3	Tl (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 23.2	Tl (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
ORM 27.6	Tl (ug/L)	14-Sep-05			<0.1	<0.1	<0.1		
Montgomery	Tl (ug/L)	14-Sep-05	5.6					<0.1	
Hannibal	Tl (ug/L)	15-Sep-05	5.9	<0.1					
ORM 132.4	Tl (ug/L)	15-Sep-05			<0.1	0.1	<0.1		
ORM 138.9	Tl (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 145.2	Tl (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 150.8	Tl (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
ORM 157.4	Tl (ug/L)	15-Sep-05			<0.1	<0.1	<0.1		
Willow Island	Tl (ug/L)	15-Sep-05	11.9	<0.1					
Dashields	Tl (ug/L)	25-Oct-05	12.3					0.12	
ORM 19.3	Tl (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 23.2	Tl (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
ORM 27.6	Tl (ug/L)	25-Oct-05			<0.1	<0.1	<0.1		
Montgomery	Tl (ug/L)	25-Oct-05	14.5					<0.1	
Hannibal	Tl (ug/L)	26-Oct-05	31.9	<0.1					
ORM 132.4	Tl (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 138.9	Tl (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 145.2	Tl (ug/L)	26-Oct-05			<0.1	0.1	<0.1		
ORM 150.8	Tl (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
ORM 157.4	Tl (ug/L)	26-Oct-05			<0.1	<0.1	<0.1		
Willow Island	Tl (ug/L)	26-Oct-05	52.5	<0.1					
Cannelton	Tl (ug/L)	09-May-06	51.9	<0.1					
ORM 725.0	Tl (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 736.7	Tl (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 747.3	Tl (ug/L)	09-May-06			0.13	<0.1	<0.1		
ORM 754.9	Tl (ug/L)	09-May-06			<0.1	<0.1	<0.1		
ORM 762.3	Tl (ug/L)	10-May-06			<0.1	<0.1	<0.1		
ORM 772.0	Tl (ug/L)	10-May-06			<0.1	<0.1	<0.1		
Newburgh	Tl (ug/L)	10-May-06	55.5	<0.1					
Hannibal	Tl (ug/L)	06-Sep-06	43.1	<0.1					
ORM 132.4	Tl (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 138.9	Tl (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 145.2	Tl (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 150.8	Tl (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
ORM 157.4	Tl (ug/L)	06-Sep-06			<0.1	<0.1	<0.1		
Willow Island	Tl (ug/L)	06-Sep-06	42.9	<0.1					
Dashields	Tl (ug/L)	02-Nov-06	77.7					<0.1	
ORM 19.3	Tl (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 23.2	Tl (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
ORM 27.6	Tl (ug/L)	02-Nov-06			<0.1	<0.1	<0.1		
Montgomery	Tl (ug/L)	02-Nov-06	89.4					<0.1	
Cannelton	Tl (ug/L)	07-Aug-07	31.8	<0.1					
ORM 725.0	Tl (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 736.7	Tl (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 747.3	Tl (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 754.9	Tl (ug/L)	07-Aug-07			<0.1	<0.1	<0.1		
ORM 762.3	Tl (ug/L)	08-Aug-07			<0.1	<0.1	<0.1		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 772.0	Tl (ug/L)	08-Aug-07			0.11	<0.1	<0.1		
Newburgh	Tl (ug/L)	08-Aug-07	52.7	<0.1					
Racine	Tl (ug/L)	23-Oct-07	12.1					<0.1	
ORM 242.3	Tl (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 251.2	Tl (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 260.8	Tl (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
KRM 1.4	Tl (ug/L)	23-Oct-07							<0.1
ORM 267.5	Tl (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
ORM 273.0	Tl (ug/L)	23-Oct-07			<0.1	<0.1	<0.1		
R.C. Byrd	Tl (ug/L)	23-Oct-07	12.1					<0.1	
Cannelton	Tl (ug/L)	01-Apr-08	346	<0.1					
ORM 724.8	Tl (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 736.7	Tl (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 747.3	Tl (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 754.9	Tl (ug/L)	01-Apr-08			<0.1	<0.1	<0.1		
ORM 762.3	Tl (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
ORM 772.0	Tl (ug/L)	02-Apr-08			<0.1	<0.1	<0.1		
Newburgh	Tl (ug/L)	02-Apr-08	381.1	<0.1					
Racine	Tl (ug/L)	30-Apr-08						<0.1	
ORM 242.0	Tl (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 251.2	Tl (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 260.8	Tl (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
K1.3-2	Tl (ug/L)	30-Apr-08							<0.1
ORM 267.5	Tl (ug/L)	30-Apr-08			<0.1	<0.1	<0.1		
ORM 273.0	Tl (ug/L)	30-Apr-08			<0.1	<0.1	0.11		
R.C. Byrd	Tl (ug/L)	30-Apr-08	107.9					9.46	
Racine	Tl (ug/L)	22-Oct-08						<0.1	
ORM 242.0	Tl (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 251.2	Tl (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 260.8	Tl (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
K1.3-2	Tl (ug/L)	22-Oct-08							<0.1
ORM 267.5	Tl (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
ORM 273.0	Tl (ug/L)	22-Oct-08			<0.1	<0.1	<0.1		
R.C. Byrd	Tl (ug/L)	22-Oct-08	12.7					<0.1	
Smithland	Tl (ug/L)	19-May-09	407.8	<0.1					
Cumberland River	Tl (ug/L)	19-May-09							<0.1
ORM 926.2	Tl (ug/L)	19-May-09			<0.1	<0.1	<0.1		
Tennessee River	Tl (ug/L)	19-May-09							<0.1
ORM 935.6	Tl (ug/L)	19-May-09			<0.1	<0.1	<0.1		
L&D 52	Tl (ug/L)	19-May-09		<0.1					
ORM 950.4	Tl (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Olmstead	Tl (ug/L)	20-May-09		<0.1					
ORM 965.3	Tl (ug/L)	20-May-09			<0.1	<0.1	<0.1		
ORN 977.3	Tl (ug/L)	20-May-09			<0.1	<0.1	<0.1		
Smithland	Tl (ug/L)	21-Jul-09	59.8	<0.1					
Cumberland River	Tl (ug/L)	21-Jul-09							<0.1
ORM 926.2	Tl (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
Tennessee River	Tl (ug/L)	21-Jul-09							<0.1
ORM 935.6	Tl (ug/L)	21-Jul-09			<0.1	<0.1	<0.1		
L&D 52	Tl (ug/L)	21-Jul-09		<0.1					
ORM 950.4	Tl (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Olmstead	Tl (ug/L)	22-Jul-09		<0.1					
ORM 965.3	Tl (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
ORM 977.3	Tl (ug/L)	22-Jul-09			<0.1	<0.1	<0.1		
Smithland	Tl (ug/L)	16-Sep-09	33.1	<0.1					
Cumberland River	Tl (ug/L)	16-Sep-09							<0.1
ORM 926.2	Tl (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
Tennessee River	Tl (ug/L)	16-Sep-09							<0.1
ORM 935.6	Tl (ug/L)	16-Sep-09			<0.1	<0.1	<0.1		
L&D 52	Tl (ug/L)	16-Sep-09		<0.1					
ORM 950.4	Tl (ug/L)	17-Sep-09			<0.1	<0.1	0.13		
Olmstead	Tl (ug/L)	17-Sep-09		<0.1					
ORM 965.3	Tl (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
ORN 977.3	Tl (ug/L)	17-Sep-09			<0.1	<0.1	<0.1		
Dashields	Zn (ug/L)	03-Aug-05	5.6					1.08	
ORM 19.3	Zn (ug/L)	03-Aug-05			1.06	1.14	<1		
ORM 23.2	Zn (ug/L)	03-Aug-05			1.33	1.03	8.41		
ORM 27.6	Zn (ug/L)	03-Aug-05			<1	1.81	1.5		
Montgomery	Zn (ug/L)	03-Aug-05	6.7					1.73	

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	Zn (ug/L)	01-Sep-05	22.3	<1					
ORM 132.4	Zn (ug/L)	01-Sep-05			1.82	1.65	2.26		
ORM 138.9	Zn (ug/L)	01-Sep-05			1.54	2.6	2.1		
ORM 145.2	Zn (ug/L)	01-Sep-05			2.41	1.84	1.55		
ORM 150.8	Zn (ug/L)	01-Sep-05			1.22	1.79	2.02		
ORM 157.4	Zn (ug/L)	01-Sep-05			2.17	1.67	1.47		
Willow Island	Zn (ug/L)	01-Sep-05	22.6	1.58					
Dashields	Zn (ug/L)	14-Sep-05	5.4					<1	
ORM 19.3	Zn (ug/L)	14-Sep-05			<1	<1	1.12		
ORM 23.2	Zn (ug/L)	14-Sep-05			2.32	<1	2.35		
ORM 27.6	Zn (ug/L)	14-Sep-05			1.28	4.94	1.22		
Montgomery	Zn (ug/L)	14-Sep-05	5.6					<1	
Hannibal	Zn (ug/L)	15-Sep-05	5.9	1.16					
ORM 132.4	Zn (ug/L)	15-Sep-05			1.29	1.32	1.31		
ORM 138.9	Zn (ug/L)	15-Sep-05			1.41	1.27	1.32		
ORM 145.2	Zn (ug/L)	15-Sep-05			1.34	1.12	1.46		
ORM 150.8	Zn (ug/L)	15-Sep-05			1.39	4.15	1.25		
ORM 157.4	Zn (ug/L)	15-Sep-05			1.33	1.45	1.13		
Willow Island	Zn (ug/L)	15-Sep-05	11.9	<1					
Dashields	Zn (ug/L)	25-Oct-05	12.3					5.83	
ORM 19.3	Zn (ug/L)	25-Oct-05			2.18	2.28	1.98		
ORM 23.2	Zn (ug/L)	25-Oct-05			3.34	1.51	1.66		
ORM 27.6	Zn (ug/L)	25-Oct-05			2.49	2.9	3.05		
Montgomery	Zn (ug/L)	25-Oct-05	14.5					1.92	
Hannibal	Zn (ug/L)	26-Oct-05	31.9	4.37					
ORM 132.4	Zn (ug/L)	26-Oct-05			1.43	1.51	2.11		
ORM 138.9	Zn (ug/L)	26-Oct-05			1.67	2.17	2.19		
ORM 145.2	Zn (ug/L)	26-Oct-05			1.33	1.32	1.56		
ORM 150.8	Zn (ug/L)	26-Oct-05			1.55	2.37	1.43		
ORM 157.4	Zn (ug/L)	26-Oct-05			1.59	1.77	1.51		
Willow Island	Zn (ug/L)	26-Oct-05	52.5	2.32					
Cannelton	Zn (ug/L)	09-May-06	51.9	2.26					
ORM 725.0	Zn (ug/L)	09-May-06			<1	1.09	<1		
ORM 736.7	Zn (ug/L)	09-May-06			<1	<1	<1		
ORM 747.3	Zn (ug/L)	09-May-06			<1	<1	1.35		
ORM 754.9	Zn (ug/L)	09-May-06			<1	1.32	1.82		
ORM 762.3	Zn (ug/L)	10-May-06			1.23	<1	1.16		
ORM 772.0	Zn (ug/L)	10-May-06			<1	<1	1.14		
Newburgh	Zn (ug/L)	10-May-06	55.5	1.68					
Hannibal	Zn (ug/L)	06-Sep-06	43.1	<1					
ORM 132.4	Zn (ug/L)	06-Sep-06			<1	1.06	<1		
ORM 138.9	Zn (ug/L)	06-Sep-06			1.09	<1	<1		
ORM 145.2	Zn (ug/L)	06-Sep-06			1.25	1.18	1.08		
ORM 150.8	Zn (ug/L)	06-Sep-06			<1	1.12	1.31		
ORM 157.4	Zn (ug/L)	06-Sep-06			<1	1.04	1.2		
Willow Island	Zn (ug/L)	06-Sep-06	42.9	1.16					
Dashields	Zn (ug/L)	02-Nov-06	77.7					5.9	
ORM 19.3	Zn (ug/L)	02-Nov-06			1.66	1.42	2.42		
ORM 23.2	Zn (ug/L)	02-Nov-06			1.16	1.59	1.17		
ORM 27.6	Zn (ug/L)	02-Nov-06			1.48	1.06	2.24		
Montgomery	Zn (ug/L)	02-Nov-06	89.4					<1	
Cannelton	Zn (ug/L)	07-Aug-07	31.8	<1					
ORM 725.0	Zn (ug/L)	07-Aug-07			1.25	4.27	<1		
ORM 736.7	Zn (ug/L)	07-Aug-07			1.23	<1	2.48		
ORM 747.3	Zn (ug/L)	07-Aug-07			<1	<1	<1		
ORM 754.9	Zn (ug/L)	07-Aug-07			1.15	1.29	<1		
ORM 762.3	Zn (ug/L)	08-Aug-07			1.03	1.12	<1		
ORM 772.0	Zn (ug/L)	08-Aug-07			<1	<1	1.11		
Newburgh	Zn (ug/L)	08-Aug-07	52.7	<1					
Racine	Zn (ug/L)	23-Oct-07	12.1					1.65	
ORM 242.3	Zn (ug/L)	23-Oct-07			1.31	2.69	2.84		
ORM 251.2	Zn (ug/L)	23-Oct-07			1.78	2.01	1.95		
ORM 260.8	Zn (ug/L)	23-Oct-07			3.63	1.49	<1		
KRM 1.4	Zn (ug/L)	23-Oct-07							<1
ORM 267.5	Zn (ug/L)	23-Oct-07			2	<1	<1		
ORM 273.0	Zn (ug/L)	23-Oct-07			<1	1.8	3.15		
R.C. Byrd	Zn (ug/L)	23-Oct-07	12.1					1.11	
Cannelton	Zn (ug/L)	01-Apr-08	346	1.62					
ORM 724.8	Zn (ug/L)	01-Apr-08			<1	<1	<1		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 736.7	Zn (ug/L)	01-Apr-08			1.17	<1	1.03		
ORM 747.3	Zn (ug/L)	01-Apr-08			<1	<1	<1		
ORM 754.9	Zn (ug/L)	01-Apr-08			<1	<1	<1		
ORM 762.3	Zn (ug/L)	02-Apr-08			<1	<1	1.88		
ORM 772.0	Zn (ug/L)	02-Apr-08			<1	<1	<1		
Newburgh	Zn (ug/L)	02-Apr-08	381.1	1.26					
Racine	Zn (ug/L)	30-Apr-08						1.61	
ORM 242.0	Zn (ug/L)	30-Apr-08			<1	<1	<1		
ORM 251.2	Zn (ug/L)	30-Apr-08			<1	1.19	2.11		
ORM 260.8	Zn (ug/L)	30-Apr-08			<1	1.29	1		
K1.3-2	Zn (ug/L)	30-Apr-08							<1
ORM 267.5	Zn (ug/L)	30-Apr-08			<1	<1	<1		
ORM 273.0	Zn (ug/L)	30-Apr-08			<1	<1	1.05		
R.C. Byrd	Zn (ug/L)	30-Apr-08	107.9					<1	
Racine	Zn (ug/L)	22-Oct-08						1.29	
ORM 242.0	Zn (ug/L)	22-Oct-08			1.32	1.25	1.09		
ORM 251.2	Zn (ug/L)	22-Oct-08			<1	<1	1.15		
ORM 260.8	Zn (ug/L)	22-Oct-08			1.53	1.24	1.26		
K1.3-2	Zn (ug/L)	22-Oct-08							<1
ORM 267.5	Zn (ug/L)	22-Oct-08			<1	<1	1.01		
ORM 273.0	Zn (ug/L)	22-Oct-08			1.11	2.26	<1		
R.C. Byrd	Zn (ug/L)	22-Oct-08	12.7					1.1	
Smithland	Zn (ug/L)	19-May-09	407.8	<1					
Cumberland River	Zn (ug/L)	19-May-09							<1
ORM 926.2	Zn (ug/L)	19-May-09			<1	<1	<1		
Tennessee River	Zn (ug/L)	19-May-09							<1
ORM 935.6	Zn (ug/L)	19-May-09			<1	<1	<1		
L&D 52	Zn (ug/L)	19-May-09		1.03					
ORM 950.4	Zn (ug/L)	20-May-09			<1	<1	1.18		
Olmstead	Zn (ug/L)	20-May-09		1.04					
ORM 965.3	Zn (ug/L)	20-May-09			<1	1.08	<1		
ORN 977.3	Zn (ug/L)	20-May-09			<1	1.42	<1		
Smithland	Zn (ug/L)	21-Jul-09	59.8	<1					
Cumberland River	Zn (ug/L)	21-Jul-09							<1
ORM 926.2	Zn (ug/L)	21-Jul-09			<1	<1	<1		
Tennessee River	Zn (ug/L)	21-Jul-09							<1
ORM 935.6	Zn (ug/L)	21-Jul-09			<1	1.46	<1		
L&D 52	Zn (ug/L)	21-Jul-09		<1					
ORM 950.4	Zn (ug/L)	22-Jul-09			1.13	<1	1.17		
Olmstead	Zn (ug/L)	22-Jul-09		<1					
ORM 965.3	Zn (ug/L)	22-Jul-09			<1	<1	<1		
ORM 977.3	Zn (ug/L)	22-Jul-09			<1	<1	<1		
Smithland	Zn (ug/L)	16-Sep-09	33.1	1.59					
Cumberland River	Zn (ug/L)	16-Sep-09							<1
ORM 926.2	Zn (ug/L)	16-Sep-09			<1	1.17	<1		
Tennessee River	Zn (ug/L)	16-Sep-09							<1
ORM 935.6	Zn (ug/L)	16-Sep-09			<1	<1	<1		
L&D 52	Zn (ug/L)	16-Sep-09		<1					
ORM 950.4	Zn (ug/L)	17-Sep-09			1.29	<1	<1		
Olmstead	Zn (ug/L)	17-Sep-09		<1					
ORM 965.3	Zn (ug/L)	17-Sep-09			<1	<1	<1		
ORN 977.3	Zn (ug/L)	17-Sep-09			<1	<1	<1		
Dashields	Cl (mg/L)	03-Aug-05	5.6					34	
ORM 19.3	Cl (mg/L)	03-Aug-05			34	34	34		
ORM 23.2	Cl (mg/L)	03-Aug-05			36	32	34		
ORM 27.6	Cl (mg/L)	03-Aug-05			34	36	36		
Montgomery	Cl (mg/L)	03-Aug-05	6.7					36	
Hannibal	Cl (mg/L)	01-Sep-05	22.3	44					
ORM 132.4	Cl (mg/L)	01-Sep-05			48	44	46		
ORM 138.9	Cl (mg/L)	01-Sep-05			48	48	48		
ORM 145.2	Cl (mg/L)	01-Sep-05			52	54	54		
ORM 150.8	Cl (mg/L)	01-Sep-05			52	52	50		
ORM 157.4	Cl (mg/L)	01-Sep-05			56	54	58		
Willow Island	Cl (mg/L)	01-Sep-05	22.6	56					
Dashields	Cl (mg/L)	14-Sep-05	5.4					40	
ORM 19.3	Cl (mg/L)	14-Sep-05			32	34	42		
ORM 23.2	Cl (mg/L)	14-Sep-05			36	36	36		
ORM 27.6	Cl (mg/L)	14-Sep-05			48	46	40		
Montgomery	Cl (mg/L)	14-Sep-05	5.6					38	

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	Cl (mg/L)	15-Sep-05	5.9	70					
ORM 132.4	Cl (mg/L)	15-Sep-05			60	60	62		
ORM 138.9	Cl (mg/L)	15-Sep-05			62	60	60		
ORM 145.2	Cl (mg/L)	15-Sep-05			56	50	60		
ORM 150.8	Cl (mg/L)	15-Sep-05			56	56	56		
ORM 157.4	Cl (mg/L)	15-Sep-05			54	56	50		
Willow Island	Cl (mg/L)	15-Sep-05	11.9	38					
Dashields	Cl (mg/L)	25-Oct-05	12.3					48	
ORM 19.3	Cl (mg/L)	25-Oct-05			44	50	48		
ORM 23.2	Cl (mg/L)	25-Oct-05			44	44	46		
ORM 27.6	Cl (mg/L)	25-Oct-05			50	48	50		
Montgomery	Cl (mg/L)	25-Oct-05	14.5					50	
Hannibal	Cl (mg/L)	26-Oct-05	31.9	46					
ORM 132.4	Cl (mg/L)	26-Oct-05			46	54	50		
ORM 138.9	Cl (mg/L)	26-Oct-05				48	52		
ORM 145.2	Cl (mg/L)	26-Oct-05			52	50	50		
ORM 150.8	Cl (mg/L)	26-Oct-05			50	52	52		
ORM 157.4	Cl (mg/L)	26-Oct-05			54	56	54		
Willow Island	Cl (mg/L)	26-Oct-05	52.5	58					
Cannelton	Cl (mg/L)	09-May-06	51.9	22					
ORM 725.0	Cl (mg/L)	09-May-06			20	22	22		
ORM 736.7	Cl (mg/L)	09-May-06			20	22	22		
ORM 747.3	Cl (mg/L)	09-May-06			22	20	24		
ORM 754.9	Cl (mg/L)	09-May-06			22	22	22		
ORM 762.3	Cl (mg/L)	10-May-06			22	22	24		
ORM 772.0	Cl (mg/L)	10-May-06			22	24	22		
Newburgh	Cl (mg/L)	10-May-06	55.5	24					
Hannibal	Cl (mg/L)	06-Sep-06	43.1	36					
ORM 132.4	Cl (mg/L)	06-Sep-06			38	36	36		
ORM 138.9	Cl (mg/L)	06-Sep-06			38	40	38		
ORM 145.2	Cl (mg/L)	06-Sep-06			40	38	42		
ORM 150.8	Cl (mg/L)	06-Sep-06			40	38	38		
ORM 157.4	Cl (mg/L)	06-Sep-06			40	40	40		
Willow Island	Cl (mg/L)	06-Sep-06	42.9	46					
Dashields	Cl (mg/L)	02-Nov-06	77.7					20	
ORM 19.3	Cl (mg/L)	02-Nov-06			16	16	16		
ORM 23.2	Cl (mg/L)	02-Nov-06			16	14	18		
ORM 27.6	Cl (mg/L)	02-Nov-06			16	20	16		
Montgomery	Cl (mg/L)	02-Nov-06	89.4					26	
Cannelton	Cl (mg/L)	07-Aug-07	31.8	44					
ORM 725.0	Cl (mg/L)	07-Aug-07			38	38	40		
ORM 736.7	Cl (mg/L)	07-Aug-07			42	36	40		
ORM 747.3	Cl (mg/L)	07-Aug-07			38	40	42		
ORM 754.9	Cl (mg/L)	07-Aug-07			36	40	40		
ORM 762.3	Cl (mg/L)	08-Aug-07			36	42	34		
ORM 772.0	Cl (mg/L)	08-Aug-07			44	34	40		
Newburgh	Cl (mg/L)	08-Aug-07	52.7	40					
Racine	Cl (mg/L)	23-Oct-07	12.1					54	
ORM 242.3	Cl (mg/L)	23-Oct-07	0		54	54	54		
ORM 251.2	Cl (mg/L)	23-Oct-07	0		54	54	54		
ORM 260.8	Cl (mg/L)	23-Oct-07	0		46	44	46		
KRM 1.4	Cl (mg/L)	23-Oct-07	0						10
ORM 267.5	Cl (mg/L)	23-Oct-07	0		28	48	34		
ORM 273.0	Cl (mg/L)	23-Oct-07	0		36	38	40		
R.C. Byrd	Cl (mg/L)	23-Oct-07	12.1					36	
Cannelton	Cl (mg/L)	01-Apr-08	346	24					
ORM 724.8	Cl (mg/L)	01-Apr-08	0		22	24	22		
ORM 736.7	Cl (mg/L)	01-Apr-08	0		22	24	22		
ORM 747.3	Cl (mg/L)	01-Apr-08	0		24	24	22		
ORM 754.9	Cl (mg/L)	01-Apr-08	0		22	20	22		
ORM 762.3	Cl (mg/L)	02-Apr-08	0		22	24	22		
ORM 772.0	Cl (mg/L)	02-Apr-08	0		26	22	22		
Newburgh	Cl (mg/L)	02-Apr-08	381.1	30					
Racine	Cl (mg/L)	30-Apr-08	0					66	
ORM 242.0	Cl (mg/L)	30-Apr-08	0		72	72	72		
ORM 251.2	Cl (mg/L)	30-Apr-08	0		76	76	78		
ORM 260.8	Cl (mg/L)	30-Apr-08	0		78	76	74		
K1.3-2	Cl (mg/L)	30-Apr-08	0						20
ORM 267.5	Cl (mg/L)	30-Apr-08	0		46	48	32		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 273.0	Cl (mg/L)	30-Apr-08	0		36	36	36		
R.C. Byrd	Cl (mg/L)	30-Apr-08	107.9					72	
Racine	Cl (mg/L)	22-Oct-08	0					60	
ORM 242.0	Cl (mg/L)	22-Oct-08	0		66	62	60		
ORM 251.2	Cl (mg/L)	22-Oct-08	0		62	64	60		
ORM 260.8	Cl (mg/L)	22-Oct-08	0		62	66	62		
K1.3-2	Cl (mg/L)	22-Oct-08	0						12
ORM 267.5	Cl (mg/L)	22-Oct-08	0		48	44	46		
ORM 273.0	Cl (mg/L)	22-Oct-08	0		52	54	50		
R.C. Byrd	Cl (mg/L)	22-Oct-08	12.7					44	
Smithland	Cl (mg/L)	19-May-09	407.8	14					
Cumberland River	Cl (mg/L)	19-May-09	0						10
ORM 926.2	Cl (mg/L)	19-May-09	0		12	12	8		
Tennessee River	Cl (mg/L)	19-May-09	0						6
ORM 935.6	Cl (mg/L)	19-May-09	0		14	12	10		
L&D 52	Cl (mg/L)	19-May-09	0	16					
ORM 950.4	Cl (mg/L)	20-May-09	0		14	12	8		
Olmstead	Cl (mg/L)	20-May-09	0	12					
ORM 965.3	Cl (mg/L)	20-May-09	0		14	8	10		
ORN 977.3	Cl (mg/L)	20-May-09	0		14	10	12		
Smithland	Cl (mg/L)	21-Jul-09	59.8	22					
Cumberland River	Cl (mg/L)	21-Jul-09	0						6
ORM 926.2	Cl (mg/L)	21-Jul-09	0		20	18	12		
Tennessee River	Cl (mg/L)	21-Jul-09	0						10
ORM 935.6	Cl (mg/L)	21-Jul-09	0		18	16	16		
L&D 52	Cl (mg/L)	21-Jul-09	0	22					
ORM 950.4	Cl (mg/L)	22-Jul-09	0		16	16	14		
Olmstead	Cl (mg/L)	22-Jul-09	0	18					
ORM 965.3	Cl (mg/L)	22-Jul-09	0		14	16	16		
ORM 977.3	Cl (mg/L)	22-Jul-09	0		20	14	14		
Smithland	Cl (mg/L)	16-Sep-09	33.1	20					
Cumberland River	Cl (mg/L)	16-Sep-09	0						6
ORM 926.2	Cl (mg/L)	16-Sep-09	0		21.5	16.5	11.5		
Tennessee River	Cl (mg/L)	16-Sep-09	0						9.5
ORM 935.6	Cl (mg/L)	16-Sep-09	0		21	13.2	11.5		
L&D 52	Cl (mg/L)	16-Sep-09	0	16					
ORM 950.4	Cl (mg/L)	17-Sep-09	0		18	15.5	15.5		
Olmstead	Cl (mg/L)	17-Sep-09	0	16.5					
ORM 965.3	Cl (mg/L)	17-Sep-09	0		16.5	16.5	15.5		
ORN 977.3	Cl (mg/L)	17-Sep-09	0		15.5	15.5	15.7		
Dashields	Hardness (mg/L)	03-Aug-05	5.6					144	
ORM 19.3	Hardness (mg/L)	03-Aug-05			160	120	280		
ORM 23.2	Hardness (mg/L)	03-Aug-05			128	136	132		
ORM 27.6	Hardness (mg/L)	03-Aug-05			124	124	132		
Montgomery	Hardness (mg/L)	03-Aug-05	6.7					120	
Hannibal	Hardness (mg/L)	01-Sep-05	22.3	160					
ORM 132.4	Hardness (mg/L)	01-Sep-05			160	152	156		
ORM 138.9	Hardness (mg/L)	01-Sep-05			148	160	160		
ORM 145.2	Hardness (mg/L)	01-Sep-05			164	156	160		
ORM 150.8	Hardness (mg/L)	01-Sep-05			152	148	160		
ORM 157.4	Hardness (mg/L)	01-Sep-05			168	152	148		
Willow Island	Hardness (mg/L)	01-Sep-05	22.6	152					
Dashields	Hardness (mg/L)	14-Sep-05	5.4					128	
ORM 19.3	Hardness (mg/L)	14-Sep-05			120	120	120		
ORM 23.2	Hardness (mg/L)	14-Sep-05			108	108	108		
ORM 27.6	Hardness (mg/L)	14-Sep-05			124	124	116		
Montgomery	Hardness (mg/L)	14-Sep-05	5.6					116	
Hannibal	Hardness (mg/L)	15-Sep-05	5.9	212					
ORM 132.4	Hardness (mg/L)	15-Sep-05			176	160	168		
ORM 138.9	Hardness (mg/L)	15-Sep-05			160	160	172		
ORM 145.2	Hardness (mg/L)	15-Sep-05			164	168	168		
ORM 150.8	Hardness (mg/L)	15-Sep-05			168	136	164		
ORM 157.4	Hardness (mg/L)	15-Sep-05			168	164	160		
Willow Island	Hardness (mg/L)	15-Sep-05	11.9	120					
Dashields	Hardness (mg/L)	25-Oct-05	12.3					192	
ORM 19.3	Hardness (mg/L)	25-Oct-05			148	144	152		
ORM 23.2	Hardness (mg/L)	25-Oct-05			140	148	148		
ORM 27.6	Hardness (mg/L)	25-Oct-05			152	156	148		
Montgomery	Hardness (mg/L)	25-Oct-05	14.5					144	

