

Table 14. Contaminant Data for Minnesota River

			Record #	1427	1431	1423	1432	1442	1443	1438	1435
			River Mile	39	39	39	39	39	39	39	39
			Location	MN R. Jordan - mid	MN R. Jordan - south	MN R. Jordan - north	MN R. Jordan - mean	MN R. Jordan - west	MN R. Jordan - mean	MN R. Jordan - mid	MN R. Jordan - east
			Year	1983	1983	1983	1983	1984	1984	1984	1984
			System	2	2	2	2	2	2	2	2
			Habitat Type	1	1	1	1	1	1	1	1
			Pool	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
			Sam. Gear	3	3	3	3	3	3	3	3
			Sam. Depth	10	10	10	10	10	10	10	10
			Data Cit.	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC
CHC's	ug/kg		a-BHC				10		13		
	ug/kg		b-BHC				< 1.1		< 0.64		
	ug/kg		BHC								
	ug/kg		2,4'-DDD								
	ug/kg		2,4'-DDE								
	ug/kg		2,4'-DDT								
	ug/kg		g-BHC (lindane)				< 0.53		9.8		
	ug/kg		Heptachlor				< 0.53		< 0.32		
	ug/kg		Anthracene								
	ug/kg		Aldrin								
	ug/kg		Acenaphthene								
	ug/kg		Acenaphthylene								
	ug/kg		Benz(a)anthracene								
	ug/kg		Benzo(a)pyrene								
	ug/kg		Heptachlorepoxyde								
	ug/kg		Benzo(g,h,i)perylene								
	ug/kg		Benzo(b)fluoranthene								
	ug/kg		Benzo(k)fluoranthene								
	ug/kg		Endosulfan I								
	ug/kg		Dieldrin				< 1.6		< 0.96		
	ug/kg		4,4'-DDE				< 1.6		< 0.96		
	ug/kg		Endrin				< 2.1		< 1.3		
	ug/kg		Endosulfan II								
	ug/kg		4,4'-DDD				< 3.2		< 1.9		
	ug/kg		Endrinaldehyde								
	ug/kg		Sulfan sulfate								
	ug/kg		4,4'-DDT				< 4.2		< 2.5		
	ug/kg		Methoxychlor								
	ug/kg		Endrin ketone								
	ug/kg		alpha-Chlordane								
	ug/kg		Chlorodane				< 11		< 6.4		
	ug/kg		gamma-Chlordane								
ug/kg		Oxychlorodane									
ug/kg		Fluoranthene									
ug/kg		Toxaphene									
ug/kg		Hexachlorobenzene									
ug/kg		Pyrene									
METALS	mg/kg		Ag (silver)	0.01	0.022	0.019		0.012		0.011	0.012
	mg/kg		Al (aluminum)								
	mg/kg		As (arsenic)	1.2	1.9	1.91		2.51		1.23	1.2
	mg/kg		B (boron)								
	mg/kg		Ba (barium)								
	mg/kg		Be (beryllium)	0.073	0.168	0.088		0.152		0.065	0.067
	mg/kg		Cd (cadmium)	0.044	0.064	0.07		0.099		0.033	0.039
	mg/kg		Cr (chromium)	21.7	15.2	27.5		11.4		5	9.1
	mg/kg		Cu (copper)	1.2	3.3	1.8		4.8		1.1	1.1
	mg/kg		Fe (iron)								
	mg/kg		Hg (mercury)	0.05	0.05	0.05		0.05		0.05	0.05
	mg/kg		Mg (magnesium)								
	mg/kg		Mn (manganese)					494.5		155	121.2
	mg/kg		Mo (molybdenum)								
	mg/kg		Ni (nickel)	7	9.2	8.2		10.2		3.3	4.9
	mg/kg		Pb (lead)	2.8	3.8	3.5		3.1		1.3	2.2
	mg/kg		Sb (antimony)								
	mg/kg		Se (selenium)	0.05	0.05	0.21		0.12		0.12	0.12
	mg/kg		Sn (tin)								
	mg/kg		Sr (strontium)								
mg/kg		Ti (titanium)									
mg/kg		Zn (zinc)									
mg/kg		V (vanadium)									
mg/kg		Chromium, Hexavalent									
PCB's	ug/kg		Aroclor-1016				< 5.3		< 3.2		
	ug/kg		Aroclor-1221								
	ug/kg		Aroclor-1232								
	ug/kg		Aroclor-1242								
	ug/kg		Aroclor-1248								
	ug/kg		Aroclor-1254				6.5		< 3.2		
