

Table 4. Contaminant Data for Pool 2 of the Upper Mississippi River

| Record # | | 409 | 46 | 411 | 47 | 48 | 1C | 1T | 1B | 1366 | 2C | |
|-------------------------|-----------------|-------------------|-------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------|
| River Mile | | 839 | 838.5 | 837.8 | 837.52 | 837.51 | 837.5 | 837.5 | 837.5 | 839.6 | 837.4 | |
| Location | | HARRIET IS. | HARRIET IS. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | |
| Year | | 1989 | 1980 | 1989 | 1975 | 1975 | 1992 | 1992 | 1992 | 1994 | 1992 | |
| System | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Habitat Type | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | |
| Pool | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Sam. Gear | | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 1 | 4 | |
| Sam. Depth | | 10 | 10 | 10 | 10 | 10 | 62-213 | 0-61 | 214-276 | 10 | 30-83 | |
| Lab | | | | | | | | | | | | |
| Data Cit. | | COE | COE | COE | COE | COE | COE | COE | COE | COE | COE | |
| C H C I S | ug/kg | a-BHC | < 0.07 | < 0.13 | | | < 1.1 | < 1 | < 1 | < 0.31 | < 1 | |
| | ug/kg | b-BHC | < 0.14 | < 0.27 | | | < 1.1 | < 1 | 18 | 0.92 | < 1 | |
| | ug/kg | BHC | < 0.21 | < 0.4 | | | < 1.1 | < 1 | < 1 | < 0.31 | < 1 | |
| | ug/kg | g-BHC (lindane) | < 0.09 | < 0.18 | | | < 1.1 | < 1 | 1.1 | < 0.31 | < 1 | |
| | ug/kg | Heptachlor | < 0.07 | < 0.13 | | | < 1.1 | < 1 | < 1 | < 0.31 | < 1 | |
| | ug/kg | Aldrin | < 0.09 | 1.1 | | | | | | | | |
| | ug/kg | Heptachlorepoxyde | < 0.12 | < 0.22 | | | | | | | | |
| | ug/kg | Endosulfan I | < 0.12 | < 0.22 | | | | | | | | |
| | ug/kg | Dieldrin | < 0.12 | 0 | < 0.22 | | < 1.1 | < 1 | 1.2 | < 0.62 | < 1 | |
| | ug/kg | 4,4'-DDE | < 0.09 | 7.3 | < 0.18 | | 1.5 | 2.6 | 2.8 | < 0.62 | < 1 | |
| | ug/kg | Endrin | < 0.21 | 0 | < 0.4 | | < 1.1 | < 1 | < 1 | < 0.62 | < 1 | |
| | ug/kg | Endosulfan II | < 0.23 | < 0.45 | | | | | | | | |
| | ug/kg | 4,4'-DDD | < 0.25 | 5.9 | < 0.49 | | < 1.1 | < 1 | < 1 | < 0.62 | < 1 | |
| | ug/kg | Endrinoldehyde | < 0.25 | < 0.49 | | | | | | | | |
| | ug/kg | Sulfan sulfate | < 0.25 | < 0.49 | | | | | | | | |
| | ug/kg | 4,4'-DDT | < 0.3 | 0 | < 0.58 | | < 1.1 | < 1 | < 1 | < 0.62 | < 1 | |
| | ug/kg | Methoxychlor | < 0.51 | < 0.98 | | | | | | | | |
| | ug/kg | Endrinetone | < 0.25 | < 0.49 | | | | | | | | |
| | ug/kg | Chlorodane | < 1.38 | 5 | < 2.68 | | < 1.1 | < 1 | < 1 | < 0.31 | < 1 | |
| | ug/kg | Oxychlorane | | | | | | | | | | |
| ug/kg | Toxaphene | < 3 | < 2.09 | | | | | | | | | |
| M E T A L S | mg/kg | Ag (silver) | | | | | | | | | | |
| | mg/kg | Al (aluminum) | | | | | | | | | | |
| | mg/kg | As (arsenic) | < 0.98 | 0 | 4.5 | 1.56 | 1.5 | 5.9 | 3.2 | 6.1 | 3.5 | 4.5 |
| | mg/kg | B (boron) | | | | | | | | | | |
| | mg/kg | Ba (barium) | | 120 | | | | | | | | |
| | mg/kg | Be (beryllium) | | | | | | | | | | |
| | mg/kg | Cd (cadmium) | < 1.1 | < 10 | < 2.2 | 0.9 | 1 | 0.41 | 0.36 | 0.67 | 0.43 | 0.35 |
| | mg/kg | Cr (chromium) | 8 | 20 | 13.6 | 10.9 | 13.3 | 11 | 6.5 | 13 | 14 | 8.5 |
| | mg/kg | Cu (copper) | 15.1 | < 10 | 11 | 9.7 | 10.4 | 19 | 6.5 | 25 | 9 | 16 |
| | mg/kg | Fe (iron) | | 8800 | | | | | | | | |
| | mg/kg | Hg (mercury) | < 0.01 | 0 | 0.066 | 0.058 | 0.051 | < 0.1 | < 0.1 | < 0.1 | < 0.05 | < 0.1 |
| | mg/kg | Mg (magnesium) | | | | | | | | | | |
| | mg/kg | Mn (manganese) | 230 | 1400 | 713 | | 1100 | | 390 | 1500 | 563 | 926 |
| | mg/kg | Mo (molybdenum) | | | | | | | | | | |
| | mg/kg | Ni (nickel) | 6.1 | 20 | < 11 | | 12 | | 8.2 | 15 | 11 | 11 |
| mg/kg | Pb (lead) | 9.5 | 50 | 36.7 | 28.4 | 36.5 | 21 | < 2.5 | 13 | 10 | 9.2 | |
| mg/kg | Sb (antimony) | | | | | | | | | | | |