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	Hardness (mg/L)	26-Oct-05	31.9	148					
ORM 132.4	Hardness (mg/L)	26-Oct-05			156	140	168		
ORM 138.9	Hardness (mg/L)	26-Oct-05			152	152	156		
ORM 145.2	Hardness (mg/L)	26-Oct-05			156	152	156		
ORM 150.8	Hardness (mg/L)	26-Oct-05			160	164	156		
ORM 157.4	Hardness (mg/L)	26-Oct-05			172	156	148		
Willow Island	Hardness (mg/L)	26-Oct-05	52.5	160					
Cannelton	Hardness (mg/L)	09-May-06	51.9	132					
ORM 725.0	Hardness (mg/L)	09-May-06			136	128	132		
ORM 736.7	Hardness (mg/L)	09-May-06			124	128	128		
ORM 747.3	Hardness (mg/L)	09-May-06			132	128	136		
ORM 754.9	Hardness (mg/L)	09-May-06			136	132	132		
ORM 762.3	Hardness (mg/L)	10-May-06			148	136	132		
ORM 772.0	Hardness (mg/L)	10-May-06			128	132	132		
Newburgh	Hardness (mg/L)	10-May-06	55.5	144					
Hannibal	Hardness (mg/L)	06-Sep-06	43.1	116					
ORM 132.4	Hardness (mg/L)	06-Sep-06			116	112	112		
ORM 138.9	Hardness (mg/L)	06-Sep-06			116	116	116		
ORM 145.2	Hardness (mg/L)	06-Sep-06			160	128	124		
ORM 150.8	Hardness (mg/L)	06-Sep-06			124	120	96		
ORM 157.4	Hardness (mg/L)	06-Sep-06			128	128	120		
Willow Island	Hardness (mg/L)	06-Sep-06	42.9	124					
Dashields	Hardness (mg/L)	02-Nov-06	77.7					80	
ORM 19.3	Hardness (mg/L)	02-Nov-06			72	68	72		
ORM 23.2	Hardness (mg/L)	02-Nov-06			60	64	68		
ORM 27.6	Hardness (mg/L)	02-Nov-06			68	68	72		
Montgomery	Hardness (mg/L)	02-Nov-06	89.4					72	
Cannelton	Hardness (mg/L)	07-Aug-07	31.8	148					
ORM 725.0	Hardness (mg/L)	07-Aug-07			160	160	160		
ORM 736.7	Hardness (mg/L)	07-Aug-07			164	164	176		
ORM 747.3	Hardness (mg/L)	07-Aug-07			156	148	168		
ORM 754.9	Hardness (mg/L)	07-Aug-07			156	160	168		
ORM 762.3	Hardness (mg/L)	08-Aug-07			152	156	156		
ORM 772.0	Hardness (mg/L)	08-Aug-07			160	172	152		
Newburgh	Hardness (mg/L)	08-Aug-07	52.7	160					
Racine	Hardness (mg/L)	23-Oct-07	12.1					148	
ORM 242.3	Hardness (mg/L)	23-Oct-07	0		160	156	156		
ORM 251.2	Hardness (mg/L)	23-Oct-07	0		148	140	148		
ORM 260.8	Hardness (mg/L)	23-Oct-07	0		152	164	156		
KRM 1.4	Hardness (mg/L)	23-Oct-07	0						80
ORM 267.5	Hardness (mg/L)	23-Oct-07	0		140	136	140		
ORM 273.0	Hardness (mg/L)	23-Oct-07	0		144	144	144		
R.C. Byrd	Hardness (mg/L)	23-Oct-07	12.1					128	
Cannelton	Hardness (mg/L)	01-Apr-08	346	116					
ORM 724.8	Hardness (mg/L)	01-Apr-08	0		116	116	120		
ORM 736.7	Hardness (mg/L)	01-Apr-08	0		124	112	120		
ORM 747.3	Hardness (mg/L)	01-Apr-08	0		124	120	120		
ORM 754.9	Hardness (mg/L)	01-Apr-08	0		120	112	116		
ORM 762.3	Hardness (mg/L)	02-Apr-08	0		116	116	108		
ORM 772.0	Hardness (mg/L)	02-Apr-08	0		108	112	120		
Newburgh	Hardness (mg/L)	02-Apr-08	381.1	120					
Racine	Hardness (mg/L)	30-Apr-08	0					140	
ORM 242.0	Hardness (mg/L)	30-Apr-08	0		140	140	136		
ORM 251.2	Hardness (mg/L)	30-Apr-08	0		144	144	156		
ORM 260.8	Hardness (mg/L)	30-Apr-08	0		148	144	148		
K1.3-2	Hardness (mg/L)	30-Apr-08	0						84
ORM 267.5	Hardness (mg/L)	30-Apr-08	0		140	128	80		
ORM 273.0	Hardness (mg/L)	30-Apr-08	0		104	120	140		
R.C. Byrd	Hardness (mg/L)	30-Apr-08	107.9					104	
Racine	Hardness (mg/L)	22-Oct-08	0					156	
ORM 242.0	Hardness (mg/L)	22-Oct-08	0		172	160	156		
ORM 251.2	Hardness (mg/L)	22-Oct-08	0		156	156	156		
ORM 260.8	Hardness (mg/L)	22-Oct-08	0		168	164	164		
K1.3-2	Hardness (mg/L)	22-Oct-08	0						80
ORM 267.5	Hardness (mg/L)	22-Oct-08	0		148	144	144		
ORM 273.0	Hardness (mg/L)	22-Oct-08	0		148	152	152		
R.C. Byrd	Hardness (mg/L)	22-Oct-08	12.7					140	
Smithland	Hardness (mg/L)	19-May-09	407.8	136					
Cumberland River	Hardness (mg/L)	19-May-09	0						100

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 926.2	Hardness (mg/L)	19-May-09	0		124	116	92		
Tennessee River	Hardness (mg/L)	19-May-09	0						80
ORM 935.6	Hardness (mg/L)	19-May-09	0		144	96	104		
L&D 52	Hardness (mg/L)	19-May-09	0	116					
ORM 950.4	Hardness (mg/L)	20-May-09	0		108	96	108		
Olmstead	Hardness (mg/L)	20-May-09	0	136					
ORM 965.3	Hardness (mg/L)	20-May-09	0		132	124	92		
ORN 977.3	Hardness (mg/L)	20-May-09	0		116	116	112		
Smithland	Hardness (mg/L)	21-Jul-09	59.8	172					
Cumberland River	Hardness (mg/L)	21-Jul-09	0						92
ORM 926.2	Hardness (mg/L)	21-Jul-09	0		164	164	136		
Tennessee River	Hardness (mg/L)	21-Jul-09	0						64
ORM 935.6	Hardness (mg/L)	21-Jul-09	0		172	124	148		
L&D 52	Hardness (mg/L)	21-Jul-09	0	156					
ORM 950.4	Hardness (mg/L)	22-Jul-09	0		120	140	100		
Olmstead	Hardness (mg/L)	22-Jul-09	0	144					
ORM 965.3	Hardness (mg/L)	22-Jul-09	0		148	136	104		
ORM 977.3	Hardness (mg/L)	22-Jul-09	0		132	124	116		
Smithland	Hardness (mg/L)	16-Sep-09	33.1	146					
Cumberland River	Hardness (mg/L)	16-Sep-09	0						80
ORM 926.2	Hardness (mg/L)	16-Sep-09	0		140	124	110		
Tennessee River	Hardness (mg/L)	16-Sep-09	0						66
ORM 935.6	Hardness (mg/L)	16-Sep-09	0		140	88	80		
L&D 52	Hardness (mg/L)	16-Sep-09	0	130					
ORM 950.4	Hardness (mg/L)	17-Sep-09	0		120	108	108		
Olmstead	Hardness (mg/L)	17-Sep-09	0	116					
ORM 965.3	Hardness (mg/L)	17-Sep-09	0		117	116	112		
ORN 977.3	Hardness (mg/L)	17-Sep-09	0		110	110	114		
Dashields	NH3-N (mg/L)	03-Aug-05	5.6					0.04	
ORM 19.3	NH3-N (mg/L)	03-Aug-05			<0.03	<0.03	<0.03		
ORM 23.2	NH3-N (mg/L)	03-Aug-05			<0.03	<0.03	<0.03		
ORM 27.6	NH3-N (mg/L)	03-Aug-05			<0.03	<0.03	<0.03		
Montgomery	NH3-N (mg/L)	03-Aug-05	6.7					<0.03	
Hannibal	NH3-N (mg/L)	01-Sep-05	22.3	0.09					
ORM 132.4	NH3-N (mg/L)	01-Sep-05			0.09	0.09	0.1		
ORM 138.9	NH3-N (mg/L)	01-Sep-05			0.09	0.09	0.09		
ORM 145.2	NH3-N (mg/L)	01-Sep-05			0.1	0.08	0.09		
ORM 150.8	NH3-N (mg/L)	01-Sep-05			0.1	0.1	0.1		
ORM 157.4	NH3-N (mg/L)	01-Sep-05			0.11	0.1	0.1		
Willow Island	NH3-N (mg/L)	01-Sep-05	22.6	0.1					
Dashields	NH3-N (mg/L)	14-Sep-05	5.4					0.04	
ORM 19.3	NH3-N (mg/L)	14-Sep-05			0.04	0.04	0.04		
ORM 23.2	NH3-N (mg/L)	14-Sep-05			0.04	0.04	0.04		
ORM 27.6	NH3-N (mg/L)	14-Sep-05			0.04	0.04	0.04		
Montgomery	NH3-N (mg/L)	14-Sep-05	5.6					0.07	
Hannibal	NH3-N (mg/L)	15-Sep-05	5.9	0.04					
ORM 132.4	NH3-N (mg/L)	15-Sep-05			0.05	0.05	0.06		
ORM 138.9	NH3-N (mg/L)	15-Sep-05			0.03	0.04	0.04		
ORM 145.2	NH3-N (mg/L)	15-Sep-05			0.06	0.03	0.06		
ORM 150.8	NH3-N (mg/L)	15-Sep-05			0.04	0.06	0.05		
ORM 157.4	NH3-N (mg/L)	15-Sep-05			0.06	0.06	0.05		
Willow Island	NH3-N (mg/L)	15-Sep-05	11.9	0.07					
Dashields	NH3-N (mg/L)	25-Oct-05	12.3					0.08	
ORM 19.3	NH3-N (mg/L)	25-Oct-05			0.11	0.09	0.09		
ORM 23.2	NH3-N (mg/L)	25-Oct-05			0.06	0.07	0.07		
ORM 27.6	NH3-N (mg/L)	25-Oct-05			0.08	0.07	0.07		
Montgomery	NH3-N (mg/L)	25-Oct-05	14.5					0.08	
Hannibal	NH3-N (mg/L)	26-Oct-05	31.9	0.05					
ORM 132.4	NH3-N (mg/L)	26-Oct-05			0.09	0.07	0.07		
ORM 138.9	NH3-N (mg/L)	26-Oct-05			0.06	0.06	0.07		
ORM 145.2	NH3-N (mg/L)	26-Oct-05			0.05	0.05	0.05		
ORM 150.8	NH3-N (mg/L)	26-Oct-05			0.05	0.05	0.05		
ORM 157.4	NH3-N (mg/L)	26-Oct-05			0.05	0.06	0.06		
Willow Island	NH3-N (mg/L)	26-Oct-05	52.5	0.05					
Cannelton	NH3-N (mg/L)	09-May-06	51.9	0.04					
ORM 725.0	NH3-N (mg/L)	09-May-06			0.04	0.04	0.04		
ORM 736.7	NH3-N (mg/L)	09-May-06			0.04	0.04	0.04		
ORM 747.3	NH3-N (mg/L)	09-May-06			<0.03	<0.03	<0.03		
ORM 754.9	NH3-N (mg/L)	09-May-06			<0.03	<0.03	<0.03		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 762.3	NH3-N (mg/L)	10-May-06			<0.03	<0.03	<0.03		
ORM 772.0	NH3-N (mg/L)	10-May-06			<0.03	<0.03	<0.03		
Newburgh	NH3-N (mg/L)	10-May-06	55.5	<0.03					
Hannibal	NH3-N (mg/L)	06-Sep-06	43.1	0.06					
ORM 132.4	NH3-N (mg/L)	06-Sep-06			0.06	0.06	0.06		
ORM 138.9	NH3-N (mg/L)	06-Sep-06			0.06	0.06	0.06		
ORM 145.2	NH3-N (mg/L)	06-Sep-06			0.07	0.06	0.08		
ORM 150.8	NH3-N (mg/L)	06-Sep-06			0.06	0.07	0.08		
ORM 157.4	NH3-N (mg/L)	06-Sep-06			0.06	0.06	0.07		
Willow Island	NH3-N (mg/L)	06-Sep-06	42.9	0.08					
Dashields	NH3-N (mg/L)	02-Nov-06	77.7					0.05	
ORM 19.3	NH3-N (mg/L)	02-Nov-06			0.05	0.04	0.05		
ORM 23.2	NH3-N (mg/L)	02-Nov-06			0.05	0.05	0.05		
ORM 27.6	NH3-N (mg/L)	02-Nov-06			0.05	0.05	0.05		
Montgomery	NH3-N (mg/L)	02-Nov-06	89.4					0.06	
Cannelton	NH3-N (mg/L)	07-Aug-07	31.8	0.07					
ORM 725.0	NH3-N (mg/L)	07-Aug-07			0.05	0.05	0.07		
ORM 736.7	NH3-N (mg/L)	07-Aug-07			0.05	0.05	<0.03		
ORM 747.3	NH3-N (mg/L)	07-Aug-07			<0.03	<0.03	<0.03		
ORM 754.9	NH3-N (mg/L)	07-Aug-07			0.03	<0.03	<0.03		
ORM 762.3	NH3-N (mg/L)	08-Aug-07			0.04	0.04	<0.03		
ORM 772.0	NH3-N (mg/L)	08-Aug-07			0.03	<0.03	<0.03		
Newburgh	NH3-N (mg/L)	08-Aug-07	52.7	0.03					
Racine	NH3-N (mg/L)	23-Oct-07	12.1					0.03	
ORM 242.3	NH3-N (mg/L)	23-Oct-07	0		0.04	0.04	0.05		
ORM 251.2	NH3-N (mg/L)	23-Oct-07	0		0.04	0.04	0.04		
ORM 260.8	NH3-N (mg/L)	23-Oct-07	0		0.05	0.05	0.04		
KRM 1.4	NH3-N (mg/L)	23-Oct-07	0						0.08
ORM 267.5	NH3-N (mg/L)	23-Oct-07	0		0.04	0.04	0.05		
ORM 273.0	NH3-N (mg/L)	23-Oct-07	0		0.04	0.04	0.04		
R.C. Byrd	NH3-N (mg/L)	23-Oct-07	12.1					0.07	
Cannelton	NH3-N (mg/L)	01-Apr-08	346	0.05					
ORM 724.8	NH3-N (mg/L)	01-Apr-08	0		0.05	0.09	0.05		
ORM 736.7	NH3-N (mg/L)	01-Apr-08	0		0.04	0.04	0.04		
ORM 747.3	NH3-N (mg/L)	01-Apr-08	0		0.07	0.06	0.07		
ORM 754.9	NH3-N (mg/L)	01-Apr-08	0		0.09	0.07	0.1		
ORM 762.3	NH3-N (mg/L)	02-Apr-08	0		0.06	0.06	0.07		
ORM 772.0	NH3-N (mg/L)	02-Apr-08	0		0.08	0.06	0.06		
Newburgh	NH3-N (mg/L)	02-Apr-08	381.1	0.12					
Racine	NH3-N (mg/L)	30-Apr-08	0					<0.03	
ORM 242.0	NH3-N (mg/L)	30-Apr-08	0		0.03	0.03	0.05		
ORM 251.2	NH3-N (mg/L)	30-Apr-08	0		0.03	0.03	0.03		
ORM 260.8	NH3-N (mg/L)	30-Apr-08	0		0.03	0.03	0.03		
K1.3-2	NH3-N (mg/L)	30-Apr-08	0						0.05
ORM 267.5	NH3-N (mg/L)	30-Apr-08	0		0.04	0.04	0.06		
ORM 273.0	NH3-N (mg/L)	30-Apr-08	0		0.05	0.05	0.04		
R.C. Byrd	NH3-N (mg/L)	30-Apr-08	107.9					0.06	
Racine	NH3-N (mg/L)	22-Oct-08	0					0.24	
ORM 242.0	NH3-N (mg/L)	22-Oct-08	0		0.13	0.15	0.12		
ORM 251.2	NH3-N (mg/L)	22-Oct-08	0		0.12	0.12	0.13		
ORM 260.8	NH3-N (mg/L)	22-Oct-08	0		0.13	0.08	0.09		
K1.3-2	NH3-N (mg/L)	22-Oct-08	0						0.14
ORM 267.5	NH3-N (mg/L)	22-Oct-08	0		0.1	0.11	<0.03		
ORM 273.0	NH3-N (mg/L)	22-Oct-08	0		0.07	0.08	0.07		
R.C. Byrd	NH3-N (mg/L)	22-Oct-08	12.7					0.23	
Smithland	NH3-N (mg/L)	19-May-09	407.8	0.05					
Cumberland River	NH3-N (mg/L)	19-May-09	0						0.04
ORM 926.2	NH3-N (mg/L)	19-May-09	0		0.04	0.04	0.04		
Tennessee River	NH3-N (mg/L)	19-May-09	0						0.05
ORM 935.6	NH3-N (mg/L)	19-May-09	0		0.04	0.04	0.04		
L&D 52	NH3-N (mg/L)	19-May-09	0	0.05					
ORM 950.4	NH3-N (mg/L)	20-May-09	0		0.05	0.05	0.05		
Olmstead	NH3-N (mg/L)	20-May-09	0	0.04					
ORM 965.3	NH3-N (mg/L)	20-May-09	0		0.04	0.04	0.04		
ORN 977.3	NH3-N (mg/L)	20-May-09	0		0.04	0.04	0.04		
Smithland	NH3-N (mg/L)	21-Jul-09	59.8	0.08					
Cumberland River	NH3-N (mg/L)	21-Jul-09	0						0.04
ORM 926.2	NH3-N (mg/L)	21-Jul-09	0		0.04	0.04	0.04		
Tennessee River	NH3-N (mg/L)	21-Jul-09	0						0.07

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 935.6	NH3-N (mg/L)	21-Jul-09	0		0.04	0.04	0.04		
L&D 52	NH3-N (mg/L)	21-Jul-09	0	0.09					
ORM 950.4	NH3-N (mg/L)	22-Jul-09	0		0.08	0.08	0.08		
Olmstead	NH3-N (mg/L)	22-Jul-09	0	0.06					
ORM 965.3	NH3-N (mg/L)	22-Jul-09	0		0.04	0.06	0.05		
ORM 977.3	NH3-N (mg/L)	22-Jul-09	0		0.03	0.03	0.04		
Smithland	NH3-N (mg/L)	16-Sep-09	33.1	0.11					
Cumberland River	NH3-N (mg/L)	16-Sep-09	0						0.05
ORM 926.2	NH3-N (mg/L)	16-Sep-09	0		0.07	0.06	0.05		
Tennessee River	NH3-N (mg/L)	16-Sep-09	0						0.07
ORM 935.6	NH3-N (mg/L)	16-Sep-09	0		0.07	0.07	0.07		
L&D 52	NH3-N (mg/L)	16-Sep-09	0	0.1					
ORM 950.4	NH3-N (mg/L)	17-Sep-09	0		0.04	0.05	0.07		
Olmstead	NH3-N (mg/L)	17-Sep-09	0	<0.03					
ORM 965.3	NH3-N (mg/L)	17-Sep-09	0		<0.03	<0.03	<0.03		
ORN 977.3	NH3-N (mg/L)	17-Sep-09	0		<0.03	<0.03	<0.03		
Dashields	NO2-NO3-N (mg/L)	03-Aug-05	5.6					0.699	
ORM 19.3	NO2-NO3-N (mg/L)	03-Aug-05			0.65	0.644	0.671		
ORM 23.2	NO2-NO3-N (mg/L)	03-Aug-05			0.588	0.624	0.631		
ORM 27.6	NO2-NO3-N (mg/L)	03-Aug-05			0.647	0.611	0.645		
Montgomery	NO2-NO3-N (mg/L)	03-Aug-05	6.7					0.593	
Hannibal	NO2-NO3-N (mg/L)	01-Sep-05	22.3	0.823					
ORM 132.4	NO2-NO3-N (mg/L)	01-Sep-05			0.973	0.959	0.957		
ORM 138.9	NO2-NO3-N (mg/L)	01-Sep-05			0.932	0.925	0.901		
ORM 145.2	NO2-NO3-N (mg/L)	01-Sep-05			0.883	0.885	0.855		
ORM 150.8	NO2-NO3-N (mg/L)	01-Sep-05			0.803	0.833	0.832		
ORM 157.4	NO2-NO3-N (mg/L)	01-Sep-05			0.851	0.809	0.762		
Willow Island	NO2-NO3-N (mg/L)	01-Sep-05	22.6	0.565					
Dashields	NO2-NO3-N (mg/L)	14-Sep-05	5.4					0.745	
ORM 19.3	NO2-NO3-N (mg/L)	14-Sep-05			0.662	0.68	0.64		
ORM 23.2	NO2-NO3-N (mg/L)	14-Sep-05			0.559	0.624	0.572		
ORM 27.6	NO2-NO3-N (mg/L)	14-Sep-05			0.877	0.814	0.573		
Montgomery	NO2-NO3-N (mg/L)	14-Sep-05	5.6					0.646	
Hannibal	NO2-NO3-N (mg/L)	15-Sep-05	5.9	1.11					
ORM 132.4	NO2-NO3-N (mg/L)	15-Sep-05			1.07	1.05	1.04		
ORM 138.9	NO2-NO3-N (mg/L)	15-Sep-05			1.03	1.04	1.03		
ORM 145.2	NO2-NO3-N (mg/L)	15-Sep-05			1.06	1.03	1.05		
ORM 150.8	NO2-NO3-N (mg/L)	15-Sep-05			1.03	1.05	1.04		
ORM 157.4	NO2-NO3-N (mg/L)	15-Sep-05			1.07	1.06	1.03		
Willow Island	NO2-NO3-N (mg/L)	15-Sep-05	11.9	0.644					
Dashields	NO2-NO3-N (mg/L)	25-Oct-05	12.3					0.922	
ORM 19.3	NO2-NO3-N (mg/L)	25-Oct-05			1.01	0.995	1.01		
ORM 23.2	NO2-NO3-N (mg/L)	25-Oct-05			1.01	1.01	0.986		
ORM 27.6	NO2-NO3-N (mg/L)	25-Oct-05			1.05	1.04	1.11		
Montgomery	NO2-NO3-N (mg/L)	25-Oct-05	14.5					1.11	
Hannibal	NO2-NO3-N (mg/L)	26-Oct-05	31.9	0.895					
ORM 132.4	NO2-NO3-N (mg/L)	26-Oct-05			0.902	0.879	0.896		
ORM 138.9	NO2-NO3-N (mg/L)	26-Oct-05			0.955	0.904	0.918		
ORM 145.2	NO2-NO3-N (mg/L)	26-Oct-05			1.04	1.02	1.02		
ORM 150.8	NO2-NO3-N (mg/L)	26-Oct-05			1.03	1.05	1.02		
ORM 157.4	NO2-NO3-N (mg/L)	26-Oct-05			1.07	1.02	1.02		
Willow Island	NO2-NO3-N (mg/L)	26-Oct-05	52.5	1.02					
Cannelton	NO2-NO3-N (mg/L)	09-May-06	51.9	0.812					
ORM 725.0	NO2-NO3-N (mg/L)	09-May-06			0.824	0.819	0.814		
ORM 736.7	NO2-NO3-N (mg/L)	09-May-06			0.829	0.824	0.818		
ORM 747.3	NO2-NO3-N (mg/L)	09-May-06			0.836	0.833	0.826		
ORM 754.9	NO2-NO3-N (mg/L)	09-May-06			0.971	0.799	0.787		
ORM 762.3	NO2-NO3-N (mg/L)	10-May-06			1.01	0.9	0.848		
ORM 772.0	NO2-NO3-N (mg/L)	10-May-06			0.932	0.848	0.852		
Newburgh	NO2-NO3-N (mg/L)	10-May-06	55.5	1.01					
Hannibal	NO2-NO3-N (mg/L)	06-Sep-06	43.1	0.535					
ORM 132.4	NO2-NO3-N (mg/L)	06-Sep-06			0.543	0.526	0.489		
ORM 138.9	NO2-NO3-N (mg/L)	06-Sep-06			0.566	0.543	0.591		
ORM 145.2	NO2-NO3-N (mg/L)	06-Sep-06			0.566	0.522	0.599		
ORM 150.8	NO2-NO3-N (mg/L)	06-Sep-06			0.636	0.572	0.667		
ORM 157.4	NO2-NO3-N (mg/L)	06-Sep-06			0.696	0.732	0.724		
Willow Island	NO2-NO3-N (mg/L)	06-Sep-06	42.9	0.765					
Dashields	NO2-NO3-N (mg/L)	02-Nov-06	77.7					0.595	
ORM 19.3	NO2-NO3-N (mg/L)	02-Nov-06			0.593	0.512	0.566		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 23.2	NO2-NO3-N (mg/L)	02-Nov-06			0.636	0.6	0.611		
ORM 27.6	NO2-NO3-N (mg/L)	02-Nov-06			0.702	0.606	0.61		
Montgomery	NO2-NO3-N (mg/L)	02-Nov-06	89.4					0.616	
Cannelton	NO2-NO3-N (mg/L)	07-Aug-07	31.8	0.738					
ORM 725.0	NO2-NO3-N (mg/L)	07-Aug-07			0.785	0.836	0.839		
ORM 736.7	NO2-NO3-N (mg/L)	07-Aug-07			0.789	0.794	0.731		
ORM 747.3	NO2-NO3-N (mg/L)	07-Aug-07			0.777	0.686	0.65		
ORM 754.9	NO2-NO3-N (mg/L)	07-Aug-07			1.01	0.84	0.806		
ORM 762.3	NO2-NO3-N (mg/L)	08-Aug-07			0.919	0.893	0.826		
ORM 772.0	NO2-NO3-N (mg/L)	08-Aug-07			1.2	1.17	1.16		
Newburgh	NO2-NO3-N (mg/L)	08-Aug-07	52.7	0.988					
Racine	NO2-NO3-N (mg/L)	23-Oct-07	12.1					1.32	
ORM 242.3	NO2-NO3-N (mg/L)	23-Oct-07	0		1.24	1.22	1.18		
ORM 251.2	NO2-NO3-N (mg/L)	23-Oct-07	0		1.19	1.18	1.21		
ORM 260.8	NO2-NO3-N (mg/L)	23-Oct-07	0		1.19	1.18	1.21		
KRM 1.4	NO2-NO3-N (mg/L)	23-Oct-07	0						0.66
ORM 267.5	NO2-NO3-N (mg/L)	23-Oct-07	0		1.04	1.07	1.05		
ORM 273.0	NO2-NO3-N (mg/L)	23-Oct-07	0		1.08	1.08	1.1		
R.C. Byrd	NO2-NO3-N (mg/L)	23-Oct-07	12.1					1.26	
Cannelton	NO2-NO3-N (mg/L)	01-Apr-08	346	0.894					
ORM 724.8	NO2-NO3-N (mg/L)	01-Apr-08	0		0.942	0.892	0.966		
ORM 736.7	NO2-NO3-N (mg/L)	01-Apr-08	0		0.887	0.876	0.912		
ORM 747.3	NO2-NO3-N (mg/L)	01-Apr-08	0		0.902	0.916	0.908		
ORM 754.9	NO2-NO3-N (mg/L)	01-Apr-08	0		0.961	0.888	0.925		
ORM 762.3	NO2-NO3-N (mg/L)	02-Apr-08	0		0.983	1.16	1.03		
ORM 772.0	NO2-NO3-N (mg/L)	02-Apr-08	0		0.904	0.943	0.925		
Newburgh	NO2-NO3-N (mg/L)	02-Apr-08	381.1	0.918					
Racine	NO2-NO3-N (mg/L)	30-Apr-08	0					0.45	
ORM 242.0	NO2-NO3-N (mg/L)	30-Apr-08	0		0.476	0.475	0.458		
ORM 251.2	NO2-NO3-N (mg/L)	30-Apr-08	0		0.485	0.597	0.533		
ORM 260.8	NO2-NO3-N (mg/L)	30-Apr-08	0		0.471	0.485	0.48		
K1.3-2	NO2-NO3-N (mg/L)	30-Apr-08	0						0.427
ORM 267.5	NO2-NO3-N (mg/L)	30-Apr-08	0		0.481	0.52	0.442		
ORM 273.0	NO2-NO3-N (mg/L)	30-Apr-08	0		0.626	0.47	0.527		
R.C. Byrd	NO2-NO3-N (mg/L)	30-Apr-08	107.9					0.447	
Racine	NO2-NO3-N (mg/L)	22-Oct-08	0					1.18	
ORM 242.0	NO2-NO3-N (mg/L)	22-Oct-08	0		1.17	1.14	1.17		
ORM 251.2	NO2-NO3-N (mg/L)	22-Oct-08	0		1.2	1.18	1.14		
ORM 260.8	NO2-NO3-N (mg/L)	22-Oct-08	0		1.23	1.22	1.24		
K1.3-2	NO2-NO3-N (mg/L)	22-Oct-08	0						0.404
ORM 267.5	NO2-NO3-N (mg/L)	22-Oct-08	0		1.08	1.05	<0.02		
ORM 273.0	NO2-NO3-N (mg/L)	22-Oct-08	0		1.11	1.16	1.14		
R.C. Byrd	NO2-NO3-N (mg/L)	22-Oct-08	12.7					1.03	
Smithland	NO2-NO3-N (mg/L)	19-May-09	407.8	1.03					
Cumberland River	NO2-NO3-N (mg/L)	19-May-09	0						0.59
ORM 926.2	NO2-NO3-N (mg/L)	19-May-09	0		0.981	0.703	0.646		
Tennessee River	NO2-NO3-N (mg/L)	19-May-09	0						0.345
ORM 935.6	NO2-NO3-N (mg/L)	19-May-09	0		1.01	0.82	0.5		
L&D 52	NO2-NO3-N (mg/L)	19-May-09	0	1.03					
ORM 950.4	NO2-NO3-N (mg/L)	20-May-09	0		0.945	0.673	0.539		
Olmstead	NO2-NO3-N (mg/L)	20-May-09	0	0.872					
ORM 965.3	NO2-NO3-N (mg/L)	20-May-09	0		0.868	0.623	0.524		
ORN 977.3	NO2-NO3-N (mg/L)	20-May-09	0		0.861	0.702	0.585		
Smithland	NO2-NO3-N (mg/L)	21-Jul-09	59.8	1.06					
Cumberland River	NO2-NO3-N (mg/L)	21-Jul-09	0						<0.02
ORM 926.2	NO2-NO3-N (mg/L)	21-Jul-09	0		1.05	0.84	0.543		
Tennessee River	NO2-NO3-N (mg/L)	21-Jul-09	0						<0.02
ORM 935.6	NO2-NO3-N (mg/L)	21-Jul-09	0		1.03	0.65	0.56		
L&D 52	NO2-NO3-N (mg/L)	21-Jul-09	0	0.953					
ORM 950.4	NO2-NO3-N (mg/L)	22-Jul-09	0		0.64	0.6	0.652		
Olmstead	NO2-NO3-N (mg/L)	22-Jul-09	0	0.839					
ORM 965.3	NO2-NO3-N (mg/L)	22-Jul-09	0		0.833	0.633	0.487		
ORM 977.3	NO2-NO3-N (mg/L)	22-Jul-09	0		0.766	0.534	0.449		
Smithland	NO2-NO3-N (mg/L)	16-Sep-09	33.1	0.676					
Cumberland River	NO2-NO3-N (mg/L)	16-Sep-09	0						<0.02
ORM 926.2	NO2-NO3-N (mg/L)	16-Sep-09	0		0.637	0.45	0.275		
Tennessee River	NO2-NO3-N (mg/L)	16-Sep-09	0						<0.02
ORM 935.6	NO2-NO3-N (mg/L)	16-Sep-09	0		0.571	0.255	0.208		
L&D 52	NO2-NO3-N (mg/L)	16-Sep-09	0	0.445					