	ug/kg		Aroclor-1260				< 5.3		< 3.2		
	ug/kg		Total PCB's								
PARTICLE SIZE & FINER	SAND	coarse	3 in								
			1 1/2								
			3/4								
			3/8								
			4								
			8								
			10								
			16								
	SILT	medium	20								
			30								
			40								
			50								
			60								
			70								
			80								
			100								
SILT	fine	140									
		200									
		270									
		0.20 mm									
SILT	clay	0.05 mm									
MISC	mg/kg		Total Organic Carbon								
	%		Total Organic Carb								
	mg/kg		Chem Oxy Demand								
	mg/kg		Kjedahl Nitrogen								
	mg/kg		Phosphorus (as P)								
	mg/kg		Oil and Grease								
	mg/kg		Cyanide, Total								
	mg/kg		Ammonia								
	mg/l		Ammonia Elutriate								
	%		Moisture								
	%		Total Solids								
	gVS/gTS		Total Volatile Solids								
	%		Volatile Solids								
	mg/kg		Phenolics, Total Recoverable								

Table 14. Contaminant Data for Minnesota River

		Record #	78506	401	404	304	305	403		78505
		River Mile	14.5	14.4	13.4	13.21	13.2	13.2	12.9	12.5&12.6
		Location	Above Savahe RR Bridge	AB SAVAGE RR BR.	AB & BLW CARGILL	AB & BLW CARGILL	AB & BLW CARGILL	AB & BLW CARGILL	Cargill	Cargill Slip
		Year	1999	1989	1989	1979	1979	1989	10/17/2007	1999
		System	2	2	2	2	2	2		2
		Habitat Type	1	1	1	1	1	1		1
		Pool	2.5	2.5	2.5	2.5	2.5	2.5		2.5
		Sam. Gear	1	1	1	1	1	1	1	1
		Sam. Depth	10	10	10	10	10	10	10	10
		Data Cit.	COE	COE	COE	COE	COE	COE	COE	COE
CHC's	ug/kg	a-BHC	<0.08	< 0.08	< 0.07			< 0.11		<0.08
	ug/kg	b-BHC	<0.08	< 0.16	< 0.15			< 0.21		<0.08
	ug/kg	BHC	<0.08	< 0.24	< 0.22			< 0.32		<0.08
	ug/kg	2,4'-DDD							<4	
	ug/kg	2,4'-DDE							<4	
	ug/kg	2,4'-DDT							<4	
	ug/kg	g-BHC (lindane)	<0.08	< 0.11	< 0.1			< 0.14		<0.08
	ug/kg	Heptachlor	<0.10	< 0.08	< 0.07			< 0.11		<0.10
	ug/kg	Anthracene							<0.79	
	ug/kg	Aldrin		< 0.11	< 0.1			< 0.14		
	ug/kg	Acenaphthene							<0.71	
	ug/kg	Acenaphthylene							<1.0	
	ug/kg	Benz(a)anthracene							1.8	
	ug/kg	Benzo(a)pyrene							1.7	
	ug/kg	Heptachlorepoide	<0.12	< 0.13	< 0.12			< 0.18		<0.12
	ug/kg	Benzo(g,h,i)perylene							1.6	
	ug/kg	Benzo(b)fluoranthene							3.1	
	ug/kg	Benzo(k)fluoranthene							0.94	
	ug/kg	Endosulfan I		< 0.13	< 0.12			< 0.18		
	ug/kg	Dieldrin	<0.04	< 0.13	< 0.12	0	0	< 0.18	<3.2	<0.04
	ug/kg	4,4'-DDE	<0.04	< 0.11	< 0.1	0	0	< 0.14	<3.5	<0.04
	ug/kg	Endrin	<0.06	< 0.24	< 0.22	0	0	< 0.32		<0.06
	ug/kg	Endosulfan II		< 0.26	< 0.25			< 0.35		
	ug/kg	4,4'-DDD	<0.06	< 0.29	< 0.27	0	0	< 0.39	<3.7	<0.06
	ug/kg	Endrinoldehyde		< 0.29	< 0.27			< 0.39		
	ug/kg	Sulfan sulfate		< 0.29	< 0.27			< 0.39		
	ug/kg	4,4'-DDT	<0.18	< 0.34	< 0.32	0	0	< 0.46	<4.2	<0.18
	ug/kg	Methoxychlor		< 0.58	< 0.55			< 0.77		
	ug/kg	Endrinetone		< 0.29	< 0.27			< 0.39		
	ug/kg	alpha-Chlordane							<1.7	
	ug/kg	Chlorodane	<0.20	< 1.58	< 1.49	0	0	< 2.11		<0.20
	ug/kg	gamma-Chlordane							<1.6	
ug/kg	Oxychlordane	<0.20							<0.20	
ug/kg	Fluoranthene							5		
ug/kg	Toxaphene		< 1.58	< 1.49			< 2.11			
ug/kg	Hexachlorobenzene							<2		
ug/kg	Pyrene							4.3		
METALS	mg/kg	Ag (silver)								
	mg/kg	Al (aluminum)								
	mg/kg	As (arsenic)	1.81	< 1.2	1.6	0	0	2.7	0.97	1.89
	mg/kg	B (boron)								
	mg/kg	Ba (barium)				40	80			
	mg/kg	Be (beryllium)								
	mg/kg	Cd (cadmium)	<0.03	< 1.3	< 1.3	< 10	< 10	< 1.6	<1.0	<0.03
	mg/kg	Cr (chromium)	3.82	4.3	5	< 10	< 10	8.1	4.7	3.81
	mg/kg	Cu (copper)	2.04	13.3	4.8	< 10	< 10	15	1.9	2.18
	mg/kg	Fe (iron)				3800	9700			
	mg/kg	Hg (mercury)	0.0069	< 0.01	< 0.01	0	0	< 0.02	<0.10	0.0052
	mg/kg	Mg (magnesium)								
	mg/kg	Mn (manganese)	931	263	232	160	720	56.8	218	242
	mg/kg	Mo (molybdenum)								
	mg/kg	Ni (nickel)	8.27	< 6.4	7	< 10	20	9.4	<0.10	7.92
	mg/kg	Pb (lead)	6.3	4.6	3.6	< 10	20	5.8	2.5	6.3
	mg/kg	Sb (antimony)								
	mg/kg	Se (selenium)		< 0.93	< 0.93			< 1.2		
	mg/kg	Sn (tin)								
	mg/kg	Sr (strontium)								
	mg/kg	Ti (titanium)								
	mg/kg	Zn (zinc)	12.3						12.1	11.1
mg/kg	V (vanadium)									
mg/kg	Chromium, Hexavalent							<5.9		
PCB's	ug/kg	Aroclor-1016	<0.24	< 1.58	< 1.49			< 2.11	<50	<0.24
	ug/kg	Aroclor-1221	<0.28	< 1.58	< 1.49			< 2.11	<50	<0.28
	ug/kg	Aroclor-1232	<0.26	< 1.58	< 1.49			< 2.11	<50	<0.26
	ug/kg	Aroclor-1242	<0.32	< 1.58	< 1.49			< 2.11	<50	<0.32
	ug/kg	Aroclor-1248	<0.22	< 1.58	< 1.49			< 2.11	<40	<0.22
	ug/kg	Aroclor-1254	<0.34	< 3.3	< 3.1			< 4.4	<50	<0.34
	ug/kg	Aroclor-1260	<0.32	< 3.3	< 3.1			< 4.4	<40	<0.32
	ug/kg	Total PCB's								
PARTICLE SIZE & FINER	SAND	coarse	3 in			100	100			
			1 1/2			100	100			
			3/4			100	100			
			3/8			100	100			
		4	100	99.9456	100	100	100	99.4659	99.14	99
		8								
		10	98	99.7595	99.9211	100	100	99.339	64.29	97
		16	94	99.3005	99.3583			98.8504		93
	medium	20				100	100		84.45	
		30	88	93.9681	92.8675			96.6491		95
		40				100	100		66.31	71
		50		93.9681	92.8675			96.6491		
	fine	60	48						33.37	37
		70								
		80		83.0929	68.9342	92	80	92.6698	6.97	
		100	10	10.3533	14.5539			42.5172	5.26	6
		140	50	6.36015858	9.9257696			26.39172056		3
SILT	clay	200	2	4.39382985	7.18111026	12	46	17.37520712	2.87	1
		270	1	2.93210559	5.17041208			11.90172384		
		0.20 mm		2.14905649	3.62252512	5	35	8.54970672		
		0.05 mm		1	2.09050416	2	19	4.54007512		
MISC	mg/kg	Total Organic Carbon							<85	
	%	Total Organic Carb	0.03	0.91	1.13			1.02		0.03
	mg/kg	Chem Oxy Demand				8700	29000			
	mg/kg	Kjedahl Nitrogen				1300	4100		170	
	mg/kg	Phosphorus (as P)				400	510		280	
	mg/kg	Oil and Grease								
	mg/kg	Cyanide, Total	<0.20						<0.20	<0.20
	mg/kg	Ammonia							6.5	
	mg/l	Ammonia Elutriate								
	%	Moisture	0.2						25.57	0.2
	%	Total Solids	99.8						74.43	99.8
gVS/gTS	Total Volatile Solids							0.013		
%	Volatile Solids	0.54							0.35	
mg/kg	Phenolics, Total Recoverable							1.5		

Table 14. Contaminant Data for Minnesota River

			Record #	78501	78500		1465	1459	1462		
			River Mile	11.3	4.4	4.3	4.0	3	3		