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 950.4	NO2-NO3-N (mg/L)	17-Sep-09	0		<0.02	0.393	0.346		
Olmstead	NO2-NO3-N (mg/L)	17-Sep-09	0	0.44					
ORM 965.3	NO2-NO3-N (mg/L)	17-Sep-09	0		0.381	0.357	0.407		
ORN 977.3	NO2-NO3-N (mg/L)	17-Sep-09	0		0.361	0.255	0.404		
Smithland	OP (mg/L)	19-May-09	407.8						
Tennessee River	OP (mg/L)	19-May-09	0						
L&D 52	OP (mg/L)	19-May-09	0						
Dashields	Phenols (ug/L)	03-Aug-05	5.6					<5	
ORM 19.3	Phenols (ug/L)	03-Aug-05			<5	<5	<5		
ORM 23.2	Phenols (ug/L)	03-Aug-05			<5	<5	<5		
ORM 27.6	Phenols (ug/L)	03-Aug-05			<5	<5	<5		
Montgomery	Phenols (ug/L)	03-Aug-05	6.7					<5	
Hannibal	Phenols (ug/L)	01-Sep-05	22.3	<5					
ORM 132.4	Phenols (ug/L)	01-Sep-05			<5	<5	<5		
ORM 138.9	Phenols (ug/L)	01-Sep-05			<5	<5	<5		
ORM 145.2	Phenols (ug/L)	01-Sep-05			<5	<5	<5		
ORM 150.8	Phenols (ug/L)	01-Sep-05			<5	<5	<5		
ORM 157.4	Phenols (ug/L)	01-Sep-05			<5	<5	<5		
Willow Island	Phenols (ug/L)	01-Sep-05	22.6	<5					
Dashields	Phenols (ug/L)	14-Sep-05	5.4					<5	
ORM 19.3	Phenols (ug/L)	14-Sep-05			<5	<5	<5		
ORM 23.2	Phenols (ug/L)	14-Sep-05			<5	<5	<5		
ORM 27.6	Phenols (ug/L)	14-Sep-05			<5	<5	<5		
Montgomery	Phenols (ug/L)	14-Sep-05	5.6					<5	
Hannibal	Phenols (ug/L)	15-Sep-05	5.9	<5					
ORM 132.4	Phenols (ug/L)	15-Sep-05			<5	<5	<5		
ORM 138.9	Phenols (ug/L)	15-Sep-05			R	<5	<5		
ORM 145.2	Phenols (ug/L)	15-Sep-05			<5	<5	<5		
ORM 150.8	Phenols (ug/L)	15-Sep-05			R	<5	<5		
ORM 157.4	Phenols (ug/L)	15-Sep-05			<5	<5	<5		
Willow Island	Phenols (ug/L)	15-Sep-05	11.9	R					
Dashields	Phenols (ug/L)	25-Oct-05	12.3					<5	
ORM 19.3	Phenols (ug/L)	25-Oct-05			<5	<5	<5		
ORM 23.2	Phenols (ug/L)	25-Oct-05			<5	<5	<5		
ORM 27.6	Phenols (ug/L)	25-Oct-05			<5	<5	<5		
Montgomery	Phenols (ug/L)	25-Oct-05	14.5					<5	
Hannibal	Phenols (ug/L)	26-Oct-05	31.9	<5					
ORM 132.4	Phenols (ug/L)	26-Oct-05			<5	<5	<5		
ORM 138.9	Phenols (ug/L)	26-Oct-05			<5	<5	<5		
ORM 145.2	Phenols (ug/L)	26-Oct-05			<5	<5	<5		
ORM 150.8	Phenols (ug/L)	26-Oct-05			<5	<5	<5		
ORM 157.4	Phenols (ug/L)	26-Oct-05			<5	<5	<5		
Willow Island	Phenols (ug/L)	26-Oct-05	52.5	<5					
Cannelton	Phenols (ug/L)	09-May-06	51.9	<5					
ORM 725.0	Phenols (ug/L)	09-May-06			<5	<5	<5		
ORM 736.7	Phenols (ug/L)	09-May-06			<5	<5	<5		
ORM 747.3	Phenols (ug/L)	09-May-06			<5	<5	<5		
ORM 754.9	Phenols (ug/L)	09-May-06			<5	<5	<5		
ORM 762.3	Phenols (ug/L)	10-May-06			<5	<5	<5		
ORM 772.0	Phenols (ug/L)	10-May-06			<5	<5	<5		
Newburgh	Phenols (ug/L)	10-May-06	55.5	<5					
Hannibal	Phenols (ug/L)	06-Sep-06	43.1	<5					
ORM 132.4	Phenols (ug/L)	06-Sep-06			<5	<5	<5		
ORM 138.9	Phenols (ug/L)	06-Sep-06			<5	<5	<5		
ORM 145.2	Phenols (ug/L)	06-Sep-06			<5	<5	<5		
ORM 150.8	Phenols (ug/L)	06-Sep-06			<5	<5	<5		
ORM 157.4	Phenols (ug/L)	06-Sep-06			<5	<5	<5		
Willow Island	Phenols (ug/L)	06-Sep-06	42.9	<5					
Dashields	Phenols (ug/L)	02-Nov-06	77.7					<5	
ORM 19.3	Phenols (ug/L)	02-Nov-06			<5	<5	<5		
ORM 23.2	Phenols (ug/L)	02-Nov-06			<5	6	12.5		
ORM 27.6	Phenols (ug/L)	02-Nov-06			<5	<5	<5		
Montgomery	Phenols (ug/L)	02-Nov-06	89.4					10	
Cannelton	Phenols (ug/L)	07-Aug-07	31.8	<5					
ORM 725.0	Phenols (ug/L)	07-Aug-07			<5	<5	<5		
ORM 736.7	Phenols (ug/L)	07-Aug-07			<5	<5	<5		
ORM 747.3	Phenols (ug/L)	07-Aug-07			<5	<5	<5		
ORM 754.9	Phenols (ug/L)	07-Aug-07			<5	<5	<5		
ORM 762.3	Phenols (ug/L)	08-Aug-07			<5	<5	<5		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 772.0	Phenols (ug/L)	08-Aug-07			<5	<5	<5		
Newburgh	Phenols (ug/L)	08-Aug-07	52.7	<5					
Racine	Phenols (ug/L)	23-Oct-07	12.1					<5	
ORM 242.3	Phenols (ug/L)	23-Oct-07	0		<5	<5	<5		
ORM 251.2	Phenols (ug/L)	23-Oct-07	0		<5	<5	<5		
ORM 260.8	Phenols (ug/L)	23-Oct-07	0		<5	<5	<5		
KRM 1.4	Phenols (ug/L)	23-Oct-07	0						<5
ORM 267.5	Phenols (ug/L)	23-Oct-07	0		<5	<5	<5		
ORM 273.0	Phenols (ug/L)	23-Oct-07	0		<5	<5	<5		
R.C. Byrd	Phenols (ug/L)	23-Oct-07	12.1					<5	
Cannelton	Phenols (ug/L)	01-Apr-08	346	<5					
ORM 724.8	Phenols (ug/L)	01-Apr-08	0		<5	<5	<5		
ORM 736.7	Phenols (ug/L)	01-Apr-08	0		<5	<5	<5		
ORM 747.3	Phenols (ug/L)	01-Apr-08	0		<5	<5	<5		
ORM 754.9	Phenols (ug/L)	01-Apr-08	0		<5	<5	<5		
ORM 762.3	Phenols (ug/L)	02-Apr-08	0		<5	<5	<5		
ORM 772.0	Phenols (ug/L)	02-Apr-08	0		<5	<5	<5		
Newburgh	Phenols (ug/L)	02-Apr-08	381.1	<5					
Racine	Phenols (ug/L)	30-Apr-08	0					<5	
ORM 242.0	Phenols (ug/L)	30-Apr-08	0		<5	<5	<5		
ORM 251.2	Phenols (ug/L)	30-Apr-08	0		<5	<5	<5		
ORM 260.8	Phenols (ug/L)	30-Apr-08	0		<5	<5	<5		
K1.3-2	Phenols (ug/L)	30-Apr-08	0						<5
ORM 267.5	Phenols (ug/L)	30-Apr-08	0		<5	<5	<5		
ORM 273.0	Phenols (ug/L)	30-Apr-08	0		<5	<5	<5		
R.C. Byrd	Phenols (ug/L)	30-Apr-08	107.9					<5	
Racine	Phenols (ug/L)	22-Oct-08	0					<5	
ORM 242.0	Phenols (ug/L)	22-Oct-08	0		<5	<5	<5		
ORM 251.2	Phenols (ug/L)	22-Oct-08	0		<5	<5	<5		
ORM 260.8	Phenols (ug/L)	22-Oct-08	0		<5	<5	<5		
K1.3-2	Phenols (ug/L)	22-Oct-08	0						<5
ORM 267.5	Phenols (ug/L)	22-Oct-08	0		<5	<5	<5		
ORM 273.0	Phenols (ug/L)	22-Oct-08	0		<5	<5	<5		
R.C. Byrd	Phenols (ug/L)	22-Oct-08	12.7					<5	
Smithland	Phenols (ug/L)	19-May-09	407.8	<5					
Cumberland River	Phenols (ug/L)	19-May-09	0						<5
ORM 926.2	Phenols (ug/L)	19-May-09	0		<5	<5	<5		
Tennessee River	Phenols (ug/L)	19-May-09	0						<5
ORM 935.6	Phenols (ug/L)	19-May-09	0		<5	<5	<5		
L&D 52	Phenols (ug/L)	19-May-09	0	<5					
ORM 950.4	Phenols (ug/L)	20-May-09	0		<5	<5	<5		
Olmstead	Phenols (ug/L)	20-May-09	0	<5					
ORM 965.3	Phenols (ug/L)	20-May-09	0		<5	<5	<5		
ORN 977.3	Phenols (ug/L)	20-May-09	0		<5	<5	<5		
Smithland	Phenols (ug/L)	21-Jul-09	59.8	<5					
Cumberland River	Phenols (ug/L)	21-Jul-09	0						<5
ORM 926.2	Phenols (ug/L)	21-Jul-09	0		<5	<5	<5		
Tennessee River	Phenols (ug/L)	21-Jul-09	0						<5
ORM 935.6	Phenols (ug/L)	21-Jul-09	0		<5	<5	<5		
L&D 52	Phenols (ug/L)	21-Jul-09	0	<5					
ORM 950.4	Phenols (ug/L)	22-Jul-09	0		<5	<5	<5		
Olmstead	Phenols (ug/L)	22-Jul-09	0	<5					
ORM 965.3	Phenols (ug/L)	22-Jul-09	0		<5	<5	<5		
ORM 977.3	Phenols (ug/L)	22-Jul-09	0		<5	<5	<5		
Smithland	Phenols (ug/L)	16-Sep-09	33.1	<5					
Cumberland River	Phenols (ug/L)	16-Sep-09	0						<5
ORM 926.2	Phenols (ug/L)	16-Sep-09	0		<5	<5	<5		
Tennessee River	Phenols (ug/L)	16-Sep-09	0						<5
ORM 935.6	Phenols (ug/L)	16-Sep-09	0		<5	<5	<5		
L&D 52	Phenols (ug/L)	16-Sep-09	0	<5					
ORM 950.4	Phenols (ug/L)	17-Sep-09	0		<5	<5	<5		
Olmstead	Phenols (ug/L)	17-Sep-09	0	<5					
ORM 965.3	Phenols (ug/L)	17-Sep-09	0		<5	<5	<5		
ORN 977.3	Phenols (ug/L)	17-Sep-09	0		<5	<5	<5		
Dashields	SO4 (mg/L)	03-Aug-05	5.6					95	
ORM 19.3	SO4 (mg/L)	03-Aug-05			120	140	130		
ORM 23.2	SO4 (mg/L)	03-Aug-05			110	120	120		
ORM 27.6	SO4 (mg/L)	03-Aug-05			95	95	95		
Montgomery	SO4 (mg/L)	03-Aug-05	6.7					100	

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	SO4 (mg/L)	01-Sep-05	22.3	130					
ORM 132.4	SO4 (mg/L)	01-Sep-05			125	125	130		
ORM 138.9	SO4 (mg/L)	01-Sep-05			130	130	145		
ORM 145.2	SO4 (mg/L)	01-Sep-05			135	125	135		
ORM 150.8	SO4 (mg/L)	01-Sep-05			135	150	145		
ORM 157.4	SO4 (mg/L)	01-Sep-05			120	125	120		
Willow Island	SO4 (mg/L)	01-Sep-05	22.6	130					
Dashields	SO4 (mg/L)	14-Sep-05	5.4					110	
ORM 19.3	SO4 (mg/L)	14-Sep-05			105	90	110		
ORM 23.2	SO4 (mg/L)	14-Sep-05			85	100	85		
ORM 27.6	SO4 (mg/L)	14-Sep-05			100	105	90		
Montgomery	SO4 (mg/L)	14-Sep-05	5.6					90	
Hannibal	SO4 (mg/L)	15-Sep-05	5.9	155					
ORM 132.4	SO4 (mg/L)	15-Sep-05			160	100	100		
ORM 138.9	SO4 (mg/L)	15-Sep-05			165	170	160		
ORM 145.2	SO4 (mg/L)	15-Sep-05			150	140	150		
ORM 150.8	SO4 (mg/L)	15-Sep-05			145	150	160		
ORM 157.4	SO4 (mg/L)	15-Sep-05			145	160	135		
Willow Island	SO4 (mg/L)	15-Sep-05	11.9	100					
Dashields	SO4 (mg/L)	25-Oct-05	12.3					135	
ORM 19.3	SO4 (mg/L)	25-Oct-05			135	135	135		
ORM 23.2	SO4 (mg/L)	25-Oct-05			135	135	130		
ORM 27.6	SO4 (mg/L)	25-Oct-05			130	130	125		
Montgomery	SO4 (mg/L)	25-Oct-05	14.5					125	
Hannibal	SO4 (mg/L)	26-Oct-05	31.9	115					
ORM 132.4	SO4 (mg/L)	26-Oct-05			120	120	115		
ORM 138.9	SO4 (mg/L)	26-Oct-05				115	115		
ORM 145.2	SO4 (mg/L)	26-Oct-05			125	125	125		
ORM 150.8	SO4 (mg/L)	26-Oct-05			125	125	130		
ORM 157.4	SO4 (mg/L)	26-Oct-05			115	125	125		
Willow Island	SO4 (mg/L)	26-Oct-05	52.5	120					
Cannelton	SO4 (mg/L)	09-May-06	51.9	64					
ORM 725.0	SO4 (mg/L)	09-May-06			62	60	62		
ORM 736.7	SO4 (mg/L)	09-May-06			64	64	60		
ORM 747.3	SO4 (mg/L)	09-May-06			64	64	64		
ORM 754.9	SO4 (mg/L)	09-May-06			64	66	62		
ORM 762.3	SO4 (mg/L)	10-May-06			64	66	64		
ORM 772.0	SO4 (mg/L)	10-May-06			64	64	62		
Newburgh	SO4 (mg/L)	10-May-06	55.5	74					
Hannibal	SO4 (mg/L)	06-Sep-06	43.1	76					
ORM 132.4	SO4 (mg/L)	06-Sep-06			74	72	72		
ORM 138.9	SO4 (mg/L)	06-Sep-06			78	74	78		
ORM 145.2	SO4 (mg/L)	06-Sep-06			82	78	84		
ORM 150.8	SO4 (mg/L)	06-Sep-06			88	84	86		
ORM 157.4	SO4 (mg/L)	06-Sep-06			88	88	88		
Willow Island	SO4 (mg/L)	06-Sep-06	42.9	88					
Dashields	SO4 (mg/L)	02-Nov-06	77.7					54	
ORM 19.3	SO4 (mg/L)	02-Nov-06			38	42	50		
ORM 23.2	SO4 (mg/L)	02-Nov-06			40	42	48		
ORM 27.6	SO4 (mg/L)	02-Nov-06			42	48	54		
Montgomery	SO4 (mg/L)	02-Nov-06	89.4					50	
Cannelton	SO4 (mg/L)	07-Aug-07	31.8	102					
ORM 725.0	SO4 (mg/L)	07-Aug-07			100	106	98		
ORM 736.7	SO4 (mg/L)	07-Aug-07			104	86	102		
ORM 747.3	SO4 (mg/L)	07-Aug-07			94	86	96		
ORM 754.9	SO4 (mg/L)	07-Aug-07			102	90	86		
ORM 762.3	SO4 (mg/L)	08-Aug-07			84	110	86		
ORM 772.0	SO4 (mg/L)	08-Aug-07			88	94	86		
Newburgh	SO4 (mg/L)	08-Aug-07	52.7	88					
Racine	SO4 (mg/L)	23-Oct-07	12.1					110	
ORM 242.3	SO4 (mg/L)	23-Oct-07	0		108	104	106		
ORM 251.2	SO4 (mg/L)	23-Oct-07	0		104	110	106		
ORM 260.8	SO4 (mg/L)	23-Oct-07	0		106	100	108		
KRM 1.4	SO4 (mg/L)	23-Oct-07	0						54
ORM 267.5	SO4 (mg/L)	23-Oct-07	0		84	82	90		
ORM 273.0	SO4 (mg/L)	23-Oct-07	0		92	90	80		
R.C. Byrd	SO4 (mg/L)	23-Oct-07	12.1					92	
Cannelton	SO4 (mg/L)	01-Apr-08	346	39					
ORM 724.8	SO4 (mg/L)	01-Apr-08	0		42	44	42		

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 736.7	SO4 (mg/L)	01-Apr-08	0		42	44	42		
ORM 747.3	SO4 (mg/L)	01-Apr-08	0		43	43	42		
ORM 754.9	SO4 (mg/L)	01-Apr-08	0		42	43	43		
ORM 762.3	SO4 (mg/L)	02-Apr-08	0		44	41	43		
ORM 772.0	SO4 (mg/L)	02-Apr-08	0		41	41	43		
Newburgh	SO4 (mg/L)	02-Apr-08	381.1	42					
Racine	SO4 (mg/L)	30-Apr-08	0					90	
ORM 242.0	SO4 (mg/L)	30-Apr-08	0		92	96	88		
ORM 251.2	SO4 (mg/L)	30-Apr-08	0		102	100	96		
ORM 260.8	SO4 (mg/L)	30-Apr-08	0		96	98	94		
K1.3-2	SO4 (mg/L)	30-Apr-08	0						46
ORM 267.5	SO4 (mg/L)	30-Apr-08	0		110	84	42		
ORM 273.0	SO4 (mg/L)	30-Apr-08	0		80	62	92		
R.C. Byrd	SO4 (mg/L)	30-Apr-08	107.9					62	
Racine	SO4 (mg/L)	22-Oct-08	0					104	
ORM 242.0	SO4 (mg/L)	22-Oct-08	0		108	100	106		
ORM 251.2	SO4 (mg/L)	22-Oct-08	0		112	100	108		
ORM 260.8	SO4 (mg/L)	22-Oct-08	0		108	116	114		
K1.3-2	SO4 (mg/L)	22-Oct-08	0						48
ORM 267.5	SO4 (mg/L)	22-Oct-08	0		100	110	106		
ORM 273.0	SO4 (mg/L)	22-Oct-08	0		108	102	106		
R.C. Byrd	SO4 (mg/L)	22-Oct-08	12.7					90	
Smithland	SO4 (mg/L)	19-May-09	407.8	62					
Cumberland River	SO4 (mg/L)	19-May-09	0						18
ORM 926.2	SO4 (mg/L)	19-May-09	0		52	44	30		
Tennessee River	SO4 (mg/L)	19-May-09	0						14
ORM 935.6	SO4 (mg/L)	19-May-09	0		40	50	28		
L&D 52	SO4 (mg/L)	19-May-09	0	52					
ORM 950.4	SO4 (mg/L)	20-May-09	0		52	26	36		
Olmstead	SO4 (mg/L)	20-May-09	0	46					
ORM 965.3	SO4 (mg/L)	20-May-09	0		42	32	32		
ORN 977.3	SO4 (mg/L)	20-May-09	0		38	42	34		
Smithland	SO4 (mg/L)	21-Jul-09	59.8	82					
Cumberland River	SO4 (mg/L)	21-Jul-09	0						28
ORM 926.2	SO4 (mg/L)	21-Jul-09	0		62	60	46		
Tennessee River	SO4 (mg/L)	21-Jul-09	0						16
ORM 935.6	SO4 (mg/L)	21-Jul-09	0		76	46	48		
L&D 52	SO4 (mg/L)	21-Jul-09	0	70					
ORM 950.4	SO4 (mg/L)	22-Jul-09	0		58	36	44		
Olmstead	SO4 (mg/L)	22-Jul-09	0	42					
ORM 965.3	SO4 (mg/L)	22-Jul-09	0		66	64	50		
ORM 977.3	SO4 (mg/L)	22-Jul-09	0		68	50	50		
Smithland	SO4 (mg/L)	16-Sep-09	33.1	67					
Cumberland River	SO4 (mg/L)	16-Sep-09	0						20
ORM 926.2	SO4 (mg/L)	16-Sep-09	0		66	50	36		
Tennessee River	SO4 (mg/L)	16-Sep-09	0						17
ORM 935.6	SO4 (mg/L)	16-Sep-09	0		58	34	28		
L&D 52	SO4 (mg/L)	16-Sep-09	0	50					
ORM 950.4	SO4 (mg/L)	17-Sep-09	0		46	40	44		
Olmstead	SO4 (mg/L)	17-Sep-09	0	48					
ORM 965.3	SO4 (mg/L)	17-Sep-09	0		44	46	42		
ORN 977.3	SO4 (mg/L)	17-Sep-09	0		44	42	42		
Dashields	TKN (mg/L)	03-Aug-05	5.6					1.22	
ORM 19.3	TKN (mg/L)	03-Aug-05			1.18	1.29	1.23		
ORM 23.2	TKN (mg/L)	03-Aug-05			1.23	1.28	1.1		
ORM 27.6	TKN (mg/L)	03-Aug-05			1.24	1.25	1.87		
Montgomery	TKN (mg/L)	03-Aug-05	6.7					1.29	
Hannibal	TKN (mg/L)	01-Sep-05	22.3	0.374					
ORM 132.4	TKN (mg/L)	01-Sep-05			0.298	0.326	0.299		
ORM 138.9	TKN (mg/L)	01-Sep-05			0.259	0.323	0.361		
ORM 145.2	TKN (mg/L)	01-Sep-05			0.365	0.281	0.296		
ORM 150.8	TKN (mg/L)	01-Sep-05			0.215	0.345	<0.2		
ORM 157.4	TKN (mg/L)	01-Sep-05			0.302	0.21	0.231		
Willow Island	TKN (mg/L)	01-Sep-05	22.6	0.355					
Dashields	TKN (mg/L)	14-Sep-05	5.4					0.94	
ORM 19.3	TKN (mg/L)	14-Sep-05			0.776	0.718	0.762		
ORM 23.2	TKN (mg/L)	14-Sep-05			0.805	0.78	0.819		
ORM 27.6	TKN (mg/L)	14-Sep-05			1.04	<0.2	0.838		
Montgomery	TKN (mg/L)	14-Sep-05	5.6					0.839	