			Location	Above 35W	Blw Perterson's Bar	Above 494	Above 494	Ft. Snelling - west	Ft. Snelling - east	Ft. Snelling - mid	
			Year	10/17/2007	1999	1999	10/17/2007	10/17/2007	1981	1981	1981
			System		2	2		2	2	2	
			Habitat Type		1	1		1	1	1	
			Pool		2.5	2.5		2.5	2.5	2.5	
			Sam. Gear	1	1	1	1	3	3	3	
			Sam. Depth	10	10	10	10	10	10	10	
			Data Cit.	COE	COE	COE	COE	COE	MWCC	MWCC	MWCC
CHC's	ug/kg		a-BHC		<0.08	<0.08					
	ug/kg		b-BHC		<0.08	<0.08					
	ug/kg		BHC		<0.08	<0.08					
	ug/kg		2,4'-DDD	<4			<4	<4			
	ug/kg		2,4'-DDE	<4			<4	<4			
	ug/kg		2,4'-DDT	<4			<4	<4			
	ug/kg		g-BHC (lindane)		<0.08	<0.08					
	ug/kg		Heptachlor		<0.10	<0.10					
	ug/kg		Anthracene	1.4			7.5	<0.76			
	ug/kg		Aldrin								
	ug/kg		Acenaphthene	<0.71			<0.71	<0.69			
	ug/kg		Acenaphthylene	<1.0			<1.0	<1.0			
	ug/kg		Benz(a)anthracene	8.4			8.4	1.6			
	ug/kg		Benzo(a)pyrene	9.8			2.4	2.3			
	ug/kg		Heptachlorepoxyde		<0.12	<0.12					
	ug/kg		Benzo(g,h,i)perylene	6.2			1.1	1.9			
	ug/kg		Benzo(b)fluoranthene	19			3.6	3.6			
	ug/kg		Benzo(k)fluoranthene	5.6			3.2	1.1			
	ug/kg		Endosulfan I								
	ug/kg		Dieldrin	<3.2	<0.04	<0.04	<3.2	<3.2			
	ug/kg		4,4'-DDE	<3.5	<0.04	<0.04	<3.5	<3.5			
	ug/kg		Endrin		<0.06	<0.06					
	ug/kg		Endosulfan II								
	ug/kg		4,4'-DDD	<3.7	<0.06	<0.06	<3.7	<3.7			
	ug/kg		Endrinaldehyde								
	ug/kg		Sulfan sulfate								
	ug/kg		4,4'-DDT	<4.2	<0.18	<0.18	<4.2	<4.2			
	ug/kg		Methoxychlor								
	ug/kg		Endrinetone								
	ug/kg		alpha-Chlordane	<1.7			<1.7	<1.7			
	ug/kg		Chlorodane		<0.20	<0.20					
	ug/kg		gamma-Chlordane	<1.6			<1.6	<1.6			
ug/kg		Oxychlordane		<0.20	<0.20						
ug/kg		Fluoranthene	26			2.2	2.7				
ug/kg		Toxaphene									
ug/kg		Hexachlorobenzene	<2			<2	<2				
ug/kg		Pyrene	21			1.8	2.9				
METALS	mg/kg		Ag (silver)					0.198	0.08	0.075	
	mg/kg		Al (aluminum)								
	mg/kg		As (arsenic)	1.2	3.44	3.53	0.84	1.7	4.6	4.21	4.2
	mg/kg		B (boron)								
	mg/kg		Ba (barium)								
	mg/kg		Be (beryllium)					0.531	0.426	0.37	
	mg/kg		Cd (cadmium)	<1.0	0.17	0.30	<1.0	<1.0	0.245	0.259	0.111
	mg/kg		Cr (chromium)	5.3	5.60	8.17	3.2	4.5	32.1	27.4	23.6
	mg/kg		Cu (copper)	2.5	3.97	7.37	<1.0	2.3	14.9	13.9	9.2
	mg/kg		Fe (iron)								
	mg/kg		Hg (mercury)	<0.10	0.0058	0.0095	<0.10	<0.10	0.09	0.09	0.06
	mg/kg		Mg (magnesium)								
	mg/kg		Mn (manganese)	203	357	426	100	324			
	mg/kg		Mo (molybdenum)								
	mg/kg		Ni (nickel)	4.7	12.3	16.4	3.3	4.2	19.5	17.3	13.4
	mg/kg		Pb (lead)	2.5	9.2	12.6	1.6	2.5	17	19.9	10.9
	mg/kg		Sb (antimony)								
	mg/kg		Se (selenium)						0.18	0.16	0.17
	mg/kg		Sn (tin)								
	mg/kg		Sr (strontium)								
mg/kg		Ti (titanium)									
mg/kg		Zn (zinc)	13.6	19.3	30.1	8.7	13.9				
mg/kg		V (vanadium)									
mg/kg		Chromium, Hexavalent	<5.8			<5.8	<5.6				
PCB's	ug/kg		Aroclor-1016	<50	<0.24	<0.24	<50	<50			
	ug/kg		Aroclor-1221	<50	<0.28	<0.28	<50	<50			
	ug/kg		Aroclor-1232	<50	<0.26	<0.26	<50	<50			
	ug/kg		Aroclor-1242	<50	<0.32	<0.32	<50	<50			
	ug/kg		Aroclor-1248	<40	<0.22	<0.22	<40	<40			
	ug/kg		Aroclor-1254	<50	<0.34	<0.34	<50	<50			
	ug/kg		Aroclor-1260	<40	<0.32	<0.32	<40	<40			
	ug/kg		Total PCB's								
PARTICLE SIZE & FINER	SAND	coarse	3 in								
			1 1/2								
			3/4								
			3/8								
			4	100		100	100	93.25			
		8									
		10	99.89	100	99	100	87.37				
		16		97	98						
		20	99.04			99.98	79.93				
		30		84	96						
	40	95.1		88	99.72	69.56					
	50										
	60	64.79	54	88	87.19	42.1					
	70										
	80	27.25			32.94	15.26					
100	21.89	31		9.93	8.48						
140		21	27								
200	13.16	13	19	0.97	3.23						
270		7	13								
0.20 mm											
0.05 mm											
MISC	mg/kg		Total Organic Carbon	<84			<84	<82			
	%		Total Organic Carb		0.18	0.50					
	mg/kg		Chem Oxy Demand								
	mg/kg		Kjedahl Nitrogen	300			100	85			
	mg/kg		Phosphorus (as P)	270			79	220			
	mg/kg		Oil and Grease								
	mg/kg		Cyanide, Total	<0.20	<0.20	<0.20	<0.20	<0.19			
	mg/kg		Ammonia	16			<1.1	<1.0			
	mg/l		Ammonia Elutriate								
	%		Moisture	24.88	0.7	1.3	25.17	22.83			
	%		Total Solids	75.12	99.3	98.7	74.83	77.17			
	gVS/gTS		Total Volatile Solids	0.013			0	0.013			
%		Volatile Solids		0.95	2.31						
mg/kg		Phenolics, Total Recoverable	6.2			1.8	0.39				

Table 14. Contaminant Data for Minnesota River

			Record #	1476	1471	1480	1481	1485	1494	1493	1489
			River Mile	3	3	3	3	3	3	3	3
			Location	Ft. Snelling - mid	Ft. Snelling - east	Ft. Snelling - west	Ft. Snelling - mean	Ft. Snelling - east	Ft. Snelling - mean	Ft. Snelling - west	Ft. Snelling - mid
			Year	1982	1982	1982	1982	1983	1983	1983	1983
			System	2	2	2	2	2	2	2	2
			Habitat Type	1	1	1	1	1	1	1	1
			Pool	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
			Sam. Gear	3	3	3	3	3	3	3	3
			Sam. Depth	10	10	10	10	10	10	10	10
			Data Cit.	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC
CHC's	ug/kg		a-BHC				< 5		16		
	ug/kg		b-BHC				< 10		< 1.1		
	ug/kg		BHC								
	ug/kg		2,4'-DDD								
	ug/kg		2,4'-DDE								
	ug/kg		2,4'-DDT								
	ug/kg		g-BHC (lindane)				20		< 0.53		
	ug/kg		Heptachlor				7		< 0.53		
	ug/kg		Anthracene								
	ug/kg		Aldrin								
	ug/kg		Acenaphthene								
	ug/kg		Acenaphthylene								
	ug/kg		Benz(a)anthracene								
	ug/kg		Benzo(a)pyrene								
	ug/kg		Heptachlorepoxyde								
	ug/kg		Benzo(g,h,i)perylene								
	ug/kg		Benzo(b)fluoranthene								
	ug/kg		Benzo(k)fluoranthene								
	ug/kg		Endosulfan I								
	ug/kg		Dieldrin				< 20		< 1.6		
	ug/kg		4,4'-DDE				7		< 1.6		
	ug/kg		Endrin				< 10		< 2.1		
	ug/kg		Endosulfan II								
	ug/kg		4,4'-DDD				< 14		< 3.2		
	ug/kg		Endrinaldehyde								
	ug/kg		Sulfan sulfate								
	ug/kg		4,4'-DDT				< 20		< 4.2		
	ug/kg		Methoxychlor								
	ug/kg		Endrin ketone								
	ug/kg		alpha-Chlordane								
	ug/kg		Chlorodane				< 2		< 11		
	ug/kg		gamma-Chlordane								
	ug/kg		Oxychlordane								
ug/kg		Fluoranthene									
ug/kg		Toxaphene									