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SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	TKN (mg/L)	15-Sep-05	5.9	0.655					
ORM 132.4	TKN (mg/L)	15-Sep-05			0.778	0.743	0.752		
ORM 138.9	TKN (mg/L)	15-Sep-05			0.72	0.799	0.664		
ORM 145.2	TKN (mg/L)	15-Sep-05			0.746	0.665	0.762		
ORM 150.8	TKN (mg/L)	15-Sep-05			0.818	0.546	0.764		
ORM 157.4	TKN (mg/L)	15-Sep-05			0.689	0.664	0.697		
Willow Island	TKN (mg/L)	15-Sep-05	11.9	0.43					
Dashields	TKN (mg/L)	25-Oct-05	12.3					0.603	
ORM 19.3	TKN (mg/L)	25-Oct-05			0.797	1.3	0.701		
ORM 23.2	TKN (mg/L)	25-Oct-05			0.696	0.682	0.777		
ORM 27.6	TKN (mg/L)	25-Oct-05			0.692	0.698	0.745		
Montgomery	TKN (mg/L)	25-Oct-05	14.5					0.718	
Hannibal	TKN (mg/L)	26-Oct-05	31.9	0.662					
ORM 132.4	TKN (mg/L)	26-Oct-05			0.939	0.87	0.699		
ORM 138.9	TKN (mg/L)	26-Oct-05			0.756	0.711	0.714		
ORM 145.2	TKN (mg/L)	26-Oct-05			0.44	0.469	0.73		
ORM 150.8	TKN (mg/L)	26-Oct-05			0.328	0.361	0.298		
ORM 157.4	TKN (mg/L)	26-Oct-05			0.289	0.511	0.484		
Willow Island	TKN (mg/L)	26-Oct-05	52.5	0.766					
Cannelton	TKN (mg/L)	09-May-06	51.9	0.273					
ORM 725.0	TKN (mg/L)	09-May-06			0.269	0.278	0.256		
ORM 736.7	TKN (mg/L)	09-May-06			0.428	0.31	0.265		
ORM 747.3	TKN (mg/L)	09-May-06			<0.2	0.205	0.295		
ORM 754.9	TKN (mg/L)	09-May-06			0.236	0.276	0.215		
ORM 762.3	TKN (mg/L)	10-May-06			0.323	0.293	0.312		
ORM 772.0	TKN (mg/L)	10-May-06			0.26	0.2	0.24		
Newburgh	TKN (mg/L)	10-May-06	55.5	0.231					
Hannibal	TKN (mg/L)	06-Sep-06	43.1	0.471					
ORM 132.4	TKN (mg/L)	06-Sep-06			0.555	0.541	0.517		
ORM 138.9	TKN (mg/L)	06-Sep-06			0.509	0.504	0.45		
ORM 145.2	TKN (mg/L)	06-Sep-06			0.409	0.478	0.484		
ORM 150.8	TKN (mg/L)	06-Sep-06			0.463	0.486	0.48		
ORM 157.4	TKN (mg/L)	06-Sep-06			0.441	0.439	0.578		
Willow Island	TKN (mg/L)	06-Sep-06	42.9	0.546					
Dashields	TKN (mg/L)	02-Nov-06	77.7					0.48	
ORM 19.3	TKN (mg/L)	02-Nov-06			0.605	0.566	0.675		
ORM 23.2	TKN (mg/L)	02-Nov-06			0.63	0.529	0.622		
ORM 27.6	TKN (mg/L)	02-Nov-06			0.559	0.578	0.571		
Montgomery	TKN (mg/L)	02-Nov-06	89.4					0.58	
Cannelton	TKN (mg/L)	07-Aug-07	31.8	0.714					
ORM 725.0	TKN (mg/L)	07-Aug-07			0.599	0.645	0.653		
ORM 736.7	TKN (mg/L)	07-Aug-07			0.612	0.809	0.648		
ORM 747.3	TKN (mg/L)	07-Aug-07			0.509	0.486	0.583		
ORM 754.9	TKN (mg/L)	07-Aug-07			0.435	0.59	0.63		
ORM 762.3	TKN (mg/L)	08-Aug-07			0.37	0.651	0.472		
ORM 772.0	TKN (mg/L)	08-Aug-07			0.542	0.534	0.5		
Newburgh	TKN (mg/L)	08-Aug-07	52.7	0.49					
Racine	TKN (mg/L)	23-Oct-07	12.1					0.321	
ORM 242.3	TKN (mg/L)	23-Oct-07	0		0.469	0.426	0.44		
ORM 251.2	TKN (mg/L)	23-Oct-07	0		0.488	0.457	0.423		
ORM 260.8	TKN (mg/L)	23-Oct-07	0		0.434	0.445	0.603		
KRM 1.4	TKN (mg/L)	23-Oct-07	0						0.54
ORM 267.5	TKN (mg/L)	23-Oct-07	0		0.444	0.508	0.504		
ORM 273.0	TKN (mg/L)	23-Oct-07	0		0.615	0.48	0.501		
R.C. Byrd	TKN (mg/L)	23-Oct-07	12.1					0.429	
Cannelton	TKN (mg/L)	01-Apr-08	346	0.893					
ORM 724.8	TKN (mg/L)	01-Apr-08	0		0.789	0.994	0.897		
ORM 736.7	TKN (mg/L)	01-Apr-08	0		0.912	0.854	0.927		
ORM 747.3	TKN (mg/L)	01-Apr-08	0		1.04	1.12	0.954		
ORM 754.9	TKN (mg/L)	01-Apr-08	0		0.858	0.802	0.823		
ORM 762.3	TKN (mg/L)	02-Apr-08	0		0.782	0.923	0.794		
ORM 772.0	TKN (mg/L)	02-Apr-08	0		0.918	1.18	0.974		
Newburgh	TKN (mg/L)	02-Apr-08	381.1	1.02					
Racine	TKN (mg/L)	30-Apr-08	0					0.582	
ORM 242.0	TKN (mg/L)	30-Apr-08	0		0.572	0.585	0.565		
ORM 251.2	TKN (mg/L)	30-Apr-08	0		0.622	0.506	0.829		
ORM 260.8	TKN (mg/L)	30-Apr-08	0		0.613	0.542	0.578		
K1.3-2	TKN (mg/L)	30-Apr-08	0						0.53
ORM 267.5	TKN (mg/L)	30-Apr-08	0		0.517	0.53	0.642		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 273.0	TKN (mg/L)	30-Apr-08	0		0.638	0.735	0.544		
R.C. Byrd	TKN (mg/L)	30-Apr-08	107.9					0.692	
Racine	TKN (mg/L)	22-Oct-08	0					0.428	
ORM 242.0	TKN (mg/L)	22-Oct-08	0		0.307	0.332	0.414		
ORM 251.2	TKN (mg/L)	22-Oct-08	0		0.237	0.346	0.33		
ORM 260.8	TKN (mg/L)	22-Oct-08	0		0.398	0.33	0.342		
K1.3-2	TKN (mg/L)	22-Oct-08	0						0.542
ORM 267.5	TKN (mg/L)	22-Oct-08	0		0.404	0.434			
ORM 273.0	TKN (mg/L)	22-Oct-08	0		0.313	0.353	0.273		
R.C. Byrd	TKN (mg/L)	22-Oct-08	12.7					0.563	
Smithland	TKN (mg/L)	19-May-09	407.8	0.775					
Cumberland River	TKN (mg/L)	19-May-09	0						0.662
ORM 926.2	TKN (mg/L)	19-May-09	0		1.03	0.815	0.614		
Tennessee River	TKN (mg/L)	19-May-09	0						0.557
ORM 935.6	TKN (mg/L)	19-May-09	0		0.847	0.848	0.659		
L&D 52	TKN (mg/L)	19-May-09	0	0.76					
ORM 950.4	TKN (mg/L)	20-May-09	0		0.825	0.699	0.634		
Olmstead	TKN (mg/L)	20-May-09	0	0.809					
ORM 965.3	TKN (mg/L)	20-May-09	0		0.669	0.699	0.66		
ORN 977.3	TKN (mg/L)	20-May-09	0		0.788	0.747	0.659		
Smithland	TKN (mg/L)	21-Jul-09	59.8	0.699					
Cumberland River	TKN (mg/L)	21-Jul-09	0						0.71
ORM 926.2	TKN (mg/L)	21-Jul-09	0		0.643	0.704	0.743		
Tennessee River	TKN (mg/L)	21-Jul-09	0						0.54
ORM 935.6	TKN (mg/L)	21-Jul-09	0		0.638	0.99	0.687		
L&D 52	TKN (mg/L)	21-Jul-09	0	0.711					
ORM 950.4	TKN (mg/L)	22-Jul-09	0		0.655	1.26	0.732		
Olmstead	TKN (mg/L)	22-Jul-09	0	0.828					
ORM 965.3	TKN (mg/L)	22-Jul-09	0		0.564	0.599	0.672		
ORM 977.3	TKN (mg/L)	22-Jul-09	0		0.57	0.708	0.732		
Smithland	TKN (mg/L)	16-Sep-09	33.1	0.682					
Cumberland River	TKN (mg/L)	16-Sep-09	0						0.928
ORM 926.2	TKN (mg/L)	16-Sep-09	0		0.659	0.903	0.686		
Tennessee River	TKN (mg/L)	16-Sep-09	0						0.508
ORM 935.6	TKN (mg/L)	16-Sep-09	0		0.678	0.567	0.529		
L&D 52	TKN (mg/L)	16-Sep-09	0	0.632					
ORM 950.4	TKN (mg/L)	17-Sep-09	0		0.655	0.688	0.774		
Olmstead	TKN (mg/L)	17-Sep-09	0	0.688					
ORM 965.3	TKN (mg/L)	17-Sep-09	0		0.684	0.711	0.718		
ORN 977.3	TKN (mg/L)	17-Sep-09	0		0.577	0.735	0.815		
Dashields	TOC (mg/L)	03-Aug-05	5.6					6.88	
ORM 19.3	TOC (mg/L)	03-Aug-05			6.98	7.31	7.61		
ORM 23.2	TOC (mg/L)	03-Aug-05			7.45	7.47	7.75		
ORM 27.6	TOC (mg/L)	03-Aug-05			8.51	8.59	8.49		
Montgomery	TOC (mg/L)	03-Aug-05	6.7					8.49	
Hannibal	TOC (mg/L)	01-Sep-05	22.3	8.36					
ORM 132.4	TOC (mg/L)	01-Sep-05			7.42	7.59	8.47		
ORM 138.9	TOC (mg/L)	01-Sep-05			6.9	7.31	7.53		
ORM 145.2	TOC (mg/L)	01-Sep-05			7.02	7.57	7.22		
ORM 150.8	TOC (mg/L)	01-Sep-05			7	6.81	6.69		
ORM 157.4	TOC (mg/L)	01-Sep-05			7.67	7.28	6.86		
Willow Island	TOC (mg/L)	01-Sep-05	22.6	8.12					
Dashields	TOC (mg/L)	14-Sep-05	5.4					2.93	
ORM 19.3	TOC (mg/L)	14-Sep-05			2.43	2.49	2.66		
ORM 23.2	TOC (mg/L)	14-Sep-05			2.61	2.58	2.42		
ORM 27.6	TOC (mg/L)	14-Sep-05			3.6	3.21	2.88		
Montgomery	TOC (mg/L)	14-Sep-05	5.6					3.03	
Hannibal	TOC (mg/L)	15-Sep-05	5.9	2.6					
ORM 132.4	TOC (mg/L)	15-Sep-05			2.32	2.8	2.55		
ORM 138.9	TOC (mg/L)	15-Sep-05			2.86	2.97	2.32		
ORM 145.2	TOC (mg/L)	15-Sep-05			2.95	2.77	3.01		
ORM 150.8	TOC (mg/L)	15-Sep-05			2.95	2.84	3.05		
ORM 157.4	TOC (mg/L)	15-Sep-05			3.22	2.74	2.84		
Willow Island	TOC (mg/L)	15-Sep-05	11.9	3.33					
Dashields	TOC (mg/L)	25-Oct-05	12.3					3.57	
ORM 19.3	TOC (mg/L)	25-Oct-05			3.33	3.22	3.39		
ORM 23.2	TOC (mg/L)	25-Oct-05			3.62	3.64	3.61		
ORM 27.6	TOC (mg/L)	25-Oct-05			3.7	3.55	3.73		
Montgomery	TOC (mg/L)	25-Oct-05	14.5					3.72	

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
Hannibal	TOC (mg/L)	26-Oct-05	31.9	2.9					
ORM 132.4	TOC (mg/L)	26-Oct-05			3.07	3.11	3.03		
ORM 138.9	TOC (mg/L)	26-Oct-05			2.9	2.85	2.76		
ORM 145.2	TOC (mg/L)	26-Oct-05			2.81	3	2.87		
ORM 150.8	TOC (mg/L)	26-Oct-05			2.98	2.76	2.92		
ORM 157.4	TOC (mg/L)	26-Oct-05			3.42	3.33	3.19		
Willow Island	TOC (mg/L)	26-Oct-05	52.5	3.28					
Cannelton	TOC (mg/L)	09-May-06	51.9	2.86					
ORM 725.0	TOC (mg/L)	09-May-06			2.81	2.57	2.91		
ORM 736.7	TOC (mg/L)	09-May-06			2.9	2.64	2.72		
ORM 747.3	TOC (mg/L)	09-May-06			2.46	2.51	2.85		
ORM 754.9	TOC (mg/L)	09-May-06			2.33	2.4	2.43		
ORM 762.3	TOC (mg/L)	10-May-06			2.38	2.14	2.4		
ORM 772.0	TOC (mg/L)	10-May-06			2.5	2.2	2.36		
Newburgh	TOC (mg/L)	10-May-06	55.5	2.5					
Hannibal	TOC (mg/L)	06-Sep-06	43.1	2.41					
ORM 132.4	TOC (mg/L)	06-Sep-06			2.92	3.02	3.23		
ORM 138.9	TOC (mg/L)	06-Sep-06			2.75	2.88	2.57		
ORM 145.2	TOC (mg/L)	06-Sep-06			2.67	2.97	3.01		
ORM 150.8	TOC (mg/L)	06-Sep-06			2.8	2.92	2.95		
ORM 157.4	TOC (mg/L)	06-Sep-06			2.96	2.78	2.81		
Willow Island	TOC (mg/L)	06-Sep-06	42.9	2.72					
Dashields	TOC (mg/L)	02-Nov-06	77.7					2.73	
ORM 19.3	TOC (mg/L)	02-Nov-06			2.96	2.93	2.8		
ORM 23.2	TOC (mg/L)	02-Nov-06			2.88	3.07	3		
ORM 27.6	TOC (mg/L)	02-Nov-06			3.57	2.92	2.77		
Montgomery	TOC (mg/L)	02-Nov-06	89.4					3.06	
Cannelton	TOC (mg/L)	07-Aug-07	31.8	3.14					
ORM 725.0	TOC (mg/L)	07-Aug-07			3.25	3.73	3.46		
ORM 736.7	TOC (mg/L)	07-Aug-07			3.46	3.57	3.59		
ORM 747.3	TOC (mg/L)	07-Aug-07			3.3	3.51	3.52		
ORM 754.9	TOC (mg/L)	07-Aug-07			3.73	3.87	3.6		
ORM 762.3	TOC (mg/L)	08-Aug-07			3.56	3.14	3.61		
ORM 772.0	TOC (mg/L)	08-Aug-07			3.83	3.49	3.36		
Newburgh	TOC (mg/L)	08-Aug-07	52.7	3.53					
Racine	TOC (mg/L)	23-Oct-07	12.1					3.22	
ORM 242.3	TOC (mg/L)	23-Oct-07	0		3.56	3.2	3.41		
ORM 251.2	TOC (mg/L)	23-Oct-07	0		3.27	3.4	3.4		
ORM 260.8	TOC (mg/L)	23-Oct-07	0		3.11	3.33	3.33		
KRM 1.4	TOC (mg/L)	23-Oct-07	0						2.21
ORM 267.5	TOC (mg/L)	23-Oct-07	0		3.1	3.23	3.4		
ORM 273.0	TOC (mg/L)	23-Oct-07	0		3.14	3.05	3.15		
R.C. Byrd	TOC (mg/L)	23-Oct-07	12.1					3.36	
Cannelton	TOC (mg/L)	01-Apr-08	346	5.13					
ORM 724.8	TOC (mg/L)	01-Apr-08	0		5.26	5.62	4.7		
ORM 736.7	TOC (mg/L)	01-Apr-08	0		5.21	3.66	6.2		
ORM 747.3	TOC (mg/L)	01-Apr-08	0		5.13	4.39	5.06		
ORM 754.9	TOC (mg/L)	01-Apr-08	0		5.76	5.18	6.1		
ORM 762.3	TOC (mg/L)	02-Apr-08	0		5.55	5.5	5.57		
ORM 772.0	TOC (mg/L)	02-Apr-08	0		4.03	5.77	4.8		
Newburgh	TOC (mg/L)	02-Apr-08	381.1	5.08					
Racine	TOC (mg/L)	30-Apr-08	0					2.62	
ORM 242.0	TOC (mg/L)	30-Apr-08	0		2.87	2.74	3.21		
ORM 251.2	TOC (mg/L)	30-Apr-08	0		2.74	2.9	3.3		
ORM 260.8	TOC (mg/L)	30-Apr-08	0		2.71	2.76	2.61		
K1.3-2	TOC (mg/L)	30-Apr-08	0						2
ORM 267.5	TOC (mg/L)	30-Apr-08	0		2.72	2.49	1.86		
ORM 273.0	TOC (mg/L)	30-Apr-08	0		2.32	2.22	2.5		
R.C. Byrd	TOC (mg/L)	30-Apr-08	107.9					2.62	
Racine	TOC (mg/L)	22-Oct-08	0					2.88	
ORM 242.0	TOC (mg/L)	22-Oct-08	0		3.19	3.2	3.58		
ORM 251.2	TOC (mg/L)	22-Oct-08	0		3.09	3.09	3.21		
ORM 260.8	TOC (mg/L)	22-Oct-08	0		3.03	3.18	3.07		
K1.3-2	TOC (mg/L)	22-Oct-08	0						2.02
ORM 267.5	TOC (mg/L)	22-Oct-08	0		2.69	2.73	2.68		
ORM 273.0	TOC (mg/L)	22-Oct-08	0		2.9	2.83	3.06		
R.C. Byrd	TOC (mg/L)	22-Oct-08	12.7					2.47	
Smithland	TOC (mg/L)	19-May-09	407.8	6.6					
Cumberland River	TOC (mg/L)	19-May-09	0						4.07

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 926.2	TOC (mg/L)	19-May-09	0		7.92	5.88	4.51		
Tennessee River	TOC (mg/L)	19-May-09	0						3.82
ORM 935.6	TOC (mg/L)	19-May-09	0		6.93	6.57	4.09		
L&D 52	TOC (mg/L)	19-May-09	0	5.85					
ORM 950.4	TOC (mg/L)	20-May-09	0		6.97	5.6	4.52		
Olmstead	TOC (mg/L)	20-May-09	0	5.98					
ORM 965.3	TOC (mg/L)	20-May-09	0		6.16	5.27	4.14		
ORN 977.3	TOC (mg/L)	20-May-09	0		6.41	5.95	4.74		
Smithland	TOC (mg/L)	21-Jul-09	59.8	3.33					
Cumberland River	TOC (mg/L)	21-Jul-09	0						3.24
ORM 926.2	TOC (mg/L)	21-Jul-09	0		3.66	3.78	3.8		
Tennessee River	TOC (mg/L)	21-Jul-09	0						2.62
ORM 935.6	TOC (mg/L)	21-Jul-09	0		3.67	3.13	3.44		
L&D 52	TOC (mg/L)	21-Jul-09	0	3.58					
ORM 950.4	TOC (mg/L)	22-Jul-09	0		3.11	3.46	3.79		
Olmstead	TOC (mg/L)	22-Jul-09	0	3.24					
ORM 965.3	TOC (mg/L)	22-Jul-09	0		3.08	3.28	3.2		
ORM 977.3	TOC (mg/L)	22-Jul-09	0		3.34	3.43	3.13		
Smithland	TOC (mg/L)	16-Sep-09	33.1	3.96					
Cumberland River	TOC (mg/L)	16-Sep-09	0						3.18
ORM 926.2	TOC (mg/L)	16-Sep-09	0		4.28	4.04	3.88		
Tennessee River	TOC (mg/L)	16-Sep-09	0						4.3
ORM 935.6	TOC (mg/L)	16-Sep-09	0		4.03	3.52	3.73		
L&D 52	TOC (mg/L)	16-Sep-09	0	3.79					
ORM 950.4	TOC (mg/L)	17-Sep-09	0		3.77	3.61	4.2		
Olmstead	TOC (mg/L)	17-Sep-09	0	3.59					
ORM 965.3	TOC (mg/L)	17-Sep-09	0		3.89	3.88	3.93		
ORN 977.3	TOC (mg/L)	17-Sep-09	0		3.81	4.09	4.54		
Dashields	TP (mg/L)	03-Aug-05	5.6					0.015	
ORM 19.3	TP (mg/L)	03-Aug-05			0.012	0.034	0.02		
ORM 23.2	TP (mg/L)	03-Aug-05			0.018	0.023	0.02		
ORM 27.6	TP (mg/L)	03-Aug-05			0.022	0.022	0.022		
Montgomery	TP (mg/L)	03-Aug-05	6.7					0.014	
Hannibal	TP (mg/L)	01-Sep-05	22.3	0.077					
ORM 132.4	TP (mg/L)	01-Sep-05			0.098	0.073	0.08		
ORM 138.9	TP (mg/L)	01-Sep-05			0.069	0.057	0.048		
ORM 145.2	TP (mg/L)	01-Sep-05			0.1	0.045	0.401		
ORM 150.8	TP (mg/L)	01-Sep-05			0.037	0.053	0.057		
ORM 157.4	TP (mg/L)	01-Sep-05			0.023	0.11	0.276		
Willow Island	TP (mg/L)	01-Sep-05	22.6	0.029					
Dashields	TP (mg/L)	14-Sep-05	5.4					0.031	
ORM 19.3	TP (mg/L)	14-Sep-05			0.023	0.023	0.019		
ORM 23.2	TP (mg/L)	14-Sep-05			0.03	0.025	0.032		
ORM 27.6	TP (mg/L)	14-Sep-05			0.055	0.043	0.102		
Montgomery	TP (mg/L)	14-Sep-05	5.6					0.054	
Hannibal	TP (mg/L)	15-Sep-05	5.9	0.033					
ORM 132.4	TP (mg/L)	15-Sep-05			0.061	0.03	0.022		
ORM 138.9	TP (mg/L)	15-Sep-05			R	0.143	0.147		
ORM 145.2	TP (mg/L)	15-Sep-05			0.052	R	R		
ORM 150.8	TP (mg/L)	15-Sep-05					0.057		
ORM 157.4	TP (mg/L)	15-Sep-05							
Willow Island	TP (mg/L)	15-Sep-05	11.9	0.04					
Dashields	TP (mg/L)	25-Oct-05	12.3					0.092	
ORM 19.3	TP (mg/L)	25-Oct-05			0.13	0.112	0.144		
ORM 23.2	TP (mg/L)	25-Oct-05			0.114	0.08	0.396		
ORM 27.6	TP (mg/L)	25-Oct-05			0.112	0.087	0.09		
Montgomery	TP (mg/L)	25-Oct-05	14.5					0.098	
Hannibal	TP (mg/L)	26-Oct-05	31.9	0.238					
ORM 132.4	TP (mg/L)	26-Oct-05			0.154	0.087	0.098		
ORM 138.9	TP (mg/L)	26-Oct-05			0.073	0.146	0.086		
ORM 145.2	TP (mg/L)	26-Oct-05			0.078	0.126	0.073		
ORM 150.8	TP (mg/L)	26-Oct-05			0.046	0.038	0.043		
ORM 157.4	TP (mg/L)	26-Oct-05			0.087	0.052	0.04		
Willow Island	TP (mg/L)	26-Oct-05	52.5	0.185					
Cannelton	TP (mg/L)	09-May-06	51.9	0.041					
ORM 725.0	TP (mg/L)	09-May-06			0.07	0.057	0.057		
ORM 736.7	TP (mg/L)	09-May-06			0.055	0.09	0.056		
ORM 747.3	TP (mg/L)	09-May-06			0.041	0.044	0.055		
ORM 754.9	TP (mg/L)	09-May-06			0.048	0.061	0.06		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 762.3	TP (mg/L)	10-May-06			0.051	0.052	0.076		
ORM 772.0	TP (mg/L)	10-May-06			0.032	0.074	0.096		
Newburgh	TP (mg/L)	10-May-06	55.5	0.06					
Hannibal	TP (mg/L)	06-Sep-06	43.1	0.039					
ORM 132.4	TP (mg/L)	06-Sep-06			0.055	0.049	0.063		
ORM 138.9	TP (mg/L)	06-Sep-06			0.054	0.048	0.048		
ORM 145.2	TP (mg/L)	06-Sep-06			0.034	0.047	0.058		
ORM 150.8	TP (mg/L)	06-Sep-06			0.041	0.054	0.073		
ORM 157.4	TP (mg/L)	06-Sep-06			0.04	0.043	0.06		
Willow Island	TP (mg/L)	06-Sep-06	42.9	0.067					
Dashields	TP (mg/L)	02-Nov-06	77.7					0.038	
ORM 19.3	TP (mg/L)	02-Nov-06			0.051	0.044	0.041		
ORM 23.2	TP (mg/L)	02-Nov-06			0.048	0.054	0.043		
ORM 27.6	TP (mg/L)	02-Nov-06			0.047	0.038	0.045		
Montgomery	TP (mg/L)	02-Nov-06	89.4					0.042	
Cannelton	TP (mg/L)	07-Aug-07	31.8	0.017					
ORM 725.0	TP (mg/L)	07-Aug-07			0.018	0.024	0.022		
ORM 736.7	TP (mg/L)	07-Aug-07			0.012	0.023	0.026		
ORM 747.3	TP (mg/L)	07-Aug-07			0.03	<0.01	0.047		
ORM 754.9	TP (mg/L)	07-Aug-07			<0.01	0.019	<0.01		
ORM 762.3	TP (mg/L)	08-Aug-07			0.021	0.016	<0.01		
ORM 772.0	TP (mg/L)	08-Aug-07			0.017	0.016	0.019		
Newburgh	TP (mg/L)	08-Aug-07	52.7	<0.01					
Racine	TP (mg/L)	23-Oct-07	12.1					0.032	
ORM 242.3	TP (mg/L)	23-Oct-07	0		0.021	0.038	0.029		
ORM 251.2	TP (mg/L)	23-Oct-07	0		0.019	0.027	<0.01		
ORM 260.8	TP (mg/L)	23-Oct-07	0		0.033	0.037	0.02		
KRM 1.4	TP (mg/L)	23-Oct-07	0						0.02
ORM 267.5	TP (mg/L)	23-Oct-07	0		0.025	0.036	0.017		
ORM 273.0	TP (mg/L)	23-Oct-07	0		0.023	0.047	0.07		
R.C. Byrd	TP (mg/L)	23-Oct-07	12.1					0.043	
Cannelton	TP (mg/L)	01-Apr-08	346	0.261					
ORM 724.8	TP (mg/L)	01-Apr-08	0		0.295	0.281	0.285		
ORM 736.7	TP (mg/L)	01-Apr-08	0		0.271	0.255	0.269		
ORM 747.3	TP (mg/L)	01-Apr-08	0		0.257	0.272	0.287		
ORM 754.9	TP (mg/L)	01-Apr-08	0		0.267	0.252	0.281		
ORM 762.3	TP (mg/L)	02-Apr-08	0		0.263	0.307	0.262		
ORM 772.0	TP (mg/L)	02-Apr-08	0		0.295	0.235	0.275		
Newburgh	TP (mg/L)	02-Apr-08	381.1	0.246					
Racine	TP (mg/L)	30-Apr-08	0					0.036	
ORM 242.0	TP (mg/L)	30-Apr-08	0		0.06	0.025	0.028		
ORM 251.2	TP (mg/L)	30-Apr-08	0		0.017	0.027	0.029		
ORM 260.8	TP (mg/L)	30-Apr-08	0		0.014	0.027	0.023		
K1.3-2	TP (mg/L)	30-Apr-08	0						0.074
ORM 267.5	TP (mg/L)	30-Apr-08	0		0.022	0.04	0.09		
ORM 273.0	TP (mg/L)	30-Apr-08	0		0.028	0.147	0.025		
R.C. Byrd	TP (mg/L)	30-Apr-08	107.9					0.094	
Racine	TP (mg/L)	22-Oct-08	0					0.044	
ORM 242.0	TP (mg/L)	22-Oct-08	0		0.111	0.034	0.033		
ORM 251.2	TP (mg/L)	22-Oct-08	0		0.031	0.033	0.033		
ORM 260.8	TP (mg/L)	22-Oct-08	0		0.042	0.04	0.1		
K1.3-2	TP (mg/L)	22-Oct-08	0						0.035
ORM 267.5	TP (mg/L)	22-Oct-08	0		0.038	0.04	0.035		
ORM 273.0	TP (mg/L)	22-Oct-08	0		0.032	0.04	0.034		
R.C. Byrd	TP (mg/L)	22-Oct-08	12.7					0.024	
Smithland	TP (mg/L)	19-May-09	407.8	0.209					
Cumberland River	TP (mg/L)	19-May-09	0						0.129
ORM 926.2	TP (mg/L)	19-May-09	0		0.245	0.241	0.162		
Tennessee River	TP (mg/L)	19-May-09	0						0.069
ORM 935.6	TP (mg/L)	19-May-09	0		0.298	0.262	0.115		
L&D 52	TP (mg/L)	19-May-09	0	0.152					
ORM 950.4	TP (mg/L)	20-May-09	0		0.245	0.186	0.164		
Olmstead	TP (mg/L)	20-May-09	0	0.254					
ORM 965.3	TP (mg/L)	20-May-09	0		0.271	0.227	0.159		
ORN 977.3	TP (mg/L)	20-May-09	0		0.198	0.228	0.185		
Smithland	TP (mg/L)	21-Jul-09	59.8	0.069					
Cumberland River	TP (mg/L)	21-Jul-09	0						0.105
ORM 926.2	TP (mg/L)	21-Jul-09	0		0.071	0.089	0.096		
Tennessee River	TP (mg/L)	21-Jul-09	0						0.094