ug/kg		Hexachlorobenzene									
ug/kg		Pyrene									
METALS	mg/kg		Ag (silver)	0.107	0.167	0.175		0.163		0.243	0.152
	mg/kg		Al (aluminum)								
	mg/kg		As (arsenic)	1.2	5.34	6.25		3.78		5.09	2.21
	mg/kg		B (boron)								
	mg/kg		Ba (barium)								
	mg/kg		Be (beryllium)	0.11	0.45	0.581		0.163		0.29	0.163
	mg/kg		Cd (cadmium)	0.057	0.247	0.214		0.2		0.203	0.131
	mg/kg		Cr (chromium)	7.2	22.3	22.8		50.1		65.1	39.7
	mg/kg		Cu (copper)	1.4	11.1	11.6		6.8		10	5
	mg/kg		Fe (iron)								
	mg/kg		Hg (mercury)	0.05	0.05	0.05		0.05		0.05	0.05
	mg/kg		Mg (magnesium)								
	mg/kg		Mn (manganese)	143	499	686.1					
	mg/kg		Mo (molybdenum)								
	mg/kg		Ni (nickel)	4.3	12.9	14.1		15.3		18.9	10.6
	mg/kg		Pb (lead)	2.4	6.8	16.8		6.4		9.2	5.6
	mg/kg		Sb (antimony)								
	mg/kg		Se (selenium)	0.06	0.06	0.07		0.09		0.16	0.05
	mg/kg		Sn (tin)								
	mg/kg		Sr (strontium)								
mg/kg		Ti (titanium)									
mg/kg		Zn (zinc)									
mg/kg		V (vanadium)									
mg/kg		Chromium, Hexavalent									
PCB's	ug/kg		Aroclor-1016				800		< 5.3		
	ug/kg		Aroclor-1221								
	ug/kg		Aroclor-1232								
	ug/kg		Aroclor-1242								
	ug/kg		Aroclor-1248								
	ug/kg		Aroclor-1254				1000		25		
	ug/kg		Aroclor-1260				< 20		13		
	ug/kg		Total PCB's								
PARTICLE SIZE & FINER	SAND	coarse	3 in								
			1 1/2								
			3/4								
			3/8								
			4								
			8								
			10								
			16								
	SILT	medium	20								
			30								
			40								
			50								
			60								
			70								
			80								
			100								
			140								
SILT	fine	200									
		270									
		0.20 mm									
SILT	clay	0.05 mm									
MISC	mg/kg		Total Organic Carbon								
	%		Total Organic Carb								
	mg/kg		Chem Oxy Demand								
	mg/kg		Kjedahl Nitrogen								
	mg/kg		Phosphorus (as P)								
	mg/kg		Oil and Grease								
	mg/kg		Cyanide, Total								
	mg/kg		Ammonia								
	mg/l		Ammonia Elutriate								
	%		Moisture								
	%		Total Solids								
	gVS/gTS		Total Volatile Solids								
	%		Volatile Solids								
mg/kg		Phenolics, Total Recoverable									

Table 14. Contaminant Data for Minnesota River

			Record #	1497	1500	1504	1503	1513	1514	1507	1510
			River Mile	3	3	3	3	3	3	3	3
			Location	Ft. Snelling - east	Ft. Snelling - mid	Ft. Snelling - mean	Ft. Snelling - west	Ft. Snelling - west	Ft. Snelling - mean	Ft. Snelling - east	Ft. Snelling - mid
			Year	1984	1984	1984	1984	1985	1985	1985	1985
			System	2	2	2	2	2	2	2	2
			Habitat Type	1	1	1	1	1	1	1	1
			Pool	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
			Sam. Gear	3	3	3	3	3	3	3	3
			Sam. Depth	10	10	10	10	10	10	10	10
			Data Cit.	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC	MWCC
CHC's	ug/kg		a-BHC			15			< 0.26		
	ug/kg		b-BHC			< 0.64			< 0.53		
	ug/kg		BHC								
	ug/kg		2,4'-DDD								
	ug/kg		2,4'-DDE								
	ug/kg		2,4'-DDT								
	ug/kg		g-BHC (lindane)			< 0.32			< 0.26		
	ug/kg		Heptachlor			< 0.32			< 0.26		