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 935.6	TP (mg/L)	21-Jul-09	0		0.066	0.075	0.104		
L&D 52	TP (mg/L)	21-Jul-09	0	0.092					
ORM 950.4	TP (mg/L)	22-Jul-09	0		0.086	0.273	0.197		
Olmstead	TP (mg/L)	22-Jul-09	0	0.076					
ORM 965.3	TP (mg/L)	22-Jul-09	0		0.102	0.105	0.118		
ORM 977.3	TP (mg/L)	22-Jul-09	0		0.072	0.137	0.106		
Smithland	TP (mg/L)	16-Sep-09	33.1	0.07					
Cumberland River	TP (mg/L)	16-Sep-09	0						0.106
ORM 926.2	TP (mg/L)	16-Sep-09	0		0.07	0.081	0.092		
Tennessee River	TP (mg/L)	16-Sep-09	0						0.085
ORM 935.6	TP (mg/L)	16-Sep-09	0		0.068	0.085	0.083		
L&D 52	TP (mg/L)	16-Sep-09	0	0.074					
ORM 950.4	TP (mg/L)	17-Sep-09	0		0.09	0.095	0.157		
Olmstead	TP (mg/L)	17-Sep-09	0	0.075					
ORM 965.3	TP (mg/L)	17-Sep-09	0		0.087	0.082	0.094		
ORN 977.3	TP (mg/L)	17-Sep-09	0		0.084	0.091	0.107		
Dashields	TSS (mg/L)	03-Aug-05	5.6					6.5	
ORM 19.3	TSS (mg/L)	03-Aug-05			7.8	7.5	9.25		
ORM 23.2	TSS (mg/L)	03-Aug-05			8.75	10.2	8		
ORM 27.6	TSS (mg/L)	03-Aug-05			9.25	8.2	8.4		
Montgomery	TSS (mg/L)	03-Aug-05	6.7					6.5	
Hannibal	TSS (mg/L)	01-Sep-05	22.3	5.6					
ORM 132.4	TSS (mg/L)	01-Sep-05			5.6	6.8	6.4		
ORM 138.9	TSS (mg/L)	01-Sep-05			4.8	9.2	6		
ORM 145.2	TSS (mg/L)	01-Sep-05			6.4	7.2	7.2		
ORM 150.8	TSS (mg/L)	01-Sep-05			4.8	4.8	4.4		
ORM 157.4	TSS (mg/L)	01-Sep-05			4.4	3.6	4.4		
Willow Island	TSS (mg/L)	01-Sep-05	22.6	4					
Dashields	TSS (mg/L)	14-Sep-05	5.4					7.4	
ORM 19.3	TSS (mg/L)	14-Sep-05			7.8	9.2	8.2		
ORM 23.2	TSS (mg/L)	14-Sep-05			8.2	10.2	9.2		
ORM 27.6	TSS (mg/L)	14-Sep-05			10.4	10	8		
Montgomery	TSS (mg/L)	14-Sep-05	5.6					5.25	
Hannibal	TSS (mg/L)	15-Sep-05	5.9	4.33					
ORM 132.4	TSS (mg/L)	15-Sep-05			5.8	6.8	6.6		
ORM 138.9	TSS (mg/L)	15-Sep-05			5.8	7	5.4		
ORM 145.2	TSS (mg/L)	15-Sep-05			5.4	5.8	6		
ORM 150.8	TSS (mg/L)	15-Sep-05			4.4	6.2	5.6		
ORM 157.4	TSS (mg/L)	15-Sep-05			5.2	6.8	6.8		
Willow Island	TSS (mg/L)	15-Sep-05	11.9	6.6					
Dashields	TSS (mg/L)	25-Oct-05	12.3					5.14	
ORM 19.3	TSS (mg/L)	25-Oct-05			17.6	13.8	15.4		
ORM 23.2	TSS (mg/L)	25-Oct-05			9.5	10.8	11.2		
ORM 27.6	TSS (mg/L)	25-Oct-05			9	12.2	11		
Montgomery	TSS (mg/L)	25-Oct-05	14.5					6.8	
Hannibal	TSS (mg/L)	26-Oct-05	31.9	6					
ORM 132.4	TSS (mg/L)	26-Oct-05			17.7	24	19.2		
ORM 138.9	TSS (mg/L)	26-Oct-05				25.2	21.2		
ORM 145.2	TSS (mg/L)	26-Oct-05			24	41	25.4		
ORM 150.8	TSS (mg/L)	26-Oct-05			19.6	14.3	19.6		
ORM 157.4	TSS (mg/L)	26-Oct-05			17.4	13.8	12.3		
Willow Island	TSS (mg/L)	26-Oct-05	52.5	8					
Cannelton	TSS (mg/L)	09-May-06	51.9	5.25					
ORM 725.0	TSS (mg/L)	09-May-06			9.75	7.25	8.5		
ORM 736.7	TSS (mg/L)	09-May-06			7.25	6.5	7.75		
ORM 747.3	TSS (mg/L)	09-May-06			7	6.5	7.5		
ORM 754.9	TSS (mg/L)	09-May-06			7.25	6	6.5		
ORM 762.3	TSS (mg/L)	10-May-06			7	6.25	10		
ORM 772.0	TSS (mg/L)	10-May-06			5.5	7	11		
Newburgh	TSS (mg/L)	10-May-06	55.5	9.75					
Hannibal	TSS (mg/L)	06-Sep-06	43.1	10.3					
ORM 132.4	TSS (mg/L)	06-Sep-06			14	15.7	18		
ORM 138.9	TSS (mg/L)	06-Sep-06			12.3	15.3	17.7		
ORM 145.2	TSS (mg/L)	06-Sep-06			9	15.7	15.3		
ORM 150.8	TSS (mg/L)	06-Sep-06			12.7	14.3	14.3		
ORM 157.4	TSS (mg/L)	06-Sep-06			9.67	12	14.7		
Willow Island	TSS (mg/L)	06-Sep-06	42.9	21					
Dashields	TSS (mg/L)	02-Nov-06	77.7					24.2	
ORM 19.3	TSS (mg/L)	02-Nov-06			32.4	31	28.4		

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 23.2	TSS (mg/L)	02-Nov-06			37	33.4	29.4		
ORM 27.6	TSS (mg/L)	02-Nov-06			28.6	32.2	36		
Montgomery	TSS (mg/L)	02-Nov-06	89.4					28.2	
Cannelton	TSS (mg/L)	07-Aug-07	31.8	4.2					
ORM 725.0	TSS (mg/L)	07-Aug-07			5.6	6.4	3.8		
ORM 736.7	TSS (mg/L)	07-Aug-07			4.6	7.8	7.2		
ORM 747.3	TSS (mg/L)	07-Aug-07			3.4	4.4	5.2		
ORM 754.9	TSS (mg/L)	07-Aug-07			2.8	3.4	5		
ORM 762.3	TSS (mg/L)	08-Aug-07			3.8	3.8	3.2		
ORM 772.0	TSS (mg/L)	08-Aug-07			3.4	5.6	5.4		
Newburgh	TSS (mg/L)	08-Aug-07	52.7	3					
Racine	TSS (mg/L)	23-Oct-07	12.1					3.6	
ORM 242.3	TSS (mg/L)	23-Oct-07	0		4.2	6.2	5.8		
ORM 251.2	TSS (mg/L)	23-Oct-07	0		4.4	4.4	4.8		
ORM 260.8	TSS (mg/L)	23-Oct-07	0		5.6	4.4	4.8		
KRM 1.4	TSS (mg/L)	23-Oct-07	0						8.8
ORM 267.5	TSS (mg/L)	23-Oct-07	0		7	6	5		
ORM 273.0	TSS (mg/L)	23-Oct-07	0		5.8	22	7		
R.C. Byrd	TSS (mg/L)	23-Oct-07	12.1					26.2	
Cannelton	TSS (mg/L)	01-Apr-08	346	148					
ORM 724.8	TSS (mg/L)	01-Apr-08	0		152	159	156		
ORM 736.7	TSS (mg/L)	01-Apr-08	0		146	161	160		
ORM 747.3	TSS (mg/L)	01-Apr-08	0		155	146	156		
ORM 754.9	TSS (mg/L)	01-Apr-08	0		150	149	155		
ORM 762.3	TSS (mg/L)	02-Apr-08	0		140	154	154		
ORM 772.0	TSS (mg/L)	02-Apr-08	0		149	148	142		
Newburgh	TSS (mg/L)	02-Apr-08	381.1	129					
Racine	TSS (mg/L)	30-Apr-08	0					9.4	
ORM 242.0	TSS (mg/L)	30-Apr-08	0		23.6	21.6	18.4		
ORM 251.2	TSS (mg/L)	30-Apr-08	0		17.6	20.2	24.8		
ORM 260.8	TSS (mg/L)	30-Apr-08	0		16.2	20.4	22.8		
K1.3-2	TSS (mg/L)	30-Apr-08	0						68.6
ORM 267.5	TSS (mg/L)	30-Apr-08	0		22	29.6	80.3		
ORM 273.0	TSS (mg/L)	30-Apr-08	0		27.8	151	22		
R.C. Byrd	TSS (mg/L)	30-Apr-08	107.9					66.6	
Racine	TSS (mg/L)	22-Oct-08	0					6	
ORM 242.0	TSS (mg/L)	22-Oct-08	0		4.67	4.17	4		
ORM 251.2	TSS (mg/L)	22-Oct-08	0		4.5	4.83	4.5		
ORM 260.8	TSS (mg/L)	22-Oct-08	0		5.83	8.5	6.17		
K1.3-2	TSS (mg/L)	22-Oct-08	0						14.3
ORM 267.5	TSS (mg/L)	22-Oct-08	0		9.17	12.8	11		
ORM 273.0	TSS (mg/L)	22-Oct-08	0		6.33	8.17	6.83		
R.C. Byrd	TSS (mg/L)	22-Oct-08	12.7					9.67	
Smithland	TSS (mg/L)	19-May-09	407.8	111					
Cumberland River	TSS (mg/L)	19-May-09	0						27.2
ORM 926.2	TSS (mg/L)	19-May-09	0		150	130	66.3		
Tennessee River	TSS (mg/L)	19-May-09	0						8.8
ORM 935.6	TSS (mg/L)	19-May-09	0		162	137	42.7		
L&D 52	TSS (mg/L)	19-May-09	0	83.2					
ORM 950.4	TSS (mg/L)	20-May-09	0		137	99.5	62.8		
Olmstead	TSS (mg/L)	20-May-09	0	120					
ORM 965.3	TSS (mg/L)	20-May-09	0		116	97.5	54.3		
ORN 977.3	TSS (mg/L)	20-May-09	0		94	102	88		
Smithland	TSS (mg/L)	21-Jul-09	59.8	11.4					
Cumberland River	TSS (mg/L)	21-Jul-09	0						18.9
ORM 926.2	TSS (mg/L)	21-Jul-09	0		16.2	31.8	24.2		
Tennessee River	TSS (mg/L)	21-Jul-09	0						6.54
ORM 935.6	TSS (mg/L)	21-Jul-09	0		18	15.4	36.8		
L&D 52	TSS (mg/L)	21-Jul-09	0	9.52					
ORM 950.4	TSS (mg/L)	22-Jul-09	0		20.8	230	132		
Olmstead	TSS (mg/L)	22-Jul-09	0	28					
ORM 965.3	TSS (mg/L)	22-Jul-09	0		25.7	26.2	32		
ORM 977.3	TSS (mg/L)	22-Jul-09	0		24.3	22.3	41.3		
Smithland	TSS (mg/L)	16-Sep-09	33.1	8.5					
Cumberland River	TSS (mg/L)	16-Sep-09	0						23
ORM 926.2	TSS (mg/L)	16-Sep-09	0		8.8	12.8	13.8		
Tennessee River	TSS (mg/L)	16-Sep-09	0						4
ORM 935.6	TSS (mg/L)	16-Sep-09	0		11	9.2	7.2		
L&D 52	TSS (mg/L)	16-Sep-09	0	9.67					

Appendix O: Integrated Assessment Sampling Data

SiteName	Parameter	Date	Flow (kcfs)	Lockwall RDB	RDB	MID	LDB	Lockwall LDB	Trib LDB
ORM 950.4	TSS (mg/L)	17-Sep-09	0		11.8	17.6	75		
Olmstead	TSS (mg/L)	17-Sep-09	0	14.2					
ORM 965.3	TSS (mg/L)	17-Sep-09	0		17.4	15.2	24.7		
ORN 977.3	TSS (mg/L)	17-Sep-09	0		20.8	16.4	35.6		

Ohio River Valley Water Sanitation Commission

POLLUTION CONTROL STANDARDS

for discharges to the Ohio River

2009 Revision

Notice of Requirements

You are hereby notified that, having considered all the evidence presented at public hearings, the Ohio River Valley Water Sanitation Commission, at its regularly held meeting on October 22, 2009, acting in accordance with and pursuant to the authority contained in Article VI of the Ohio River Valley Water Sanitation Compact, adopted and promulgated, subject to revision as changing conditions require, Pollution Control Standards 2009 Revision for the modification or treatment of all sewage from municipalities or other political subdivisions, public or private institutions, corporations or watercraft, and for the modification or treatment of all industrial wastes discharged or permitted to flow into the Ohio River from the point of confluence of the Allegheny and Monongahela Rivers at Pittsburgh, Pennsylvania, designated as Ohio River mile point 0.0 to Cairo Point, Illinois, located at the confluence of the Ohio and Mississippi Rivers, and being 981.0 miles downstream from Pittsburgh, Pennsylvania.

Under the terms and provisions of the Ohio River Valley Water Sanitation Compact, all sewage from municipalities or other political subdivisions, public or private institutions, corporations or watercraft and all industrial wastes discharged or permitted to flow into the Ohio River will be required to be modified or treated to the extent specified in the standards established as above set forth.

To the extent that Pollution Control Standards (2006 Revision), which were established by Commission action October 5, 2006, have been amended or restated by virtue of Pollution Control Standards 2009, the Pollution Control Standards 2006 Revision, including any definitions and application procedures appended to or incorporated therein, are rescinded.

Alan H. Vicory, Jr.
Executive Director and Chief Engineer

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Ohio River Valley Water Sanitation Commission

POLLUTION CONTROL STANDARDS

for discharges to the Ohio River

2009 Revision

I. AUTHORITY AND PURPOSE

The Ohio River Valley Water Sanitation Compact (the Compact) was signed in 1948 by the Governors of the States of Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia, following the consent of the United States Congress and enactment of the Compact into law by the legislatures of the eight states. The Compact created the Ohio River Valley Water Sanitation Commission (the Commission) as a body corporate with powers and duties set forth in it for the purpose of abating water pollution within the Compact District. Article I of the Compact mandates that all waters in the District be placed and maintained in a satisfactory, sanitary condition, available for certain beneficial uses. It is the mission of the Commission to insure protection of these uses and to preserve the waters for other legitimate purposes.

The Compact grants the Commission authority to carry out its mission. Article VI states that "the guiding principle of this Compact shall be that pollution by sewage or industrial wastes originating within a signatory State shall not injuriously affect the various uses of the interstate waters." Minimum requirements for the treatment of sewage and industrial waste then are established in Article VI, as well as the authority of the Commission to require higher degrees of treatment where they are determined to be necessary after investigation, due notice, and hearing. Article VI concludes by authorizing the Commission to "adopt, prescribe, and promulgate rules, regulations and standards for administering and enforcing the provisions of this article."

Article IX of the Compact grants the Commission authority to issue orders, after investigation and hearing, for the purpose of achieving compliance with its standards. Any court of general jurisdiction or any United States District Court in the signatory states may be used by the Commission in order to enforce such orders.

It is the policy of the Commission to rely on the member states for the primary enforcement of its standards. Each of the member states is authorized to do so under the legislation that enabled its membership in the Compact. Each of the member states is authorized to administer the federal/state National Pollutant Discharge Elimination

System (NPDES) as established in Section 402 of the Federal Clean Water Act. Sections 301(b)(1)(C) and 510 of the Federal Act require that permits issued under that system incorporate applicable standards promulgated by an interstate agency wherever they are more stringent than comparable state or federal standards. The NPDES permits are therefore the primary means by which the Commission's Standards are implemented and enforced.

These standards set forth the uses to be protected in the Ohio River (Section III) as established in the Compact, establish water quality criteria to assure that those uses will be achieved (Section IV), and set waste water discharge requirements (Section V) needed to attain the water quality criteria. The standards also recognize the rights of individual states to adopt and apply more stringent regulations.

Specific waste water discharge requirements are established in these regulations and must be incorporated into discharge permits issued under the authority of the NPDES or state discharge permitting programs when they are more stringent than:

1) applicable U.S. EPA technology-based effluent guidelines required under Sections 301, 304, 306, and 307 of the Federal Clean Water Act, or

2) any state treatment requirements, effluent standards, or water quality-based effluent limits.

In the absence of promulgated Federal effluent guidelines pursuant to Sections 301, 304, 306, and 307 of the Clean Water Act, the Compact signatory states have the responsibility to establish effluent limitations to be included in any discharge permit, consistent with the standards contained herein using best professional judgment on a case-by-case basis.

II. DEFINITIONS

A. "Acute Criteria" means the highest concentrations of toxic substances to which organisms can be exposed for a brief period of time **(**as measured by approved short-term exposure tests) without causing mortality or other unacceptable effects.

B. "Biological Integrity" means the ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to those best attainable given ecoregional attributes and the modified habitat types of the river.

C. "Chronic Criteria" means the highest concentrations of toxic substances to which organisms can be exposed indefinitely without causing long-term harmful effects on growth and/or reproduction or other unacceptable effects (as measured by approved long-term exposure tests).

D. "Combined Sewer Overflow" means a discharge from a sewer system designed to convey sanitary waste waters and storm water through a single-pipe system to a treatment facility, at a point in the system prior to the treatment facility.

E. "Compact," as used in these regulations, means the Ohio River Valley Water Sanitation Compact and is an agreement entered into by and between the states of Indiana, West Virginia, Ohio, New York, Illinois, Kentucky, Pennsylvania, and Virginia, which pledges each to the other of the signatory states faithful cooperation in the control of existing and future pollution of the waters in the Ohio River Basin. This Compact created the Ohio River Valley Water Sanitation Commission.

F. "Cooling Water" means water used as a heat transfer medium for once-through cooling or cooling tower blow down to which no industrial wastes, toxic wastes, residues from potable water treatment plants, untreated sewage, or other wastes, exclusive of antifouling agents approved by the appropriate regulatory agencies, are added prior to discharge.

G. "Contact Recreation" means recreational activities where the human body may come in direct contact with water of the Ohio River.

H. "Dry Weather Flow Conditions" means flow conditions within a combined sewer system resulting from one or more of the following: flows of domestic sewage, ground water infiltration, commercial and industrial waste water, and any non-precipitation event related flows. Other non-precipitation event related flows that are included in dry weather flow conditions will be decided by the permitting agency based on site specific conditions.

I. "Early Life Stages" of fish means the pre-hatch embryonic period, the post-hatch free embryo or yolk-sac fry, and the larval period, during which the organism feeds. Juvenile fish, which are anatomically rather similar to adults, are not considered an early life stage.

J. "Industrial Wastes" means any liquid, gaseous, or solid materials or waste substances or combination thereof other than cooling water as herein defined, resulting from any process or operation including storage and transportation, manufacturing, commercial, agricultural, and government operations.

K. "Mixing Zone" means that portion of the water body receiving a discharge where effluent and receiving waters are not totally mixed and uniform with the result that the zone is not representative of the receiving waters and may not meet all ambient water quality standards or other requirements of any signatory state applicable to the particular receiving waters. All applicable water quality criteria must be met at the edge of the mixing zone.

L. "Net Discharge" is determined by excluding the amount of a pollutant in the intake water when determining the quality of a discharge if both the intake and discharge are from and to the same body of water.

M. "96 hour LC_{50}" as used in these regulations, means the concentration of a substance that kills 50 percent of the test organisms within 96 hours. The test organisms shall be representative important species indigenous to the Ohio River or standard test organisms.

N. The "Ohio River," as used in these regulations, extends from the point of confluence of the Allegheny and Monongahela rivers at Pittsburgh, Pennsylvania, designated as Ohio River mile point 0.0 to Cairo Point, Illinois, located at the confluence of the Ohio and Mississippi Rivers, 981.0 miles downstream from Pittsburgh.

O. "Ohio River Valley Water Sanitation Commission" (the Commission) means a body corporate created by authority of the Compact and is the operating agency established to implement the Compact. It consists of three representatives of each signatory state and three representatives of the federal government.

P. "Other Wastes" means any waste other than sewage, cooling water, residues from potable water treatment plants, industrial wastes or toxic wastes which, if discharged to the Ohio River, could cause or contribute to any violations of these regulations, or of any water quality standards of any signatory state, or which may be deleterious to the designated uses. Other wastes include, but are not limited to: garbage, refuse, decayed wood, sawdust, shavings, bark and other wood debris and residues resulting from secondary processing, sand, lime cinders, ashes, offal, night soil, silt, oil, tar, dyestuffs, acids, chemicals, heat or other materials and substances not sewage or industrial wastes which may cause or might reasonably be expected to cause or contribute to the pollution of the Ohio River.

Q. "Persistent Substances" means those substances that have a half-life for degradation under natural environmental conditions of more than four days. All other substances are non-persistent.

R. "Pollution" means the human-made or human-induced alteration of the chemical, physical, biological and radiological integrity of the waters of the Ohio River.

S. "Public Water System" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of the year. As this relates to Section IV.C.3 (Total Ammonia-Nitrogen), the source water of the public water system is the Ohio River or ground water under the direct influence of the Ohio River.

T. “Reasonable Treatment” means, for the purposes of these standards, the conventional drinking water treatment processes of mixing, flocculation, sedimentation, filtration, and disinfection.

U. “Representative Aquatic Species” means those species of aquatic life whose protection and propagation will assure the sustained presence of a balanced indigenous community. Such species are representative in the sense that maintenance of suitable water quality conditions will assure the overall protection and sustain propagation of the balanced, indigenous community.

V. “Residues from Potable Water Treatment Plants” means those wastes emanating from processes used in water purification. Such processes may include sedimentation, chemical coagulation, filtration, iron and manganese removal, softening, and disinfection.

W. “Sewage” means water-carried human or animal wastes from such sources as residences; industrial, commercial, or government establishments; public or private institutions; or other places. For the purposes of these standards, the mixture of sewage with industrial wastes, toxic wastes, or other wastes, shall be subject to treatment requirements for those types of wastes, but shall also be regarded as sewage.

X. “Substantially Complete Removal” means removal to the lowest practicable level attainable with current technology.

Y. “Toxic Wastes” means wastes containing substances or combinations of substances in concentrations which might reasonably be expected to cause death, disease, behavioral abnormalities, genetic mutations, physiological malfunctions, including those in reproduction, or physical deformations in fish, other aquatic life, wildlife, livestock, or humans.

Z. “Waste Water” means sewage and/or industrial wastes as herein defined.

III. DESIGNATED USES

The Ohio River, as hereinbefore defined, has been designated by the Compact as available for safe and satisfactory use as public and industrial water supplies after reasonable treatment, suitable for recreational usage, capable of maintaining fish and other aquatic life, and adaptable to such other uses as may be legitimate. It is the purpose of these Pollution Control Standards to safeguard the waters of the Ohio River for these designated uses. No degradation of the water quality of the Ohio River that would interfere with or become injurious to these uses shall be permitted.

IV. WATER QUALITY CRITERIA

A. General

The minimum conditions which the waste water discharge requirements (Section V) are intended to achieve in the receiving waters outside the mixing zone are as follows:

1. Freedom from anything that will settle to form objectionable sludge deposits which interfere with designated water uses.

2. Freedom from floating debris, scum, oil, and other floating material in amounts sufficient to be unsightly or deleterious.

3. Freedom from materials producing color or odors to such a degree as to create unaesthetic conditions or a nuisance.

4. Freedom from substances in concentrations which are toxic or harmful to humans, animals, or fish and other aquatic life; which would in any manner adversely affect the flavor, color, odor, or edibility of fish and other aquatic life, wildlife, or livestock; or which are otherwise detrimental to the designated uses specified in Section III.

B. Aquatic Life Protection

To protect aquatic life**,** the following criteria shall be met outside the mixing zone:

1. BIOLOGICAL: The biological integrity of the Ohio River shall be safeguarded, protected, and preserved.

2. DISSOLVED OXYGEN: The average concentration shall be at least 5.0 mg/L for each calendar day; the minimum concentration shall not be less than 4.0 mg/L. During the April 15-June 15 spawning season, a minimum concentration of 5.0 mg/L shall be maintained at all times.

3. TEMPERATURE: Allowable stream temperatures are:

Month/Date	Period Average		Maximum	
January 1-31	45°F	7.2°C	50°F	10.0°C
February 1-29	45	7.2	50	10.0
March 1-15	51	10.6	56	13.3
March 16-31	54	12.2	59	15.0
April 1-15	58	14.4	64	17.8
April 16-30	64	17.8	69	20.6
May 1-15	68	20.0	73	22.8
May 16-31	75	23.9	80	26.7

Month/Date	Period Average		Maximum	
June 1-15	80°F	26.7°C	85°F	29.4°C
June 16-30	83	28.3	87	30.6
July 1-31	84	28.9	89	31.7
August 1-31	84	28.9	89	31.7
September 1-15	84	28.9	87	30.6
September 16-30	82	27.8	86	30.0
October 1-15	77	25.0	82	27.8
October 16-31	72	22.2	77	25.0
November 1-30	67	19.4	72	22.2
December 1-31	52	11.1	57	13.9

4. pH: No value below 6.0 standard units nor above 9.0 standard units.

5. AMMONIA:

a. Acute Criterion Concentration: The one-hour average concentration of total ammonia-nitrogen (mg/L) shall not exceed, more than once every three years on the average, the ACC (acute criterion) calculated using the following equation:

$$ACC = \frac{0.411}{1 + 10^{(7.204-pH)}} + \frac{58.4}{1 + 10^{(pH-7.204)}}$$

b. Chronic Criterion Concentration: The 30-day average concentration of total ammonia-nitrogen (in mg/L) shall not exceed, more than once every three years, the CCC (chronic criterion) calculated using the following equations:

i. When fish early life stages are present (from March 1 to October 31):

$$CCC = \left(\frac{0.0577}{1+10^{(7.688-pH)}} + \frac{2.487}{1+10^{(pH-7.688)}}\right) * MIN[2.85 \text{ OR } (1.45*10^{[.028*(25-T)]})]$$

Where: T = Temperature, °C

Note: For the above equation, multiply the parenthetical equation by 2.85 when temperature is less than or equal to 14.51ºC. When temperature is greater than 14.51ºC, multiply the parenthetical equation by $(1.45 * 10^{[0.028*(25-T)]})$.

ii. When fish early life stages are absent (from November 1 to the last day of February):

$$CCC = \left(\frac{0.0577}{1 + 10^{(7.688-pH)}} + \frac{2.487}{1 + 10^{(pH-7.688)}}\right) * (1.45*10^{0.028*(25-(MAX[T \text{ OR } 7]))})$$

Where: T = Temperature, °C.

Note: For the above equation, the last term should be $10^{(0.028*(25-T))}$ for all temperatures greater than 7ºC. When temperatures are 7ºC or less, the last term in the equation should be $10^{[0.028*(25-7)]}$ or $10^{(0.504)}$.

iii. In addition, the highest four-day average within the 30-day period should not exceed 2.5 times the chronic criterion.

Note: Acute and chronic criteria concentrations for total ammonia-nitrogen (in mg/L) for different combinations of pH and temperature are shown in Appendix A.

6. CHEMICAL CONSTITUENTS:

a. The following constituents are presented in the total recoverable form. However, Ohio River criteria for these constituents are to be applied in the dissolved form (except for cyanide and selenium) which are calculated by multiplying the criteria in this table by the corresponding conversion factors from the table in 6.b, unless it can be demonstrated to the satisfaction of the Commission and its member states that a more appropriate analytical technique is available which provides a measurement of that portion of the metal present which causes toxicity to aquatic life.

Total Recoverable Constituent	Acute Criterion Concentration (µg/L)	Chronic Criterion Concentration (µg/L)
Arsenic	340	150
Cadmium	$e^{(1.0166(\ln Hard)-3.924)}$	$e^{(0.7409(\ln Hard)-4.719)}$
Chromium III	$e^{(0.819(\ln Hard+3.7256)}$	$e^{(0.819(\ln Hard)+0.6848)}$
Chromium VI	16	11
Copper	$e^{(0.9422(\ln Hard)-1.700)}$	$e^{(0.8545(\ln Hard)-1.702)}$
Cyanide (free) *	22	5.2
Lead	$e^{(1.273(\ln Hard)-1.460)}$	$e^{(1.273(\ln Hard)-4.705)}$
Mercury	1.7	0.91
Nickel	$e^{(0.846(\ln Hard)+2.255)}$	$e^{(0.846(\ln Hard)+0.0584)}$
Selenium *	20	5
Silver	$e^{(1.72(\ln Hard)-6.59)}$	---
Zinc	$e^{(0.8473(\ln Hard)+0.884)}$	$e^{(0.8473(\ln Hard)+0.884)}$

* Ohio River criteria for cyanide (free) and selenium are to be applied in the total recoverable form as expressed in this table. Hardness is expressed as mg/L of $CaCO_3$.

b. Conversion factors presented in this table are to be applied to calculate Ohio River criteria in the dissolved form when multiplied by the criteria set forth in the table in section 6.a (with the exception of cyanide and selenium). Numeric values for hardness-dependent criteria at specified hardness values are listed in Appendix B.

Constituent	Acute Dissolved Criterion Conversion Factor	Chronic Dissolved Criterion Conversion Factor
Arsenic	1.0	1.0
Cadmium	1.136672-[(ln Hard)*(0.041838)]	1.101672-[ln(Hard)*0.041838]
Chromium (III)	0.316	0.86
Chromium (VI)	0.982	0.962
Copper	0.960	0.960
Lead	1.46203-[(ln Hard)*(0.145712)]	1.46203-[ln(Hard)*0.145712]
Mercury	0.85	0.85
Nickel	0.998	0.997
Silver	0.85	---
Zinc	0.978	0.986

c. Waste water discharge requirements for these constituents shall be expressed as total recoverable limits based on the dissolved aquatic life criteria multiplied by the appropriate translators, the appropriate in-stream concentration upstream of the point of discharge, and the minimum appropriate critical flow as contained in Appendix C. The appropriate critical flow shall be the seven day, ten year low flow for chronic criteria, and the one day, ten year low flow for acute criteria. The appropriate translators for arsenic, copper, nickel and zinc are in the table below. Translators for cadmium, chromium (III), chromium (VI), lead, mercury, and silver are the inverse of the values contained in the table in section 6.b. Other translators may be used after successful demonstration to the Commission and its member states.

Constituent	Translators for Upper Ohio River (river miles 0-265)	Translators for Middle Ohio River (river miles 266-629)	Translators for Lower Ohio River (river miles 630-981)
Arsenic	1+(0.040*TSS)	1+(0.023*TSS)	1+(0.013*TSS)
Copper	1+(0.049*TSS)	1+(0.033*TSS)	1+(0.023*TSS)
Nickel	1+(0.035*TSS)	1+(0.039*TSS)	1+(0.032*TSS)
Zinc	1+(0.21*TSS)	1+(0.15*TSS)	1+(0.083*TSS)

Note: Total Suspended Solids (TSS) values in translator formulas are to be applied in units of mg/L.

7. OTHER TOXIC SUBSTANCES:

Water quality criteria for substances not otherwise specified in this section shall be derived based on the following:

a. For the Protection of Aquatic Life, methodologies set forth in U.S. EPA's final Water Quality Guidance for the Great Lakes System, adopted in the Federal Register, March 23, 1995, shall be used (see Appendix D).

b. Limiting concentrations other than those derived from the above may be used for the protection of aquatic life when justified on the basis of scientifically defensible evidence.

C. Human Health Protection

To protect human health, the following criteria shall be met outside the mixing zone:

1. BACTERIA:

a. Protection of public water supply use -- public water supply use shall be protected at all times. Fecal coliform bacteria content shall not exceed 2,000/100 mL as a monthly geometric mean based on not less than five samples per month.

b. Maximum allowable level of fecal coliform bacteria for contact recreation -- for the months of May through October, content shall not exceed 200/100 mL as a monthly geometric mean based on not less than five samples per month; nor exceed 400/100 mL in more than ten percent of all samples taken during the month.

c. Maximum allowable level of *E. coli* bacteria for contact recreation -- for the months of May through October, measurements of *E. coli* bacteria may be substituted for fecal coliform. Content shall not exceed 130/100 mL as a monthly geometric mean, based on not less than five samples per month, nor exceed 240/100 mL in any sample.

2. CHEMICAL CONSTITUENTS:

Not to exceed the following concentrations:

Constituent	Concentration (mg/L)
Arsenic (total)	0.010
Barium (total)	1.0
Chloride	250
Fluoride	1.0

Constituent	Concentration (mg/L)
Mercury (total)	0.000012
Nitrite + Nitrate Nitrogen	10.0
Nitrite Nitrogen	1.0
Phenolics	0.005
Silver (total)	0.05
Sulfate	250

3. TOTAL AMMONIA-NITROGEN: Total ammonia-nitrogen shall not exceed 1.0 mg/L at any surface water intake for a public water system providing at least reasonable treatment.

4. RADIONUCLIDES: Gross total alpha activity (including radium-226, but excluding radon and uranium) shall not exceed 15 picocuries per liter (pCi/L) and combined radium-226 and radium-228 shall not exceed 4 pCi/L. Concentration of total gross beta particle activity shall not exceed 50 pCi/L; the concentration of total strontium-90 shall not exceed 8 pCi/L.

5. OTHER TOXIC SUBSTANCES: Water quality criteria for substances not otherwise specified in this section shall be derived based on the following:

   a. For the protection of human health, criteria are listed in Appendix E to these regulations.

      i. For substances identified as human carcinogens, waste water discharge requirements shall be developed based on the in-stream concentration above the point of discharge, and calculated so as to prevent one additional cancer per one million population at the harmonic mean stream flow (see Appendix C).

      ii. For substances not identified as human carcinogens, waste water discharge requirements shall be developed based on the in-stream concentration above the point of discharge and calculated to meet the water quality criteria at the minimum 7-day, 10-year flow (see Appendix C).

   b. Limiting concentrations other than those derived from the above may be used for the protection of human health when justified on the basis of scientifically defensible evidence.

D. Site-Specific Criteria

Alternative site-specific criteria for the constituents listed herein may be approved if they are demonstrated to be appropriate to the satisfaction of the Commission. Such demonstrations shall utilize methods contained in the Water Quality Standards Handbook (U.S. EPA publication EPA823-B94005A, August 1994), or other methods approved by the U.S. EPA.

V. WASTE WATER DISCHARGE REQUIREMENTS

A. General

1. No discharge of sewage, industrial wastes, toxic wastes, other wastes, cooling water or residues from potable water treatment plants shall cause or contribute to a violation of these waste water discharge requirements, shall preclude the attainment of any designated use of the main stem waters of the Ohio River, or cause or contribute to a violation of the water quality criteria set forth in Section IV.

2. All discharges of sewage, industrial wastes, toxic wastes, other wastes, cooling water or residues from potable water treatment plants shall be treated or otherwise modified so as to provide:

   a. Substantially complete removal of settleable solids, which may form sludge deposits;

   b. Substantially complete removal of oil, debris, scum and other floating material;

   c. Reduction of total suspended solids and other materials to such a degree that the discharge will not produce a substantial negative visible contrast to natural conditions in turbidity, color or odor of the river, or impart taste to potable water supplies, or cause tainting of fish flesh;

   d. Reduction of all substances in amounts which, when concentrated or combined in the receiving stream, would result in conditions toxic or harmful to humans, animals, or fish and other aquatic life; which would in any manner adversely affect the flavor, color, odor, or edibility of fish and other aquatic life, wildlife, or livestock; or which are otherwise detrimental to the designated water uses specified in Section III.

3. Each holder of an individual NPDES permit shall post and maintain a permanent marker at the establishment under permit as follows:

   a. A marker shall be posted on the stream bank at each outfall discharging directly to the Ohio River.

   b. The marker shall consist of, at a minimum, the name of the establishment to which the permit was issued, the permit number, and the outfall number. The information shall be printed in letters not less than two inches in height.

c. The marker shall be a minimum of two feet by two feet and shall be a minimum of three feet above ground level.

B. Sewage

1. MINIMUM LEVEL OF TREATMENT:

Sewage shall be treated prior to discharge, to meet the following effluent limitations in addition to the requirements of Section V.A.

a. Biochemical Oxygen Demand

i. Five-day biochemical oxygen demand (BOD_5) -- the arithmetic mean of the values for effluent samples collected in a month shall not exceed 30 mg/L, and the arithmetic mean of the values for effluent samples collected in a week shall not exceed 45 mg/L.

ii. Five-day carbonaceous biochemical oxygen demand ($CBOD_5$) may be substituted for BOD_5, provided that the arithmetic mean of the values for effluent samples collected in a month shall not exceed 25 mg/L, and the arithmetic mean of the values of effluent samples collected in a week shall not exceed 40 mg/L.

b. Suspended Solids

The arithmetic mean of the values for effluent samples collected in a month shall not exceed 30 mg/L, and the arithmetic mean of the values for effluent samples collected in a week shall not exceed 45 mg/L.

c. pH

The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 standard units.

d. Bacteria

i. The geometric mean of the fecal coliform bacteria content of effluent samples collected in a month shall not exceed 2,000/100 mL.

ii. During the months of May through October, the geometric mean of the fecal coliform bacteria content of effluent samples collected in a month shall not exceed 200/100 mL, and no more than 10 percent of the values shall exceed 400/100 mL.

iii. During the months of May through October, *E. coli* may be substituted for fecal coliform provided the geometric mean of the

values for effluent samples collected in a month shall not exceed 130/100 mL, and no more than 10 percent of the values shall exceed 240/100 mL.

2. ALTERNATIVE TREATMENT:

Such facilities as waste stabilization ponds and trickling filters shall be deemed to provide effective treatment of sewage, provided that the requirements of Sections V.A., V.B.1.(c) and (d) are met, that the effluent does not cause any violations of applicable states' water quality standards or Sections III and IV of these regulations, and that the following requirements are met:

a. Biochemical Oxygen Demand

i. Five-day biochemical oxygen demand (BOD_5) -- the arithmetic mean of the values for effluent samples collected in a month shall not exceed 45 mg/L; and the arithmetic mean of the values for effluent samples collected in a week shall not exceed 65 mg/L.

ii. Five-day carbonaceous biochemical oxygen demand ($CBOD_5$) may be substituted for BOD_5, provided that the levels are not less stringent than the following: the arithmetic mean of the values for effluent samples collected in a month shall not exceed 40 mg/L and; the arithmetic mean of the values for effluent samples collected in a week shall not exceed 60 mg/L.

b. Suspended Solids

The arithmetic mean of the values for effluent samples collected in a month shall not exceed 45 mg/L; and the arithmetic mean of the values for effluent samples collected in a week shall not exceed 65 mg/L.

3. COMBINED SEWER SYSTEMS:

a. Prohibition of Dry Weather Discharges

No combined sewer overflow (CSO) to the Ohio River shall occur under dry weather flow conditions unless the discharge is caused by elevated river stage. All discharges from combined sewers must be in compliance with the NPDES permit and the National Combined Sewer Overflow Control Policy.

b. System Overflows During Wet Weather

A direct discharge, if caused by temporary excess flows due to storm water collected and conveyed through combined sewer systems, shall

not be considered in violation of these waste water discharge requirements, providing that the discharger is demonstrating compliance with the nine minimum controls as specified in the National Combined Sewer Overflow Control Policy. The nine minimum controls are as follows:

i. Proper operation and regular maintenance programs for the sewer system and the CSOs;
ii. Maximum use of the collection system for storage;
iii. Review and modification of pre-treatment requirements to assure CSO impacts are minimized;
iv. Maximization of flow to the POTW for treatment;
v. Prohibition of CSOs during dry weather;
vi. Control of solid and floatable materials in CSOs;
vii. Pollution prevention;
viii. Public notification to ensure that the public receives adequate notice of CSO occurrences and CSO impacts;
ix. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

In addition, the system must be operated in accordance with an approved Long Term Control Plan (LTCP), where required, and the discharge must not interfere with the attainment of the water quality criteria set forth in Section IV except in situations where alternative criteria are authorized by the permitting agency and the Commission. Authorization of such alternative criteria shall be based upon and justified through a Use Attainability Analysis (UAA) consistent with 40CFR131.10g. The LTCP must be developed and implemented to fully attain the alternative criteria.

The approved LTCP and UAA will identify the conditions, at or above which, the contact recreation use and associated bacteria criteria cannot be achieved, and will identify alternative bacteria criteria that can be achieved. The alternative bacteria criteria shall apply for the period during which conditions exist and shall not exceed 2000 fecal coliform per 100 mL as a monthly geometric mean for the protection of public water supplies.

c. Treatment of Flows from Combined Sewer Systems during Wet Weather Conditions

In cases where municipal waste water treatment plants serving combined sewer areas have primary treatment capacity in excess of secondary treatment capacity, opportunities may exist for partial treatment of combined flows which would otherwise be discharged as untreated combined sewer overflows. In such cases, in order to maximize the treatment of wet weather flows from combined sewer

systems and reduce the frequency and duration of combined sewer overflow (CSO) events, bypass of the secondary treatment during wet weather conditions may be allowed on an interim basis, provided the following conditions are met:

i. the facilities are properly operated and maintained,

ii. the maximum possible quantity of waste water (determined through an approved engineering study) receives secondary treatment in accordance with discharge requirements, and

iii. the discharge does not cause exceedances of water quality criteria in the Ohio River outside the mixing zone.

Bypasses of secondary treatment which are necessary in order to implement a CSO long-term control plan which includes primary treatment options at the municipal waste water treatment plant may be allowed, provided it is not technically or financially feasible to provide secondary treatment of greater amounts of wet weather flow. The consideration of feasible alternatives should be documented in the development of the long-term control plan.

C. Industrial Wastes, Including Toxic Wastes

1. The minimum level of treatment for industrial wastes including toxic wastes, prior to discharge shall be in accordance with national effluent limitations and guidelines adopted by the Administrator of the United States Environmental Protection Agency pursuant to Sections 301 and 302 of the Federal Clean Water Act, national standards of performance for new sources adopted pursuant to Section 306 of the Federal Clean Water Act, and national toxic and pretreatment effluent limitations, adopted pursuant to Section 307 of the Federal Clean Water Act or in accordance with the standards of the state in which the discharge occurs.

2. Effluent limitations for discharges of industrial wastes including toxic wastes may be based on the net discharge of pollutants provided that the following conditions are met:

a. Any determination for net discharge of pollutants must be made on a pollutant-by-pollutant, outfall-by-outfall basis.

b. A net discharge of pollutants would only be allowed in the absence of a TMDL applicable to the discharge.

c. The facility withdraws 100 percent of the intake water containing the pollutant from the same body of water into which the discharge is made.

d. The facility does not contribute any additional mass of the identified intake pollutant to its waste water.

e. The facility does not alter the identified intake pollutant chemically or physically in a manner that would cause adverse water quality impacts to occur that would not occur if the pollutants were left in-stream.

f. The facility does not increase the identified intake pollutant concentration, as defined by the permitting authority, at the edge of the mixing zone, or at the point of discharge if a mixing zone is not allowed, as compared to the pollutant concentration in the intake water, unless the increased concentration does not cause or contribute to an excursion above an applicable water quality standard.

g. The timing and location of the discharge would not cause adverse water quality impacts to occur that would not occur if the identified intake pollutant were left in-stream.

3. Industrial waste treatment facilities shall notify ORSANCO of all upsets and bypasses within two hours of their discovery.

D. Residues from Potable Water Treatment Plants

The use of controlled discharge for residues from potable water treatment plant processes of sedimentation, coagulation, and filtration may be authorized provided that, as a minimum, the discharge meets all the requirements of Section IV.A. and V.A.

E. Cooling Water

1. A discharge of cooling water shall meet the requirements of Section V.A. and shall not cause violations of the temperature criteria set forth in Section IV.B.3., except as authorized by a variance issued pursuant to Section 316(a) of the Federal Clean Water Act.

2. Any cooling water additives that will ultimately be discharged to the environment must be approved by the appropriate state agency.

F. Other Wastes

The discharge of Other Wastes (other than those specified above) shall meet the requirements of Section V.A. and shall not cause or contribute to a violation of the water quality criteria set forth in Section IV.

VI. MIXING ZONE DESIGNATION

A. Where mixing zones are allowed by the permitting authority, the specific numerical limits for any mixing zone shall be determined on a case-by-case basis, and shall include considerations for existing uses, linear distance (i.e., length and width) from the point of discharge, surface area involved, and volume of receiving water within the defined zone.

B. Conditions within the mixing zone shall not be injurious to human health, in the event of a temporary exposure.

C. Acute water quality criteria, as specified in Section IV.B.6, will apply at all points within the mixing zone; except that, states may at their discretion allow a smaller zone in the immediate vicinity of the point of discharge sometimes referred to as a zone of initial dilution in which acute criteria are exceeded, provided the zone does not impact the water of another state, but the acute criteria must be met at the edge of the acute mixing zone or zone of initial dilution. Acute mixing zones shall be calculated in accordance with one of the approaches presented in appendix F, or by such other method as may be demonstrated to be appropriate to the Commission.

D. The mixing zone shall be free from substances attributable to sewage, industrial wastes, toxic wastes, other wastes, cooling water, or residues from potable water treatment plants in quantities which:

1. Settle to form sludge deposits;

2. Float as debris, scum, or oil;

3. Contaminate natural sediments so as to cause or contribute to a violation of:

   a. appropriate stream criteria outside the mixing zone, or

   b. any condition of the designated uses of the water.

4. Impart a disagreeable flavor or odor to flesh of fish or other aquatic life, wildlife or livestock which are consumed by humans and which acquire such a flavor because of passage through or ingestion of the waters from the mixing zone.

E. The mixing zone shall be located so as not to interfere significantly with migratory movements and passage of fish, other aquatic life, and wildlife. No mixing zone shall adversely impact water quality so as to interfere with potable or industrial water supplies, bathing areas**,** reproduction of fish, other aquatic life and wildlife.

F. In no case shall a permitting authority grant a mixing zone that would likely jeopardize the continued existence of any endangered or threatened species listed under Section 4 of the Federal Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat.

G. Mixing zones shall be prohibited for Bioaccumulative Chemicals of Concern (BCCs) as set forth in this paragraph. Discharges containing BCCs which were in existence on or before October 16, 2003 will have mixing zones eliminated for such pollutants as soon as practicable but no later than October 16, 2013; however, no increase in such discharges will be allowed. Discharges of BCCs that come into existence after October 16, 2003 are subject to this prohibition immediately. BCCs are defined as any chemicals that accumulate in aquatic organisms by a human health bioaccumulation factor (BAF) greater than 1000 (after considering various specified factors), and have the potential upon entering surface waters to cause adverse effects, either by themselves or in the form of their toxic transformation, as a result of that accumulation. Currently, the list of BCCs, as described in the Final Rule to Amend the Final Water Quality Guidance for the Great Lakes System to Prohibit Mixing Zones for Bioaccumulative Chemicals of Concern, includes:

Bioaccumulative Chemicals of Concern

Lindane	Mirex
Hexachlorocyclohexane	Hexachlorobenzene
alpha-Hexachlorocyclohexane	Chlordane
beta-Hexachlorocyclohexane	DDD
delta-Hexachlorocyclohexane	DDT
Hexachlorobutadiene	DDE
Photomirex	Octachlorostyrene
1,2,4,5-Tetrachlorobenzene	PCBs
Toxaphene	2,3,7,8-TCDD
Pentachlorobenzene	Mercury
1,2,3,4-Tetrachlorobenzene	Dieldrin

H. If mixing zones from two or more proximate sources interact or overlap, the combined effect must be evaluated to ensure that applicable values will be met in the area where any applicable mixing zones overlap.

VII. LIMITATION

Nothing contained in these regulations shall be construed to limit the powers of any state signatory to the Compact to promulgate more stringent criteria, conditions, and restrictions to further lessen or prevent the pollution of waters within its jurisdiction.

VIII. VARIANCE

A. The Commission may grant a variance from the provisions of Section V of these standards, provided that the uses set forth in Section III are maintained and that the water quality criteria set forth in Section IV are met. The applicant for a variance shall adhere to the following:

1. The specific reasons for the variance shall be clearly stated in writing;

2. The burden of proof is upon the applicant to assure that the uses set forth in Section III are maintained;

3. Prior concurrence of the state where the applicant's discharge is located and those state(s) that may be affected must be obtained;

4. Such additional information shall be provided to the Commission upon request.

B. A variance may be granted for a period not to exceed the life of the applicable discharge permit; the applicant may apply for a variance renewal prior to the expiration of the permit.

IX. ANALYTICAL METHODS

Tests or analytical determinations establish compliance or non-compliance with the Waste Water Discharge Requirements and stream criteria established herein shall be made in accordance with accepted procedures such as those contained in the: (a) latest edition of Standard Methods for the Examination of Water and Waste Water, prepared and published jointly by the American Public Health Association (APHA), American Water Works Association (AWWA), and Water Environment Federation (WEF); (b) Annual Book of ASTM Standards, Part 31 – Water, by the American Society for Testing and Materials; (c) Guidelines Establishing Test Procedures for the Analysis of Pollutants (40 CFR 136) by the U.S. EPA; or (d) by such other methods as are approved by the Commission as equal or superior to or not available within methods in documents listed above, provided such other test methods are available to the public.

X. SEVERABILITY CLAUSE

Should any one or more of the Pollution Control Standards hereby established or should any one or more provisions of the regulations herein contained be held or determined to be invalid, illegal or unenforceable, for any reason whatsoever, all other standards and other provisions shall remain effective.

Appendix A

Acute and Chronic Criteria Concentrations for Total Ammonia-Nitrogen (in mg/L) For Varying Combinations of pH and Temperature

Table A1: pH-Dependent Values of the Acute Criteria for Total Ammonia-Nitrogen

pH	Acute Criterion (mg/L)		pH	Acute Criterion (mg/L)
6.0	55.0		7.6	17.0
6.1	54.2		7.7	14.4
6.2	53.2		7.8	12.1
6.3	52.0		7.9	10.1
6.4	50.5		8.0	8.41
6.5	48.8		8.1	6.95
6.6	46.8		8.2	5.73
6.7	44.6		8.3	4.71
6.8	42.0		8.4	3.88
6.9	39.2		8.5	3.20
7.0	36.1		8.6	2.65
7.1	32.9		8.7	2.20
7.2	29.5		8.8	1.84
7.3	26.2		8.9	1.56
7.4	23.0		9.0	1.32
7.5	19.9			

Table A2: Temperature and pH-Dependent Values of the Chronic Criteria for Total Ammonia-Nitrogen (when Fish Early Life Stages Present: March 1 - October 31)

pH	Temperature, Celsius									
	0	14	16	18	20	22	24	26	28	30
6.0	6.95	6.95	6.32	5.55	4.88	4.29	3.77	3.31	2.91	2.56
6.1	6.91	6.91	6.28	5.52	4.86	4.27	3.75	3.30	2.90	2.55
6.2	6.87	6.87	6.24	5.49	4.82	4.24	3.73	3.28	2.88	2.53
6.3	6.82	6.82	6.19	5.45	4.79	4.21	3.70	3.25	2.86	2.51
6.4	6.75	6.75	6.13	5.39	4.74	4.17	3.66	3.22	2.83	2.49
6.5	6.67	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.90
8.1	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.88	0.77
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.97	0.86	0.75	0.66
8.3	1.52	1.52	1.39	1.22	1.07	0.94	0.83	0.73	0.64	0.56
8.4	1.29	1.29	1.17	1.03	0.91	0.80	0.70	0.62	0.54	0.48
8.5	1.09	1.09	0.99	0.87	0.76	0.67	0.59	0.52	0.46	0.40
8.6	0.92	0.92	0.84	0.73	0.65	0.57	0.50	0.44	0.39	0.34
8.7	0.78	0.78	0.71	0.62	0.55	0.48	0.42	0.37	0.33	0.29
8.8	0.66	0.66	0.60	0.53	0.46	0.41	0.36	0.32	0.28	0.24
8.9	0.56	0.56	0.51	0.45	0.40	0.35	0.31	0.27	0.24	0.21
9.0	0.49	0.49	0.44	0.39	0.34	0.30	0.26	0.23	0.20	0.18

Table A3: Temperature and pH-Dependent Values of the Chronic Criteria for Total Ammonia-Nitrogen (when Fish Early Life Stages Absent: November 1 – February 29)

pH	Temperature, Celsius									
	0-7	8	9	10	11	12	13	14	15	16
6.0	11.3	10.6	9.92	9.30	8.72	8.20	7.70	7.20	6.70	6.30
6.1	11.2	10.5	9.87	9.25	8.67	8.13	7.62	7.15	6.70	6.28
6.2	11.2	10.5	9.81	9.19	8.62	8.08	7.58	7.10	6.66	6.24
6.3	11.1	10.4	9.73	9.12	8.55	8.02	7.52	7.05	6.61	6.19
6.4	11.0	10.3	9.63	9.03	8.47	7.94	7.44	6.98	6.54	6.13
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46	6.06
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36	5.97
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25	5.86
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10	5.72
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93	5.56
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73	5.37
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49	5.15
7.2	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22	4.90
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92	4.61
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59	4.30
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23	3.97
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85	3.61
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47	3.25
7.8	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71	2.54
8.0	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36	2.21
8.1	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03	1.91
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74	1.63
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48	1.39
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06	0.99
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.95	0.89	0.84
8.7	1.26	1.18	1.11	1.04	0.98	0.92	0.86	0.80	0.75	0.71
8.8	1.07	1.01	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.60
8.9	0.92	0.86	0.81	0.76	0.71	0.66	0.62	0.58	0.55	0.51
9.0	0.79	0.74	0.69	0.65	0.61	0.57	0.54	0.50	0.47	0.44

Note: At 15°C and above, the criteria for fish ELS absent is the same as the criteria for fish ELS present.

Appendix B

Dissolved Metals Criteria

Table B1: Numerical Values of Dissolved Metals Criteria at Specified Hardness Levels

Hardness	Cadmium		Chromium (III)		Lead		Silver	
	Acute Criterion (ug/L)	Chronic Criterion (ug/L)	Acute Criterion (ug/L)	Chronic Criterion (ug/L)	Acute Criterion (ug/L)	Chronic Criterion (ug/L)	Acute Criterion (ug/L)	Chronic Criterion (ug/L)
50	1.03	0.15	323	42.0	30.1	1.17	0.98	---
100	2.01	0.25	570	74.1	64.6	2.52	3.22	---
150	2.99	0.33	794	103	100	3.90	6.46	---
200	3.95	0.40	1005	131	136	5.31	10.6	---
250	4.90	0.46	1207	157	172	6.72	15.6	---
300	5.85	0.53	1401	182	209	8.13	21.3	---

Hardness	Copper		Nickel		Zinc	
	Acute Criterion (ug/L)	Chronic Criterion (ug/L)	Acute Criterion (ug/L)	Chronic Criterion (ug/L)	Acute Criterion (ug/L)	Chronic Criterion (ug/L)
50	6.99	4.95	261	28.9	65.1	65.7
100	13.4	8.96	469	52.0	117	118
150	19.7	12.7	660	73.3	165	167
200	25.8	16.2	842	93.5	211	213
250	31.9	19.6	1017	113	255	257
300	37.8	22.9	1187	132	297	300

Appendix C

Critical Flow Values

FROM	TO	Minimum 7-day 10-year Low-Flow, cfs[1]	Minimum 1-day 10-year Low-Flow, cfs[2]	Harmonic Mean Flow, cfs[2]
Pittsburgh (MP 0.0)	Montgomery Dam (MP 31.7)	4,730	4,200	16,200
Montgomery Dam (MP 31.7)	Willow Island Dam (MP 161.7)	5,880	5,000	20,500
Willow Island Dam (MP 161.7)	Racine Dam (MP 237.5)	6,560	5,170	24,500
Racine Dam (MP 237.5)	R.C. Byrd Dam (MP 279.2)	6,700	5,170	26,000
R.C. Byrd Dam (MP 279.2)	Guyandotte River (MP 305.2)	9,120	5,870	34,500
Guyandotte River (MP 305.2)	Big Sandy River (MP 317.1)	9,300	6,000	35,900
Big Sandy River (MP 317.1)	Greenup Dam (MP 341.0)	10,000	7,000	38,400
Greenup Dam (MP 341.0)	Meldahl Dam (MP 436.2)	10,600	7,960	42,100
Meldahl Dam (MP 436.2)	McAlpine Dam (MP 606.8)	10,600	8,670	45,300
McAlpine Dam (MP 606.8)	Newburgh Dam (MP 776.1)	11,000	8,670	49,000
Newburgh Dam (MP 776.1)	J.T. Myers Dam (MP 846.0)	12,900	10,000	60,900
J.T. Myers Dam (MP 846.0)	Smithland Dam (MP 918.5)	16,900	12,700	78,600
Smithland Dam (MP 918.5)	Cairo Point (MP 981.0)	51,000	40,900	175,000

[1]Minimum 7-day, 10-year flow (in cubic feet per second) provided by the U.S. Army Corps of Engineers.
[2]Based on Commission analysis of stream flow data provided by the U.S. Army Corps of Engineers.

Appendix D

Great Lakes Water Quality Initiative Methodologies for Development of Aquatic Life Criteria and Values

Methodology for Deriving Aquatic Life Criteria: Tier I

Great Lakes States and Tribes shall adopt provisions consistent with (as protective as) this appendix.

I. Definitions

A. **Material of Concern.** When defining the material of concern the following should be considered:

1. Each separate chemical that does not ionize substantially in most natural bodies of water should usually be considered a separate material, except possibly for structurally similar organic compounds that only exist in large quantities as commercial mixtures of the various compounds and apparently have similar biological, chemical, physical, and toxicological properties.

2. For chemicals that ionize substantially in most natural bodies of water (e.g., some phenols and organic acids, some salts of phenols and organic acids, and most inorganic salts and coordination complexes of metals and metalloid), all forms that would be in chemical equilibrium should usually be considered one material. Each different oxidation state of a metal and each different non-ionizable covalently bonded organometallic compound should usually be considered a separate material.