	ug/kg		Anthracene								
	ug/kg		Aldrin								
	ug/kg		Acenaphthene								
	ug/kg		Acenaphthylene								
	ug/kg		Benz(a)anthracene								
	ug/kg		Benzo(a)pyrene								
	ug/kg		Heptachlorepoxyde								
	ug/kg		Benzo(g,h,i)perylene								
	ug/kg		Benzo(b)fluoranthene								
	ug/kg		Benzo(k)fluoranthene								
	ug/kg		Endosulfan I								
	ug/kg		Dieldrin			< 0.96				< 0.79	
	ug/kg		4,4'-DDE			< 0.96				< 0.79	
	ug/kg		Endrin			< 1.3				< 1.1	
	ug/kg		Endosulfan II								
	ug/kg		4,4'-DDD			< 1.9				< 1.6	
	ug/kg		Endrinaldehyde								
	ug/kg		Sulfan sulfate								
	ug/kg		4,4'-DDT			< 2.5				< 2.1	
	ug/kg		Methoxychlor								
	ug/kg		Endrin ketone								
	ug/kg		alpha-Chlordane								
	ug/kg		Chlorodane			< 6.4				32.6	
	ug/kg		gamma-Chlordane								
ug/kg		Oxychlordane									
ug/kg		Fluoranthene									
ug/kg		Toxaphene									
ug/kg		Hexachlorobenzene									
ug/kg		Pyrene									
METALS	mg/kg		Ag (silver)	0.104	0.065		0.196	0.08		0.116	0.028
	mg/kg		Al (aluminum)								
	mg/kg		As (arsenic)	3.6	1.03		3.72	5.53		7.62	2.15
	mg/kg		B (boron)								
	mg/kg		Ba (barium)								
	mg/kg		Be (beryllium)	0.334	0.123		0.337	0.374		0.49	0.121
	mg/kg		Cd (cadmium)	0.199	0.069		0.247	0.189		0.221	0.058
	mg/kg		Cr (chromium)	17.5	8.1		18.4	17.1		20.7	6.1
	mg/kg		Cu (copper)	11.4	2.3		8.6	7.2		12.4	2.6
	mg/kg		Fe (iron)								
	mg/kg		Hg (mercury)	0.05	0.05		0.05	0.05		0.05	0.05
	mg/kg		Mg (magnesium)								
	mg/kg		Mn (manganese)	351.2	147.4		429.1	462.7		554.1	171.8
	mg/kg		Mo (molybdenum)								
	mg/kg		Ni (nickel)	12.2	5.9		12.8	10.1		12.9	4.3
	mg/kg		Pb (lead)	15.6	3.2		7.2	6.7		10.2	3.5
	mg/kg		Sb (antimony)							14.1	7.4
	mg/kg		Se (selenium)	0.12	0.12		0.12	0.13		0.13	0.12
	mg/kg		Sn (tin)								
	mg/kg		Sr (strontium)								
mg/kg		Ti (titanium)									
mg/kg		Zn (zinc)									
mg/kg		V (vanadium)									
mg/kg		Chromium, Hexavalent									
PCB's	ug/kg		Aroclor-1016			< 3.2			< 5.3		
	ug/kg		Aroclor-1221								
	ug/kg		Aroclor-1232								
	ug/kg		Aroclor-1242								
	ug/kg		Aroclor-1248								
	ug/kg		Aroclor-1254			36			< 5.3		
	ug/kg		Aroclor-1260			30			< 5.3		
	ug/kg		Total PCB's								
PARTICLE SIZE & FINER	SAND	coarse	3 in								
			1 1/2								
			3/4								
			3/8								
			4								
			8								
			10								
			16								
	SILT	medium	20								
			30								
			40								
			50								
			60								
			70								
			80								
			100								
SILT	fine	140									
		200									
		270									
		0.20 mm									
SILT	clay	0.05 mm									
MISC	mg/kg		Total Organic Carbon								
	%		Total Organic Carb								
	mg/kg		Chem Oxy Demand								
	mg/kg		Kjedahl Nitrogen								
	mg/kg		Phosphorus (as P)								
	mg/kg		Oil and Grease								
	mg/kg		Cyanide, Total								
	mg/kg		Ammonia								
	mg/l		Ammonia Elutriate								
	%		Moisture								
	%		Total Solids								
	gVS/gTS		Total Volatile Solids								
	%		Volatile Solids								