3. The definition of the material of concern should include an operational analytical component. Identification of a material simply as "sodium," for example, implies "total sodium," but leaves room for doubt. If "total" is meant, it must be explicitly stated. Even "total" has different operational definitions, some of which do not necessarily measure "all that is there" in all samples. Thus, it is also necessary to reference or describe the analytical method that is intended. The selection of the operational analytical component should take into account the analytical and environmental chemistry of the material and various practical considerations, such as labor and equipment requirements, and whether the method would require measurement in the field or would allow measurement after samples are transported to a laboratory.

a. The primary requirements of the operational analytical component are that it be appropriate for use on samples of receiving water, that it be compatible with the available toxicity and bioaccumulation data without making extrapolations that are too hypothetical, and that it rarely results in underprotection or overprotection of aquatic organisms and their uses. Toxicity is the property of a material, or combination of materials, to adversely affect organisms.

b. Because an ideal analytical measurement will rarely be available, an appropriate compromise measurement will usually have to be used. This compromise measurement must fit with the general approach that if an ambient concentration is lower than the criterion, unacceptable effects will probably not occur, i.e., the compromise measure must not err on the side of underprotection when measurements are made on a surface water. What is an appropriate measurement in one situation might not be appropriate for another. For example, because the chemical and physical properties of an effluent are usually quite different from those of the receiving water, an analytical method that is appropriate for analyzing an effluent might not be appropriate for expressing a criterion, and vice versa. A criterion should be based on an appropriate analytical measurement, but the criterion is not rendered useless if an ideal measurement either is not available or is not feasible.

   Note: The analytical chemistry of the material might have to be taken into account when defining the material or when judging the acceptability of some toxicity tests, but a criterion must not be based on the sensitivity of an analytical method. When aquatic organisms are more sensitive than routine analytical methods, the proper solution is to develop better analytical methods.

4. It is now the policy of U.S. EPA that the use of dissolved metal to set and measure compliance with water quality standards is the recommended approach, because dissolved metal more closely approximates the bioavailable fraction of metal in the water column than does total recoverable metal. One reason is that a primary mechanism for water column toxicity is adsorption at the gill surface which requires metals to be in the dissolved form. Reasons for the consideration of total recoverable metals criteria include risk management considerations not covered by evaluation of water column toxicity. A risk manager may consider sediments and food chain effects and may decide to take a conservative approach for metals, considering that metals are very persistent chemicals. This approach could include the use of total recoverable metal in water quality standards. A range of different risk management decisions can be justified. U.S. EPA recommends that State water quality standards be based on dissolved metal. U.S. EPA will also approve a State risk

management decision to adopt standards based on total recoverable metal, if those standards are otherwise approvable under this program.

B. **Acute Toxicity.** Concurrent and delayed adverse effect(s) that results from an acute exposure and occurs within any short observation period which begins when the exposure begins, may extend beyond the exposure period, and usually does not constitute a substantial portion of the life span of the organism. (Concurrent toxicity is an adverse effect to an organism that results from, and occurs during, its exposure to one or more test materials.) Exposure constitutes contact with a chemical or physical agent. Acute exposure, however, is exposure of an organism for any short period which usually does not constitute a substantial portion of its life span.

C. **Chronic Toxicity.** Concurrent and delayed adverse effect(s) that occurs only as a result of a chronic exposure. Chronic exposure is exposure of an organism for any long period or for a substantial portion of its life span.

II. Collection Of Data

A. Collect all data available on the material concerning toxicity to aquatic animals and plants.

B. All data that are used should be available in typed, dated, and signed hard copy (e.g., publication, manuscript, letter, memorandum, etc.) with enough supporting information to indicate that acceptable test procedures were used and that the results are reliable. In some cases, it might be appropriate to obtain written information from the investigator, if possible. Information that is not available for distribution shall not be used.

C. Questionable data, whether published or unpublished, must not be used. For example, data must be rejected if they are from tests that did not contain a control treatment, and tests in which too many organisms in the control treatment died or showed signs of stress or disease.

D. Data on technical grade materials may be used if appropriate, but data on formulated mixtures and emulsifiable concentrates of the material must not be used.

E. For some highly volatile, hydrolyzable, or degradable materials, it might be appropriate to use only results of flow-through tests in which the concentrations of test material in test solutions were measured using acceptable analytical methods. A flow-through test is a test with aquatic organisms in which test solutions flow into constant-volume test chambers either intermittently (e.g., every few minutes) or continuously, with the excess flowing out.

F. Data must be rejected if obtained using:

1. Brine shrimp, because they usually only occur naturally in water with salinity greater than 35 g/kg.

2. Species that do not have reproducing wild populations in North America.

3. Organisms that were previously exposed to substantial concentrations of the test material or other contaminants.

4. Saltwater species except for use in deriving Acute-Chronic Ratios (ACR). An ACR is a standard measure of the acute toxicity of a material divided by an appropriate measure of the chronic toxicity of the same material under comparable conditions.

G. Questionable data, data on formulated mixtures and emulsifiable concentrates, and data obtained with species non-resident to North America or previously exposed organisms may be used to provide auxiliary information but must not be used in the derivation of criteria.

III. Required Data

A. Certain data should be available to help ensure that each of the major kinds of possible adverse effects receives adequate consideration. An adverse effect is a change in an organism that is harmful to the organism. Exposure means contact with a chemical or physical agent. Results of acute and chronic toxicity tests with representative species of aquatic animals are necessary so that data available for tested species can be considered a useful indication of the sensitivities of appropriate untested species. Fewer data concerning toxicity to aquatic plants are usually available because procedures for conducting tests with plants and interpreting the results of such tests are not as well developed.

B. To derive a Tier I criterion for aquatic organisms and their uses, the following must be available:

1. Results of acceptable acute (or chronic) tests (see section IV or VI of this appendix) with at least one species of freshwater animal in at least eight different families such that all of the following are included:
   a) The family Salmonidae in the class Osteichthyes;
   b) One other family (preferably a commercially or recreationally important, warmwater species) in the class Osteichthyes (e.g., bluegill, channel catfish);
   c) A third family in the phylum Chordata (e.g., fish, amphibian);
   d) A planktonic crustacean (e.g., a cladoceran, copepod);
   e) A benthic crustacean (e.g., ostracod, isopod, amphipod, crayfish);

f) An insect (e.g., mayfly, dragonfly, damselfly, stonefly, caddisfly, mosquito, midge);
g) A family in a phylum other than Arthropoda or Chordata (e.g., Rotifera, Annelida, Mollusca);
h) A family in any order of insect or any phylum not already represented.

2. Acute-chronic ratios (see section VI of this appendix) with at least one species of aquatic animal in at least three different families provided that of the three species:
   a) At least one is a fish,
   b) At least one is an invertebrate, and
   c) At least one species is an acutely sensitive freshwater species.

3. Results of at least one acceptable test with a freshwater algae or vascular plant is desirable but not required for criterion derivation (see section VIII of this appendix). If plants are among the aquatic organisms most sensitive to the material, results of a test with a plant in another phylum (division) should also be available.

C. If all required data are available, a numerical criterion can usually be derived except in special cases. For example, derivation of a chronic criterion might not be possible if the available ACRs vary by more than a factor of ten with no apparent pattern. Also, if a criterion is to be related to a water quality characteristic (see sections V and VII of this appendix), more data will be required.

D. Confidence in a criterion usually increases as the amount of available pertinent information increases. Thus, additional data are usually desirable.

IV. Final Acute Value

A. Appropriate measures of the acute (short-term) toxicity of the material to a variety of species of aquatic animals are used to calculate the Final Acute Value (FAV). The calculated FAV is a calculated estimate of the concentration of a test material such that 95 percent of the genera (with which acceptable acute toxicity tests have been conducted on the material) have higher Genus Mean Acute Values (GMAVs). An acute test is a comparative study in which organisms, that are subjected to different treatments, are observed for a short period usually not constituting a substantial portion of their life span. However, in some cases, the Species Mean Acute Value (SMAV) of a commercially or recreationally important species is lower than the calculated FAV, then the SMAV replaces the calculated FAV in order to provide protection for that important species.

B. Acute toxicity tests shall be conducted using acceptable procedures. For good examples of acceptable procedures see American Society for Testing and

Materials (ASTM) Standard E 729, Guide for Conducting Acute Toxicity Tests with Fishes, Macroinvertebrates and Amphibians.

C. Results of acute tests during which the test organisms were fed should not be used, unless data indicate that the food did not affect the toxicity of the test material.

D. Results of acute tests conducted in unusual dilution water, e.g., dilution water in which total organic carbon or particulate matter exceeded 5 mg/L, should not be used, unless a relationship is developed between acute toxicity and organic carbon or particulate matter, or unless data show that organic carbon or particulate matter, etc., do not affect toxicity.

E. Acute values must be based upon endpoints which reflect the total severe adverse impact of the test material on the organisms used in the test. Therefore, only the following kinds of data on acute toxicity to aquatic animals shall be used:

1. Tests with daphnids and other cladocerans must be started with organisms less than 24 hours old and tests with midges must be started with second or third instar larvae. It is preferred that the results should be the 48-hour EC50 based on the total percentage of organisms killed and immobilized. If such an EC50 is not available for a test, the 48-hour LC50 should be used in place of the desired 48-hour EC50. An EC50 or LC50 of longer than 48 hours can be used as long as the animals were not fed and the control animals were acceptable at the end of the test. An EC50 is a statistically or graphically estimated concentration that is expected to cause one or more specified effects in 50 percent of a group of organisms under specified conditions. An LC50 is a statistically or graphically estimated concentration that is expected to be lethal to 50 percent of a group of organisms under specified conditions.

2. It is preferred that the results of a test with embryos and larvae of barnacles, bivalve mollusks (clams, mussels, oysters and scallops), sea urchins, lobsters, crabs, shrimp and abalones be the 96-hour EC50 based on the percentage of organisms with incompletely developed shells plus the percentage of organisms killed. If such an EC50 is not available from a test, of the values that are available from the test, the lowest of the following should be used in place of the desired 96-hour EC50: 48- to 96-hour EC50s based on percentage of organisms with incompletely developed shells plus percentage of organisms killed, 48- to 96-hour EC50s based upon percentage of organisms with incompletely developed shells, and 48-hour to 96-hour LC50s.

3. It is preferred that the result of tests with all other aquatic animal species and older life stages of barnacles, bivalve mollusks (clams, mussels, oysters and scallops), sea urchins, lobsters, crabs, shrimp and abalones be

the 96-hour EC50 based on percentage of organisms exhibiting loss of equilibrium plus percentage of organisms immobilized plus percentage of organisms killed. If such an EC50 is not available from a test, of the values that are available from a test the lower of the following should be used in place of the desired 96-hour EC50: the 96-hour EC50 based on percentage of organisms exhibiting loss of equilibrium plus percentage of organisms immobilized and the 96-hour LC50.

4. Tests whose results take into account the number of young produced, such as most tests with protozoans, are not considered acute tests, even if the duration was 96 hours or less.

5. If the tests were conducted properly, acute values reported as "greater than" values and those that are above the solubility of the test material should be used, because rejection of such acute values would bias the FAV by eliminating acute values for resistant species.

F. If the acute toxicity of the material to aquatic animals has been shown to be related to a water quality characteristic such as hardness or particulate matter for freshwater animals, refer to section V of this appendix.

G. The agreement of the data within and between species must be considered. Acute values that appear to be questionable in comparison with other acute and chronic data for the same species and for other species in the same genus must not be used. For example, if the acute values available for a species or genus differ by more than a factor of ten, rejection of some or all of the values would be appropriate, absent countervailing circumstances.

H. If the available data indicate that one or more life stages are at least a factor of two more resistant than one or more other life stages of the same species, the data for the more resistant life stages must not be used in the calculation of the SMAV because a species cannot be considered protected from acute toxicity if all of the life stages are not protected.

I. For each species for which at least one acute value is available, the SMAV shall be calculated as the geometric mean of the results of all acceptable flow-through acute toxicity tests in which the concentrations of test material were measured with the most sensitive tested life stage of the species. For a species for which no such result is available, the SMAV shall be calculated as the geometric mean of all acceptable acute toxicity tests with the most sensitive tested life stage, i.e., results of flow-through tests in which the concentrations were not measured and results of static and renewal tests based on initial concentrations (nominal concentrations are acceptable for most test materials if measured concentrations are not available) of test material. A renewal test is a test with aquatic organisms in which either the test solution in a test chamber is removed and replaced at least once during the test or the test organisms are transferred into a new test solution of the same composition at

least once during the test. A static test is a test with aquatic organisms in which the solution and organisms that are in a test chamber at the beginning of the test remain in the chamber until the end of the test, except for removal of dead test organisms.

Note 1: Data reported by original investigators must not be rounded off. Results of all intermediate calculations must not be rounded off to fewer than four significant digits.

Note 2: The geometric mean of N numbers is the Nth root of the product of the N numbers. Alternatively, the geometric mean can be calculated by adding the logarithms of the N numbers, dividing the sum by N, and taking the antilog of the quotient. The geometric mean of two numbers is the square root of the product of the two numbers, and the geometric mean of one number is that number. Either natural (base e) or common (base 10) logarithms can be used to calculate geometric means as long as they are used consistently within each set of data, i.e., the antilog used must match the logarithms used.

Note 3: Geometric means, rather than arithmetic means, are used here because the distributions of sensitivities of individual organisms in toxicity tests on most materials and the distributions of sensitivities of species within a genus are more likely to be lognormal than normal. Similarly, geometric means are used for ACRs because quotients are likely to be closer to lognormal than normal distributions. In addition, division of the geometric mean of a set of numerators by the geometric mean of the set of denominators will result in the geometric mean of the set of corresponding quotients.

J. For each genus for which one or more SMAVs are available, the GMAV shall be calculated as the geometric mean of the SMAVs available for the genus.

K. Order the GMAVs from high to low.

L. Assign ranks, R, to the GMAVs from "1" for the lowest to "N" for the highest. If two or more GMAVs are identical, assign them successive ranks.

M. Calculate the cumulative probability, P, for each GMAV as R/(N + 1).

N. Select the four GMAVs which have cumulative probabilities closest to 0.05 (if there are fewer than 59 GMAVs, these will always be the four lowest GMAVs).

O. Using the four selected GMAVs, and Ps, calculate:

$$L = \frac{\sum(\ln\ GMAV) - S(\sum(\sqrt{P}))}{4}$$

$$S^2 = \frac{\sum((\ln\ GMAV)^2) - \frac{(\sum(\ln\ GMAV))^2}{4}}{\sum(P) - \frac{(\sum(\sqrt{P}))^2}{4}}$$

$$A = S(\sqrt{0.05}) + L$$

$$FAV = e^A$$

Note: Natural logarithms (logarithms to base e, denoted as ln) are used herein merely because they are easier to use on some hand calculators and computers than common (base 10) logarithms. Consistent use of either will produce the same result.

P. If, for a commercially or recreationally important species, the geometric mean of the acute values from flow-through tests in which the concentrations of test material were measured is lower than the calculated Final Acute Value (FAV), then that geometric mean must be used as the FAV instead of the calculated FAV.

Q. See section VI of this appendix.

V. Final Acute Equation

A. When enough data are available to show that acute toxicity to two or more species is similarly related to a water quality characteristic, the relationship shall be taken into account as described in sections V.B through V.G of this appendix or using analysis of covariance. The two methods are equivalent and produce identical results. The manual method described below provides an understanding of this application of covariance analysis, but computerized versions of covariance analysis are much more convenient for analyzing large data sets. If two or more factors affect toxicity, multiple regression analysis shall be used.

B. For each species for which comparable acute toxicity values are available at two or more different values of the water quality characteristic, perform a least squares regression of the acute toxicity values on the corresponding values of

the water quality characteristic to obtain the slope and its 95 percent confidence limits for each species.

Note: Because the best documented relationship is that between hardness and acute toxicity of metals in fresh water and a log-log relationship fits these data, geometric means and natural logarithms of both toxicity and water quality are used in the rest of this section. For relationships based on other water quality characteristics, such as pH or temperature, no transformation or a different transformation might fit the data better, and appropriate changes will be necessary throughout this section.

C. Decide whether the data for each species are relevant, taking into account the range and number of the tested values of the water quality characteristic and the degree of agreement within and between species. For example, a slope based on six data points might be of limited value if it is based only on data for a very narrow range of values of the water quality characteristic. A slope based on only two data points, however, might be useful if it is consistent with other information and if the two points cover a broad enough range of the water quality characteristic. In addition, acute values that appear to be questionable in comparison with other acute and chronic data available for the same species and for other species in the same genus should not be used. For example, if after adjustment for the water quality characteristic, the acute values available for a species or genus differ by more than a factor of ten, rejection of some or all of the values would be appropriate, absent countervailing justification. If useful slopes are not available for at least one fish and one invertebrate or if the available slopes are too dissimilar or if too few data are available to adequately define the relationship between acute toxicity and the water quality characteristic, return to section IV.G of this appendix, using the results of tests conducted under conditions and in waters similar to those commonly used for toxicity tests with the species.

D. For each species, calculate the geometric mean of the available acute values and then divide each of the acute values for the species by the geometric mean for the species. This normalizes the acute values so that the geometric mean of the normalized values for each species individually and for any combination of species is 1.0.

E. Similarly, normalize the values of the water quality characteristic for each species individually using the same procedure as above.

F. Individually for each species perform a least squares regression of the normalized acute values of the water quality characteristic. The resulting slopes and 95 percent confidence limits will be identical to those obtained in section V.B. of this appendix. If, however, the data are actually plotted, the line of best fit for each individual species will go through the point 1,1 in the center of the graph.

G. Treat all of the normalized data as if they were all for the same species and perform a least squares regression of all of the normalized acute values on the corresponding normalized values of the water quality characteristic to obtain the pooled acute slope, V, and its 95 percent confidence limits. If all of the normalized data are actually plotted, the line of best fit will go through the point 1,1 in the center of the graph.

H. For each species, calculate the geometric mean, W, of the acute toxicity values and the geometric mean, X, of the values of the water quality characteristic. (These were calculated in sections V.D and V.E of this appendix).

I. For each species, calculate the logarithm, Y, of the SMAV at a selected value, Z, of the water quality characteristic using the equation:

$$Y = \ln W - V(\ln X - \ln Z)$$

J. For each species, calculate the SMAV at X using the equation:

$$SMAV = e^{Y}$$

Note: Alternatively, the SMAVs at Z can be obtained by skipping step H above, using the equations in steps I and J to adjust each acute value individually to Z, and then calculating the geometric mean of the adjusted values for each species individually. This alternative procedure allows an examination of the range of the adjusted acute values for each species.

K. Obtain the FAV at Z by using the procedure described in sections IV.J through IV.O of this appendix.

L. If, for a commercially or recreationally important species, the geometric mean of the acute values at Z from flow-through tests in which the concentrations of the test material were measured is lower than the FAV at Z, then the geometric mean must be used as the FAV, instead of the FAV.

M. The Final Acute Equation is written as:

$$FAV = e^{(V[\ln(\text{water quality characteristic})] + A - V[\ln Z])},$$

where V = pooled acute slope, and A = ln(FAV at Z).

Because V, A, and Z are known, the FAV can be calculated for any selected value of the water quality characteristic.

VI. Final Chronic Value

A. Depending on the data that are available concerning chronic toxicity to aquatic animals, the Final Chronic Value (FCV) can be calculated in the same manner as the FAV or by dividing the FAV by the Final Acute-Chronic Ratio (FACR). In some cases, it might not be possible to calculate a FCV. The FCV is (a) a calculated estimate of the concentration of a test material such that 95 percent of the genera (with which acceptable chronic toxicity tests have been conducted on the material) have higher GMCVs, or (b) the quotient of an FAV divided by an appropriate ACR, or (c) the SMCV of an important and/or critical species, if the SMCV is lower than the calculated estimate or the quotient, whichever is applicable.

Note: As the name implies, the ACR is a way of relating acute and chronic toxicities.

B. Chronic values shall be based on results of flow-through (except renewal is acceptable for daphnids) chronic tests in which the concentrations of test material in the test solutions were properly measured at appropriate times during the test. A chronic test is a comparative study in which organisms, that are subjected to different treatments, are observed for a long period or a substantial portion of their life span.

C. Results of chronic tests in which survival, growth, or reproduction in the control treatment was unacceptably low shall not be used. The limits of acceptability will depend on the species.

D. Results of chronic tests conducted in unusual dilution water, e.g., dilution water in which total organic carbon or particulate matter exceeded five mg/L, should not be used, unless a relationship is developed between chronic toxicity and organic carbon or particulate matter, or unless data show that organic carbon, particulate matter, etc., do not affect toxicity.

E. Chronic values must be based on endpoints and lengths of exposure appropriate to the species. Therefore, only results of the following kinds of chronic toxicity tests shall be used:

1. Life-cycle toxicity tests consisting of exposures of each of two or more groups of individuals of a species to a different concentration of the test material throughout a life cycle. To ensure that all life stages and life processes are exposed, tests with fish should begin with embryos or newly hatched young less than 48 hours old, continue through maturation and reproduction, and should end not less than 24 days (90 days for salmonids) after the hatching of the next generation. Tests with daphnids should begin with young less than 24 hours old and last for not less than 21 days, and for ceriodaphnids not less than seven days. For good examples of acceptable procedures see American Society for Testing and Materials

(ASTM) Standard E 1193 Guide for conducting renewal life-cycle toxicity tests with Daphnia magna and ASTM Standard E 1295 Guide for conducting three-brood, renewal toxicity tests with Ceriodaphnia dubia. Tests with mysids should begin with young less than 24 hours old and continue until seven days past the median time of first brood release in the controls. For fish, data should be obtained and analyzed on survival and growth of adults and young, maturation of males and females, eggs spawned per female, embryo viability (salmonids only), and hatchability. For daphnids, data should be obtained and analyzed on survival and young per female. For mysids, data should be obtained and analyzed on survival, growth, and young per female.

2. Partial life-cycle toxicity tests consist of exposures of each of two more groups of individuals of a species of fish to a different concentration of the test material through most portions of a life cycle. Partial life-cycle tests are allowed with fish species that require more than a year to reach sexual maturity, so that all major life stages can be exposed to the test material in less than 15 months. A life-cycle test is a comparative study in which organisms, that are subjected to different treatments, are observed at least from a life stage in one generation to the same life-stage in the next generation. Exposure to the test material should begin with immature juveniles at least two months prior to active gonad development, continue through maturation and reproduction, and end not less than 24 days (90 days for salmonids) after the hatching of the next generation. Data should be obtained and analyzed on survival and growth of adults and young, maturation of males and females, eggs spawned per female, embryo viability (salmonids only), and hatchability.

3. Early life-stage toxicity tests consisting of 28-day to 32-day (60 days post hatch for salmonids) exposures of the early life stages of a species of fish from shortly after fertilization through embryonic, larval, and early juvenile development. Data should be obtained and analyzed on survival and growth.

   Note: Results of an early life-stage test are used as predictions of results of life cycle and partial life-cycle tests with the same species. Therefore, when results of a life cycle or partial life-cycle test are available, results of an early life-stage test with the same species should not be used. Also, results of early life-stage tests in which the incidence of mortalities or abnormalities increased substantially near the end of the test shall not be used because the results of such tests are possibly not good predictions of comparable life-cycle or partial life-cycle tests.

F. A chronic value may be obtained by calculating the geometric mean of the lower and upper chronic limits from a chronic test or by analyzing chronic data using regression analysis.

1. A lower chronic limit is the highest tested concentration:
   a) In an acceptable chronic test;
   b) Which did not cause an unacceptable amount of adverse effect on any of the specified biological measurements; and
   c) Below which no tested concentration caused an unacceptable effect.

2. An upper chronic limit is the lowest tested concentration:
   a) In an acceptable chronic test;
   b) Which did cause an unacceptable amount of adverse effect on one or more of the specified biological measurements; and
   c) Above which all tested concentrations also caused such an effect.

Note: Because various authors have used a variety of terms and definitions to interpret and report results of chronic tests, reported results should be reviewed carefully. The amount of effect that is considered unacceptable is often based on a statistical hypothesis test, but might also be defined in terms of a specified percent reduction from the controls. A small percent reduction (e.g., three percent) might be considered acceptable even if it is statistically significantly different from the control, whereas a large percent reduction (e.g., 30 percent) might be considered unacceptable even if it is not statistically significant.

G. If the chronic toxicity of the material to aquatic animals has been shown to be related to a water quality characteristic such as hardness or particulate matter for freshwater animals, refer to section VII of this appendix.

H. If chronic values are available for species in eight families as described in section III.B.1 of this appendix, a SMCV shall be calculated for each species for which at least one chronic value is available by calculating the geometric mean of the results of all acceptable life-cycle and partial life-cycle toxicity tests with the species; for a species of fish for which no such result is available, the SMCV is the geometric mean of all acceptable early life-stage tests. Appropriate GMCVs shall also be calculated. A GMCV is the geometric mean of the SMCVs for the genus. The FCV shall be obtained using the procedure described in sections IV.J through IV.O of this appendix, substituting SMCV and GMCV for SMAV and GMAV respectively. See section VI.M of this appendix.

Note: Section VI.I through VI.L is for use when chronic values are not available for species in eight taxonomic families as described in section III.B.1 of this appendix.

I. For each chronic value for which at least one corresponding appropriate acute value is available, calculate an ACR, using for the numerator the geometric mean of the results of all acceptable flow-through (except static is acceptable for daphnids and midges) acute tests in the same dilution water in which the concentrations are measured. For fish, the acute test(s) should be conducted

with juveniles. The acute test(s) should be part of the same study as thechronic test. If acute tests were not conducted as part of the same study, but were conducted as part of a different study in the same laboratory and dilution water, then they may be used. If no such acute tests are available, results of acute tests conducted in the same dilution water in a different laboratory may be used. If no such acute tests are available, an ACR shall not be calculated.

J. For each species, calculate the SMACR as the geometric mean of all ACRs available for that species.

K. For some materials, the ACR seems to be the same for all species, but for other materials the ratio seems to increase or decrease as the SMAV increases. Thus the FACR can be obtained in three ways, depending on the data available:

1. If the species mean ACR seems to increase or decrease as the MAVs increase, the FACR shall be calculated as the geometric mean of the ACRs for species whose SMAVs are close to the FAV.

2. If no major trend is apparent and the ACRs for all species are within a factor of ten, the FACR shall be calculated as the geometric mean of all of the SMACRs.

3. If the most appropriate SMACRs are less than 2.0, and especially if they are less than 1.0, acclimation has probably occurred during the chronic test. In this situation, because continuous exposure and acclimation cannot be assured to provide adequate protection in field situations, the FACR should be assumed to be 2.0, so that the FCV is equal to the Criterion Maximum Concentration (CMC). See section X.B of this appendix.

   If the available SMACRs do not fit one of these cases, a FACR may not be obtained and a Tier I FCV probably cannot be calculated.

L. Calculate the FCV by dividing the FAV by the FACR:

$$FCV = FAV/FACR$$

If there is a Final Acute Equation rather than a FAV, see section V of this appendix.

M. If the SMCV of a commercially or recreationally important species is lower than the calculated FCV, then that SMCV must be used as the FCV instead of the calculated FCV.

N. See section VIII of this appendix.

VII. Final Chronic Equation

A. A Final Chronic Equation can be derived in two ways. The procedure described in section VII.A. of this appendix will result in the chronic slope being the same as the acute slope. The procedure described in sections VII.B. through N of this appendix will usually result in the chronic slope being different from the acute slope.

1. If ACRs are available for enough species at enough values of the water quality characteristic to indicate that the ACR appears to be the same for all species and appears to be independent of the water quality characteristic, calculate the FACR as the geometric mean of the available SMACRs.

2. Calculate the FCV at the selected value Z of the water quality characteristic by dividing the FAV at Z (see section V.M of this appendix) by the FACR.

3. Use V = pooled acute slope (see section V.M of this appendix), and L = pooled chronic slope.

4. See section VII.M of this appendix.

B. When enough data are available to show that chronic toxicity to at least one species is related to a water quality characteristic, the relationship should be taken into account as described in sections C through G below or using analysis of covariance. The two methods are equivalent and produce identical results. The manual method described below provides an understanding of this application of covariance analysis, but computerized versions of covariance analysis are much more convenient for analyzing large data sets. If two or more factors affect toxicity, multiple regression analysis shall be used.

C. For each species for which comparable chronic toxicity values are available at two or more different values of the water quality characteristic, perform a least squares regression of the chronic toxicity values on the corresponding values of the water quality characteristic to obtain the slope and its 95 percent confidence limits for each species.

Note: Because the best documented relationship is that between hardness and acute toxicity of metals in fresh water and a log-log relationship fits these data, geometric means and natural logarithms of both toxicity and water quality are used in the rest of this section. For relationships based on other water quality characteristics, such as pH or temperature, no transformation or a different transformation might fit the data better, and appropriate changes will be necessary throughout this section. It is probably preferable, but not necessary, to use the same transformation that was used with the acute values in section V of this appendix.

D. Decide whether the data for each species are relevant, taking into account the range and number of the tested values of the water quality characteristic and the degree of agreement within and between species. For example, a slope based on six data points might be of limited value if it is based only on data for a very narrow range of values of the water quality characteristic. A slope based on only two data points, however, might be more useful if it is consistent with other information and if the two points cover a broad range of the water quality characteristic. In addition, chronic values that appear to be questionable in comparison with other acute and chronic data available for the same species and for other species in the same genus in most cases should not be used. For example, if after adjustment for the water quality characteristic, the chronic values available for a species or genus differ by more than a factor of ten, rejection of some or all of the values is, in most cases, absent countervailing circumstances, appropriate. If a useful chronic slope is not available for at least one species or if the available slopes are too dissimilar or if too few data are available to adequately define the relationship between chronic toxicity and the water quality characteristic, it might be appropriate to assume that the chronic slope is the same as the acute slope, which is equivalent to assuming that the ACR is independent of the water quality characteristic. Alternatively, return to section VI.H of this appendix, using the results of tests conducted under conditions and in waters similar to those commonly used for toxicity tests with the species.

E. Individually for each species, calculate the geometric mean of the available chronic values and then divide each chronic value for a species by the mean for the species. This normalizes the chronic values so that the geometric mean of the normalized values for each species individually, and for any combination of species, is 1.0.

F. Similarly, normalize the values of the water quality characteristic for each species individually.

G. Individually for each species, perform a least squares regression of the normalized chronic toxicity values on the corresponding normalized values of the water quality characteristic. The resulting slopes and the 95 percent confidence limits will be identical to those obtained in section VII.B of this appendix. Now, however, if the data are actually plotted, the line of best fit for each individual species will go through the point 1,1 in the center of the graph.

H. Treat all of the normalized data as if they were all the same species and perform a least squares regression of all of the normalized chronic values on the corresponding normalized values of the water quality characteristic to obtain the pooled chronic slope, L, and its 95 percent confidence limits. If all normalized data are actually plotted, the line of best fit will go through the point 1,1 in the center of the graph.

I. For each species, calculate the geometric mean, M, of the toxicity values and the geometric mean, P, of the values of the water quality characteristic. (These are calculated in sections VII.E and F of this appendix.)

J. For each species, calculate the logarithm, Q, of the SMCV at a selected value, Z, of the water quality characteristic using the equation:

$$Q = \ln M - L(\ln P - \ln Z)$$

Note: Although it is not necessary, it is recommended that the same value of the water quality characteristic be used here as was used in section V of this appendix.

K. For each species, calculate a SMCV at Z using the equation:

$$SMCV = e^{Q}$$

Note: Alternatively, the SMCV at Z can be obtained by skipping section VII.J of this appendix, using the equations in sections VII.J and K of this appendix to adjust each chronic value individually to Z, and then calculating the geometric means of the adjusted values for each species individually. This alternative procedure allows an examination of the range of the adjusted chronic values for each species.

L. Obtain the FCV at Z by using the procedure described in sections IV.J through O of this appendix.

M. If the SMCV at Z of a commercially or recreationally important species is lower than the calculated FCV at Z, then that SMCV shall be used as the FCV at Z instead of the calculated FCV.

N. The Final Chronic Equation is written as:

$$FCV = e^{(L[\ln(\text{water quality characteristic})] + \ln S - L[\ln Z])}$$

where:

L = pooled chronic slope
S = FCV at Z.

Because L, S, and Z are known, the FCV can be calculated for any selected value of the water quality characteristic.

VIII. Final Plant Value

A. A Final Plant Value (FPV) is the lowest plant value that was obtained with an important aquatic plant species in an acceptable toxicity test for which the concentrations of the test material were measured and the adverse effect was biologically important. Appropriate measures of the toxicity of the material to

aquatic plants are used to compare the relative sensitivities of aquatic plants and animals. Although procedures for conducting and interpreting the results of toxicity tests with plants are not well-developed, results of tests with plants usually indicate that criteria which adequately protect aquatic animals and their uses will, in most cases, also protect aquatic plants and their uses.

B. A plant value is the result of a 96-hour test conducted with an alga or a chronic test conducted with an aquatic vascular plant.

Note: A test of the toxicity of a metal to a plant shall not be used if the medium contained an excessive amount of a completing agent, such as EDTA, that might affect the toxicity of the metal. Concentrations of EDTA above 200 µg/L should be considered excessive.

C. The FPV shall be obtained by selecting the lowest result from a test with an important aquatic plant species in which the concentrations of test material are measured and the endpoint is biologically important.

IX. Other Data

Pertinent information that could not be used in earlier sections might be available concerning adverse effects on aquatic organisms. The most important of these are data on cumulative and delayed toxicity, reduction in survival, growth, or reproduction, or any other adverse effect that has been shown to be biologically important. Delayed toxicity is an adverse effect to an organism that results from, and occurs after the end of, its exposure to one or more test materials. Especially important are data for species for which no other data are available. Data from behavioral, biochemical, physiological, microcosm, and field studies might also be available. Data might be available from tests conducted in unusual dilution water (see sections IV.D and VI.D of this appendix), from chronic tests in which the concentrations were not measured (see section VI.B of this appendix), from tests with previously exposed organisms (see section II.F.3 of this appendix), and from tests on formulated mixtures or emulsifiable concentrates (see section II.D of this appendix). Such data might affect a criterion if the data were obtained with an important species, the test concentrations were measured, and the endpoint was biologically important.

X. Criterion

A. A criterion consists of two concentrations: the Criterion Maximum Concentration (CMC) and the Criterion Continuous Concentration (CCC).

B. The CMC is equal to one-half the FAV. The CMC is an estimate of the highest concentration of a material in the water column to which an aquatic community can be exposed briefly without resulting in an unacceptable effect.

C. The CCC is equal to the lowest of the FCV or the FPV (if available) unless other data (see section IX of this appendix) show that a lower value should be used. The CCC is an estimate of the highest concentration of a material in the water column to which an aquatic community can be exposed indefinitely without resulting in an unacceptable effect. If toxicity is related to a water quality characteristic, the CCC is obtained from the Final Chronic Equation or FPV (if available) that results in the lowest concentrations in the usual range of the water quality characteristic, unless other data (see section IX) show that a lower value should be used.

D. Round both the CMC and the CCC to two significant digits.

E. The criterion is stated as:
The procedures described in the Tier I methodology indicate that, except possibly where a commercially or recreationally important species is very sensitive, aquatic organisms should not be affected unacceptably if the four-day average concentration of (1) does not exceed (2) µg/L more than once every three years on the average and if the one-hour average concentration does not exceed (3) µg/L more than once every three years on the average.
where:

(1) = Insert name of material
(2) = Insert the CCC
(3) = Insert the CMC

If the CMC averaging period of one hour or the CCC averaging period of four days is inappropriate for the pollutant, or if the once-in-three-year allowable excursion frequency is inappropriate for the pollutant or for the sites to which a criterion is applied, then the State may specify alternative averaging periods or frequencies. The choice of an alternative averaging period or frequency shall be justified by a scientifically defensible analysis demonstrating that the alternative values will protect the aquatic life uses of the water. Appropriate laboratory data and/or well-designed field biological surveys shall be submitted to U.S. EPA as justification for differing averaging periods and/or frequencies of exceedance.

XI. Final Review

A. The derivation of the criterion should be carefully reviewed by rechecking each step of the Guidance in this part. Items that should be especially checked are:

1. If unpublished data are used, are they well documented?

2. Are all required data available?

3. Is the range of acute values for any species greater than a factor of ten?

4. Is the range of SMAVs for any genus greater than a factor of ten?

5. Is there more than a factor of ten difference between the four lowest GMAVs?

6. Are any of the lowest GMAVs questionable?

7. Is the FAV reasonable in comparison with the SMAVs and GMAVs?

8. For any commercially or recreationally important species, is the geometric mean of the acute values from flow-through tests in which the concentrations of test material were measured lower than the FAV?

9. Are any of the chronic values used questionable?

10. Are any chronic values available for acutely sensitive species?

11. Is the range of acute-chronic ratios greater than a factor of ten?

12. Is the FCV reasonable in comparison with the available acute and chronic data?

13. Is the measured or predicted chronic value for any commercially or recreationally important species below the FCV?

14. Are any of the other data important?

15. Do any data look like they might be outliers?

16. Are there any deviations from the guidance in this part? Are they acceptable?

B. On the basis of all available pertinent laboratory and field information, determine if the criterion is consistent with sound scientific evidence. If it is not, another criterion, either higher or lower, shall be derived consistent with the Guidance in this part.

Methodology for Deriving Aquatic Life Values: Tier II

XII. Secondary Acute Value

If all eight minimum data requirements for calculating an FAV using Tier I are not met, a Secondary Acute Value (SAV) shall be calculated for a chemical as follows:
To calculate a SAV, the lowest GMAV in the database is divided by the Secondary Acute Factor (SAF) (Table A-1 of this appendix) corresponding to the number of satisfied minimum data requirements listed in the Tier I methodology (section III.B.1 of this appendix). Requirements for definitions, data collection and data review, contained in sections I, II, and IV shall be applied to calculation of a SAV. If all eight minimum data requirements are satisfied, a Tier I criterion calculation may be possible. In order to calculate a SAV, the database must contain, at a minimum, a genus mean acute value (GMAV) for one of the following three genera in the family Daphnidae - *Ceriodaphnia sp*., *Daphnia sp*., or *Simocephalus sp.*

If appropriate, the SAV shall be made a function of a water quality characteristic in a manner similar to that described in Tier I.

XIII. Secondary Acute-Chronic Ratio

If three or more experimentally determined ACRs, meeting the data collection and review requirements of Section VI of this appendix, are available for the chemical, determine the FACR using the procedure described in Section VI. If fewer than three acceptable experimentally determined ACRs are available, use enough assumed ACRs of 18 so that the total number of ACRs equals three. Calculate the Secondary Acute-Chronic Ratio (SACR) as the geometric mean of the three ACRs. Thus, if no experimentally determined ACRs are available, the SACR is 18.

XIV. Secondary Chronic Value

Calculate the Secondary Chronic Value (SCV) using one of the following:

A. $SCV = \frac{FAV}{SACR}$ (use FAV from Tier I)

B. $SCV = \frac{SAV}{FACR}$

C. $SCV = \frac{SAV}{SACR}$

If appropriate, the SCV will be made a function of a water quality characteristic in a manner similar to that described in Tier I.

XV. Commercially Or Recreationally Important Species

If for a commercially or recreationally important species the geometric mean of the acute values or chronic values from flow-through tests in which the concentrations of the test materials were measured is lower than the calculated SAV or SCV, then that geometric mean must be used as the SAV or SCV instead of the calculated SAV or SCV.

XVI. Tier II Value

A. A Tier II value shall consist of two concentrations: the Secondary Maximum Concentration (SMC) and the Secondary Continuous Concentration (SCC).

B. The SMC is equal to one-half of the SAV.

C. The SCC is equal to the lowest of the SCV or the Final Plant Value, if available, unless other data (see section IX of this appendix) show that a lower value should be used.

   If toxicity is related to a water quality characteristic, the SCC is obtained from the Secondary Chronic Equation or FPV, if available, that results in the lowest concentrations in the usual range of the water quality characteristic, unless other data (see section IX of this appendix) show that a lower value should be used.

D. Round both the SMC and the SCC to two significant digits.

E. The Tier II value is stated as:

   The procedures described in the Tier II methodology indicate that, except possibly where a locally important species is very sensitive, aquatic organisms should not be affected unacceptably if the four-day average concentration of (1) does not exceed (2) µg/L more than once every three years on the average and if the one-hour average concentration does not exceed (3) µg/L more than once every three years on the average, where:

   (1) = insert name of material
   (2) = insert the SCC
   (3) = insert the SMC

   As discussed above, States and Tribes have the discretion to specify alternative averaging periods or frequencies.

XVII. Appropriate Modifications

On the basis of all available pertinent laboratory and field information, determine if the Tier II value is consistent with sound scientific evidence. If it is not, another value, either higher or lower, shall be derived consistent with the Guidance in this part.

Table A-1: Secondary Acute Factors

Number of Minimum Data Requirements Satisfied	Adjustment Factor
1	21.9
2	13.0
3	8.0
4	7.0
5	6.1
6	5.2
7	4.3

XVIII. Definitions

The following definitions apply in this part. Terms not defined in this section have the meaning given by the Clean Water Act and U.S. EPA implementing regulations.

- **Acute-chronic ratio (ACR)** is a standard measure of the acute toxicity of a material divided by an appropriate measure of the chronic toxicity of the same material under comparable conditions.
- **Acute toxicity** is concurrent and delayed adverse effect(s) that results from an acute exposure and occurs within any short observation period which begins when the exposure begins, may extend beyond the exposure period, and usually does not constitute a substantial portion of the life span of the organism.
- **Adverse effect** is any deleterious effect to organisms due to exposure to a substance. This includes effects which are or may become debilitating, harmful or toxic to the normal functions of the organism, but does not include non-harmful effects such as tissue discoloration alone or the induction of enzymes involved in the metabolism of the substance.
- **Bioaccumulation** is the net accumulation of a substance by an organism as a result of uptake from all environmental sources.
- **Bioaccumulation factor (BAF)** is the ratio (in L/kg) of a substance's concentration in tissue of an aquatic organism to its concentration in the ambient water, in situations where both the organism and its food are exposed and the ratio does not change substantially over time.
- **Bioaccumulative chemical of concern (BCC)** is any chemical that has the potential to cause adverse effects which, upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a

human health bioaccumulation factor greater than 1000, after considering metabolism and other physicochemical properties that might enhance or inhibit bioaccumulation, in accordance with the methodology in appendix B of this part. Chemicals with half-lives of less than eight weeks in the water column, sediment, and biota are not BCCs. The minimum BAF information needed to define an organic chemical as a BCC is either a field-measured BAF or a BAF derived using the BSAF methodology. The minimum BAF information needed to define an inorganic chemical, including an organometal, as a BCC is either a field-measured BAF or a laboratory-measured BCF. BCCs include, but are not limited to, the pollutants identified as BCCs in section VI.G.

- **Bioconcentration** is the net accumulation of a substance by an aquatic organism as a result of uptake directly from the ambient water through gill membranes or other external body surfaces.
- **Bioconcentration factor (BCF)** is the ratio (in L/kg) of a substance's concentration in tissue of an aquatic organism to its concentration in the ambient water, in situations where the organism is exposed through the water only and the ratio does not change substantially over time.
- **Biota-sediment accumulation factor (BSAF)** is the ratio (in kg of organic carbon/kg of lipid) of a substance's lipid-normalized concentration in tissue of an aquatic organism to its organic carbon-normalized concentration in surface sediment, in situations where the ratio does not change substantially over time, both the organism and its food are exposed, and the surface sediment is representative of average surface sediment in the vicinity of the organism.
- **Carcinogen** is a substance which causes an increased incidence of benign or malignant neoplasms, or substantially decreases the time to develop neoplasms, in animals or humans.
- **Chronic toxicity** is concurrent and delayed adverse effect(s) that occurs only as a result of a chronic exposure.
- **Criterion continuous concentration (CCC)** is an estimate of the highest concentration of a material in the water column to which an aquatic community can be exposed indefinitely without resulting in an unacceptable effect.
- **Criterion maximum concentration (CMC)** is an estimate of the highest concentration of a material in the water column to which an aquatic community can be exposed briefly without resulting in an unacceptable effect.
- **EC50** is a statistically or graphically estimated concentration that is expected to cause one or more specified effects in 50 percent of a group of organisms under specified conditions.
- **Endangered or threatened species** are those species that are listed as endangered or threatened under section 4 of the Endangered Species Act.
- **Existing discharger** is any building, structure, facility, or installation from which there is or may be a "discharge of pollutants" (as defined in 40 CFR 122.2), that is not a new discharger.
- **Final acute value (FAV)** is (a) a calculated estimate of the concentration of a test material such that 95 percent of the genera (with which acceptable acute toxicity tests have been conducted on the material) have higher GMAVs, or (b) the SMAV of an important and/or critical species, if the SMAV is lower than the calculated estimate.

- **Final chronic value (FCV)** is (a) a calculated estimate of the concentration of a test material such that 95 percent of the genera (with which acceptable chronic toxicity tests have been conducted on the material) have higher GMCVs, (b) the quotient of an FAV divided by an appropriate acute-chronic ratio, or (c) the SMCV of an important and/or critical species, if the SMCV is lower than the calculated estimate or the quotient, whichever is applicable.
- **Final plant value (FPV)** is the lowest plant value that was obtained with an important aquatic plant species in an acceptable toxicity test for which the concentrations of the test material were measured and the adverse effect was biologically important.
- **Genus mean acute value (GMAV)** is the geometric mean of the SMAVs for the genus.
- **Genus mean chronic value (GMCV)** is the geometric mean of the SMCVs for the genus.
- **Human cancer criterion (HCC)** is a Human Cancer Value (HCV) for a pollutant that meets the minimum data requirements for Tier I.
- **Human cancer value (HCV)** is the maximum ambient water concentration of a substance at which a lifetime of exposure from either: drinking the water, consuming fish from the water, and water-related recreation activities; or consuming fish from the water, and water-related recreation activities, will represent a plausible upper-bound risk of contracting cancer of one in 100,000 using the exposure assumptions specified in the Methodologies for the Development of Human Health Criteria and Values.
- **Human noncancer criterion (HNC)** is a Human Noncancer Value (HNV) for a pollutant that meets the minimum data requirements for Tier I.
- **Human noncancer value (HNV)** is the maximum ambient water concentration of a substance at which adverse noncancer effects are not likely to occur in the human population from lifetime exposure via either: drinking the water, consuming fish from the water, and water-related recreation activities; or consuming fish from the water, and water-related recreation activities using the Methodologies for the Development of Human Health Criteria and Values.
- **LC50** is a statistically or graphically estimated concentration that is expected to be lethal to 50 percent of a group of organisms under specified conditions.
- **Load allocation (LA)** is the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources or to natural background sources, as more fully defined at 40 CFR 130.2(g). Nonpoint sources include: in-place contaminants, direct wet and dry deposition, groundwater inflow, and overland runoff.
- **Loading capacity** is the greatest amount of loading that a water can receive without violating water quality standards.
- **Lowest observed adverse effect level (LOAEL)** is the lowest tested dose or concentration of a substance which resulted in an observed adverse effect in exposed test organisms when all higher doses or concentrations resulted in the same or more severe effects.
- **Method detection level** is the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte

concentration is greater than zero as determined by the procedure set forth in appendix B of 40 CFR part 136.

- **Minimum level (ML)** is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.
- **New discharger** is any building, structure, facility, or installation from which there is or may be a "discharge of pollutants" (as defined in 40 CFR 122.2).
- **No observed adverse effect level (NOAEL)** is the highest tested dose or concentration of a substance which resulted in no observed adverse effect in exposed test organisms where higher doses or concentrations resulted in an adverse effect.
- **No observed effect concentration (NOEC)** is the highest concentration of toxicant to which organisms are exposed in a full life cycle or partial life-cycle (short-term) test, that causes no observable adverse effects on the test organisms (i.e., the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different from the controls).
- **Quantification level** is a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.
- **Quantitative structure activity relationship (QSAR)** or structure activity relationship (SAR) is a mathematical relationship between a property (activity) of a chemical and a number of descriptors of the chemical. These descriptors are chemical or physical characteristics obtained experimentally or predicted from the structure of the chemical.
- **Risk associated dose (RAD)** is a dose of a known or presumed carcinogenic substance in (mg/kg)/day which, over a lifetime of exposure, is estimated to be associated with a plausible upper bound incremental cancer risk equal to one in 100,000.
- **Species mean acute value (SMAV)** is the geometric mean of the results of all acceptable flow-through acute toxicity tests (for which the concentrations of the test material were measured) with the most sensitive tested life stage of the species. For a species for which no such result is available for the most sensitive tested life stage, the SMAV is the geometric mean of the results of all acceptable acute toxicity tests with the most sensitive tested life stage.
- **Species mean chronic value (SMCV)** is the geometric mean of the results of all acceptable life-cycle and partial life-cycle toxicity tests with the species; for a species of fish for which no such result is available, the SMCV is the geometric mean of all acceptable early life-stage tests.
- **Stream design flow** is the stream flow that represents critical conditions, upstream from the source, for protection of aquatic life, human health, or wildlife.

- **Threshold effect** is an effect of a substance for which there is a theoretical or empirically established dose or concentration below which the effect does not occur.
- **Tier I criteria** are numeric values derived by use of the Tier I methodologies in appendixes A, C and D of this part, the methodology in appendix B of this part, and the procedures in appendix F of this part, that either have been adopted as numeric criteria into a water quality standard or are used to implement narrative water quality criteria.
- **Tier II values** are numeric values derived by use of the Tier II methodologies in appendixes A and C of this part, the methodology in appendix B of this part, and the procedures in appendix F of this part, that are used to implement narrative water quality criteria.
- **Total maximum daily load (TMDL)** is the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined at 40 CFR 130.2(i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water body and still assure attainment and maintenance of water quality standards.
- **Uncertainty factor (UF)** is one of several numeric factors used in operationally deriving criteria from experimental data to account for the quality or quantity of the available data.
- **Uptake** is acquisition of a substance from the environment by an organism as a result of any active or passive process.
- **Waste load allocation (WLA)** is the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined at 40 CFR 130.2(h). In the absence of a TMDL approved by EPA pursuant to 40 CFR 130.7 or an assessment and remediation plan developed and approved in accordance with procedure 3.A of appendix F of this part, a WLA is the allocation for an individual point source, that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards.
- **Wet weather point source** means any discernible, confined and discrete conveyance from which pollutants are, or may be, discharged as the result of a wet weather event. Discharges from wet weather point sources shall include only: discharges of storm water from a municipal separate storm sewer as defined at 40 CFR 122.26(b)(8); storm water discharge associated with industrial activity as defined at 40 CFR 122.26(b)(14); discharges of storm water and sanitary waste water (domestic, commercial, and industrial) from a combined sewer overflow; or any other storm water discharge for which a permit is required under section 402(p) of the Clean Water Act. A storm water discharge associated with industrial activity which is mixed with process waste water shall not be considered a wet weather point source.

Appendix E

Clean Water Act Section 304(a)
Human Health Criteria for Priority Pollutants

Priority Pollutant	Human Health Criteria, (μg/L)
Antimony	5.6[A]
Copper	1300[G]
Methylmercury	0.3 mg/kg[D]
Nickel	610[A]
Selenium	170[H]
Thallium	0.24
Zinc	7400[G]
Cyanide	140[I]
Asbestos	7 million fibers/L[C]
2,3,7,8-TCDD (Dioxin)	0.000000005[B]
Acrolein	190
Acrylonitrile	0.051[A,B]
Benzene	2.2[A,B]
Bromoform	4.3[A,B]
Carbon Tetrachloride	0.23[A,B]
Chlorobenzene	130[G,H]
Chlorodibromomethane	0.4[A,B]
Chloroform	5.7[B,F]
Dichlorobromomethane	0.55[A,B]
1,2-Dichloroethane	0.38[A,B]
1,1-Dichloroethylene	330
1,2-Dichloropropane	0.5[A,B]
1,3-Dichloropropene	0.34[B]
Ethylbenzene	530
Methyl Bromide	47[A]
Methylene Chloride	4.6[A,B]
1,1,2,2-Tetrachloroethane	0.17[A,B]
Tetrachloroethylene	0.69[B]
Toluene	1300[H]
1,2-Trans-Dichloroethylene	140[H]
1,1,2-Trichloroethane	0.59[A,B]

Priority Pollutant	Human Health Criteria, (μg/L)
Pentachlorophenol	0.27[A,B]
Phenol	21000[A,G]
2,4,6-Trichlorophenol	1.4[A,B]
Acenaphthene	670[A,G]
Anthracene	8300[A]
Benzidine	0.000086[A,B]
Benzo(a) Anthracene	0.0038[A,B]
Benzo(a) Pyrene	0.0038[A,B]
Benzo(b) Fluoranthene	0.0038[A,B]
Benzo(k) Fluoranthene	0.0038[A,B]
Bis(2-Chloroethyl) Ether	0.03[A,B]
Bis(2-Chloroisopropyl) Ether	1400[A]
Bis(2-Ethylhexyl)Phthalate	1.2[A,B]
Butylbenzyl Phthalate	1500[A]
2-Chloronaphthalene	1000[A]
Chrysene	0.0038[A,B]
Dibenzo(a,h) Anthracene	0.0038[A,B]
1,2-Dichlorobenzene	420
1,3-Dichlorobenzene	320
1,4-Dichlorobenzene	63
3,3'-Dichlorobenzidine	0.021[A,B]
Diethyl Phthalate	17000[A]
Dimethyl Phthalate	270000
Di-n-Butyl Phthalate	2000[A]
2,4-Dinitrotoluene	0.11[B]
1,2-Diphenylhydrazine	0.036[A,B]
Fluoranthene	130[A]
Fluorene	1100[A]
Hexachlorobenzene	0.00028[A,B]
Hexachlorobutadiene	0.44[A,B]
Hexachlorocyclopentadiene	40[G]

Priority Pollutant	Human Health Criteria (ug/L)
Trichloroethylene	2.5[B]
Vinyl Chloride	0.025[B,J]
2-Chlorophenol	81[A,G]
2,4-Dichlorophenol	77[A,G]
2,4-Dimethylphenol	380[A]
2-Methyl-4,6-Dinitrophenol	13
2,4-Dinitrophenol	69[A]
Pyrene	830[A]
1,2,4-Trichlorobenzene	35
Aldrin	0.000049[A,B]
alpha-BHC	0.0026[A,B]
beta-BHC	0.0091[A,B]
gamma-BHC (Lindane)	0.98
Chlordane	0.0008[A,B]
4,4'-DDT	0.00022[A,B]
4,4'-DDE	0.00022[A,B]
4,4'-DDD	0.00031[A,B]

Priority Pollutant	Human Health Criteria (ug/L)
Hexachloroethane	1.4[A,B]
Ideno(1,2,3-cd) Pyrene	0.0038[A,B]
Isophorone	35[A,B]
Nitrobenzene	17[A]
N-Nitrosodimethylamine	0.00069[A,B]
N-Nitrosodi-n-Propylamine	0.005[A,B]
N-Nitrosodiphenylamine	3.3[A,B]
Dieldrin	0.000052[A,B]
alpha-Endosulfan	62[A]
beta-Endosulfan	62[A]
Endosulfan Sulfate	62[A]
Endrin	0.059
Endrin Aldehyde	0.29[A]
Heptachlor	0.000079[A,B]
Heptachlor Epoxide	0.000039[A,B]
Polychlorinated Biphenyls	0.000064[A,B,E]
Toxaphene	0.00028[A,B]

Footnotes:

A This criterion has been revised to reflect The U.S. EPA's q1* or RfD, as contained in the Integrated Risk Information System (IRIS) as of May 17, 2002. The fish tissue bioconcentration factor (BCF) from the 1980 Ambient Water Quality Criteria document was retained in each case.

B This criterion is based on carcinogenicity of 10^{-6} risk. Alternate risk levels may be obtained by moving the decimal point (e.g., for a risk level of 10^{-5}, move the decimal point in the recommended criterion one place to the right).

C This criterion for asbestos is the Maximum Contaminant Level (MCL) developed under the Safe Drinking Water Act (SDWA).

D This fish tissue residue criterion for methylmercury is based on a total fish consumption rate of 0.0175 kg/day.

E This criterion applies to total PCBs, (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses).

F Although a new RfD is available in IRIS, the surface water criteria will not be revised until the National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) is completed, since public comment on the relative source contribution (RSC) for chloroform is anticipated.

G The organoleptic effect criterion is more stringent than the value for priority toxic pollutants.

H U.S. EPA has issued a more stringent MCL. Refer to drinking water regulations (40 CFR 141) or Safe Drinking Water Hotline (1-800-426-4791) for values.

I This recommended water quality criterion is expressed as total cyanide, even though the IRIS RFD we used to derive the criterion is based on free cyanide. The multiple forms of cyanide that are present in ambient water have significant differences in toxicity due to their differing abilities to liberate the CN-moiety. Some complex cyanides require even more extreme conditions than refluxing with sulfuric acid to liberate the CN-moiety. Thus, these complex cyanides are expected to have little or no 'bioavailability' to humans. If a substantial fraction of the cyanide present in a water body is present in a complexed form (e.g., Fe4[Fe(CN)6]3), this criterion may be over conservative.

J This recommended water quality criterion was derived using the cancer slope factor of 1.4 (LMS exposure from birth).

Appendix F

Alternate Approaches For Calculating Acute Mixing Zones

Alternative 1

Apply the acute criterion at the end-of-pipe.

Alternative 2 (for high velocity discharges => 3 m/s)

The acute criterion should be met within 50 times the discharge length scale (50 times square root of the cross-sectional pipe area). The scientific basis for this alternative is that these conditions will ensure that the acute criterion is met within a few minutes under practically all conditions.

Alternative 3 (for low velocity discharges < 3 m/s)

The acute criterion should be met:

1) Within 10% of the distance from the end-of-pipe to the edge of the regulatory mixing zone in any direction. This will restrict the acute zone to a relatively small area around the discharge pipe.
2) Within a distance of 50 times the square root of the pipe diameter (discharge length scale). This will ensure a dilution factor of at least ten at the edge of the acute mixing zone.
3) Within a distance of five times the local in any horizontal direction water depth. This will ensure that mixing zones are not established in shallow, near-shore waters.

Alternative 4 (demonstration by discharger)

A discharger may demonstrate that a drifting organism would not be exposed to one-hour average concentrations exceeding acute aquatic life criteria or would not receive harmful exposure when evaluated by other valid toxicological analyses.

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