	mg/kg		Phenolics, Total Recoverable								

Table 14. Contaminant Data for Minnesota River

			Record #	309	310	
			River Mile	0.5	0.3	
			Location	MOUTH MN RIVER	Mouth of MN River	
			Year	1980	10/17/2007	
			System	2	2	
			Habitat Type	1	1	
			Pool	2.5	2.5	
			Sam. Gear	1	1	
			Sam. Depth	10	10	
			Data Cit.	COE	COE	
CHC's	ug/kg		a-BHC			
	ug/kg		b-BHC			
	ug/kg		BHC			
	ug/kg		2,4'-DDD		<4	
	ug/kg		2,4'-DDE		<4	
	ug/kg		2,4'-DDT		<4	
	ug/kg		g-BHC (lindane)			
	ug/kg		Heptachlor			
	ug/kg		Anthracene		8.3	
	ug/kg		Aldrin			
	ug/kg		Acenaphthene		4	
	ug/kg		Acenaphthylene		4.9	
	ug/kg		Benz(a)anthracene		20	
	ug/kg		Benzo(a)pyrene		28	
	ug/kg		Heptachlorepoxyde			
	ug/kg		Benzo(g,h,i)perylene		29	
	ug/kg		Benzo(b)fluoranthene		39	
	ug/kg		Benzo(k)fluoranthene		11	
	ug/kg		Endosulfan I			
	ug/kg		Dieldrin	0	<3.2	0.6
	ug/kg		4,4'-DDE	0	<3.5	1
	ug/kg		Endrin	0		0
	ug/kg		Endosulfan II			
	ug/kg		4,4'-DDD	0	<3.7	0.8
	ug/kg		Endrinaldehyde			
	ug/kg		Sulfan sulfate			
	ug/kg		4,4'-DDT	0	<4.2	0.4
	ug/kg		Methoxychlor			
	ug/kg		Endrinetone			
	ug/kg		alpha-Chlordane		<1.7	
	ug/kg		Chlorodane	0		1
	ug/kg		gamma-Chlordane		<1.6	
ug/kg		Oxychlordane				
ug/kg		Fluoranthene		50		
ug/kg		Toxaphene				
ug/kg		Hexachlorobenzene		<2		
ug/kg		Pyrene		43		
METALS	mg/kg		Ag (silver)			
	mg/kg		Al (aluminum)			
	mg/kg		As (arsenic)	0	1.4	0
	mg/kg		B (boron)			
	mg/kg		Ba (barium)	20		30
	mg/kg		Be (beryllium)			
	mg/kg		Cd (cadmium)	< 10	<1.0	< 10
	mg/kg		Cr (chromium)	< 10	2.9	< 10
	mg/kg		Cu (copper)	< 10	1.6	< 10
	mg/kg		Fe (iron)	2300		3400
	mg/kg		Hg (mercury)	0	<0.10	0
	mg/kg		Mg (magnesium)			
	mg/kg		Mn (manganese)	230	140	390
	mg/kg		Mo (molybdenum)			
	mg/kg		Ni (nickel)	< 10	3.6	< 10
	mg/kg		Pb (lead)	< 10	2.5	< 10
	mg/kg		Sb (antimony)			
	mg/kg		Se (selenium)			
	mg/kg		Sn (tin)			
	mg/kg		Sr (strontium)			
mg/kg		Ti (titanium)				
mg/kg		Zn (zinc)		8.5		
mg/kg		V (vanadium)				
mg/kg		Chromium, Hexavalent		<5.7		
PCB's	ug/kg		Aroclor-1016		<50	
	ug/kg		Aroclor-1221		<50	
	ug/kg		Aroclor-1232		<50	
	ug/kg		Aroclor-1242		<50	
	ug/kg		Aroclor-1248		<40	
	ug/kg		Aroclor-1254		<50	
	ug/kg		Aroclor-1260		<40	
	ug/kg		Total PCB's			
PARTICLE SIZE & FINER	SAND	coarse	3 in	100		100
			1 1/2	100		100
			3/4	98		100
			3/8	79		100
			4	63	98.65	100
			8	49		100
			10		95.31	
	16	36		99		
	20		84.96			
	30					
	40	18	71.98	86		
	50					
	60		40.07			
	70					
80		4.47				
100	2	2.75	74			
140						
200	0	1.49	66			
270						
0.20 mm	0		36			
0.05 mm	0		13			
MISC	mg/kg		Total Organic Carbon		<82	
	%		Total Organic Carb			
	mg/kg		Chem Oxy Demand	2200		17000
	mg/kg		Kjedahl Nitrogen	150	110	1800
	mg/kg		Phosphorus (as P)		450	
	mg/kg		Oil and Grease			
	mg/kg		Cyanide, Total		<0.20	
	mg/kg		Ammonia		<1.0	
	mg/l		Ammonia Elutriate			
	%		Moisture		23.18	
	%		Total Solids		76.82	
	gVS/gTS		Total Volatile Solids		0.013	
%		Volatile Solids				
mg/kg		Phenolics, Total Recoverable		<0.078		