| mg/kg | Se (selenium) | < 0.77 | < 1.6 | | | | | | | | | |
| mg/kg | Sn (tin) | | | | | | | | | | | |
| mg/kg | Sr (strontium) | | | | | | | | | | | |
| mg/kg | Ti (titanium) | | | | | | | | | | | |
| mg/kg | Zn (zinc) | 16 | 77 | 50.9 | 41.3 | 42.7 | 66 | 26 | 70 | 40.7 | 48 | |
| mg/kg | V (vanadium) | | | | | | | | | | | |
| P C B S | ug/kg | Aroclor-1006 | < 1.38 | < 2.68 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1221 | < 1.38 | < 2.68 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1232 | < 1.38 | < 2.68 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1242 | < 1.38 | < 2.68 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1248 | < 1.38 | < 2.68 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1254 | < 2.88 | < 5.58 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Aroclor-1260 | < 2.88 | < 5.58 | | | < 11 | < 10 | < 11 | < 6.2 | < 10 | |
| | ug/kg | Total PCB's | | 29 | | 0 | 0 | | | | | |
| S I Z E | C O A R S E | 3 in | | 100 | | 100 | 100 | | | | | |
| | | 1 1/2 | | 100 | | 100 | 100 | | | | | |
| | | 3/4 | | 100 | | 100 | 100 | | | | | |
| | | 3/8 | | 100 | | 100 | 100 | | | | | |
| | | 4 | 90.4 | 100 | 99.2 | 99 | 99 | | | | | |
| | | 8 | | 100 | | 99 | 99 | | | | | |
| | | 10 | 76.9 | | 94.6 | | | | | 100 | | |
| | S A M E I M | 16 | 53.7 | 99.0 | 93.7 | 96.0 | 96.0 | | | | | |
| | | 18 | | | | | | | | | 99.8 | |
| | | 20 | | | | | | | | | | |
| | | 30 | 31.2 | | 76.0 | | | | | | | |
| | | 40 | | 85.0 | | 53.0 | 53.0 | | | | 99.5 | |
| | F I N E | 50 | 31.2 | | 76.0 | | | | | | | |
| | | 60 | | | | | | | | | | |
| | | 70 | | | | | | | | | | |
| 80 | | 14.4 | | 60.9 | | | | | | | | |
| 100 | | 0.1 | 58.0 | 41.1 | 19.0 | 19.0 | | | 95.6 | | | |
| 140 | | | 35.7 | | | | | | 86.3 | | | |
| P A R T I C L E S I Z E | 170 | | | | | | | | | | | |
| | 200 | | 36.0 | 24.0 | 9.0 | 9.0 | 64.1 | 24.2 | 75.2 | 76.0 | 66.5 | |
| | 230 | | | | | | | | | | | |
| | 270 | | | 16.5 | | | | | | | | |
| | 0.20 mm | | 19.0 | 14.9 | | | | | | | | |
| 0.05 mm | | 9.0 | 8.5 | | | | | | | | | |
| M I S C | % | Total Organic Car | 0.034 | 6.24 | | | 2.33 | 0.87 | 2.8 | 0.744 | 1.84 | |
| | mg/kg | Chem Oxy Demand | | 690 | 15755 | 16600 | | | | | | |
| | mg/kg | Kjedahl Nitrogen | | 7400 | -- | -- | | | | | | |
| | mg/kg | Total Phosph | | -- | -- | -- | | | | | | |
| | mg/kg | Oil and Grease | | 0 | 1625 | 1712 | | | | | | |
| | mg/kg | Cyanide, Total | < 0.58 | < 1.2 | | | < 5 | < 5 | < 5 | 0.63 | < 5 | |
| | mg/kg | Ammonia | 0.81 | 110 | | | | | | | | |
| | mg/l | Ammonia Elutriate | | | | | 28 | 2.1 | 30 | 1.5 | 19 | |
| | % | Moisture | 14.1 | 59 | | | | | | 36.2 | | |
| | % | Total Solids | 85.9 | 41 | | | 57.5 | 72.1 | 55.8 | 63.8 | 60.1 | |
| % | Volatile Solids | 0.9 | 6.5 | | | 6.5 | 2.7 | 6.7 | 4.66 | 5.8 | | |

Table 4. Contaminant Data for Pool 2 of the Upper Mississippi River

| Record # | | 3C | 2T | 2B | 3B | 3T | 49 | 50 | 4B | | | |
|--------------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------|--------|
| River Mile | | 837.4 | 837.4 | 837.4 | 837.4 | 837.4 | 837.4 | 837.21 | 837.2 | 837.2 | | |
| Location | | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | | |
| Year | | 1992 | 1992 | 1992 | 1992 | 2002 | 1992 | 2008 | 1978 | 1974 | 1992 | |
| System | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Habitat Type | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | |
| Pool | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Sam. Gear | | 4 | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 4 | | |
| Sam. Depth | | 30-289 | 0-30 | 84-99 | 290-320 | | 0-30 | 10 | 10 | 207 | | |
| Lab | | | | | | | | STAT | | | | |
| Data Cit. | | COE | COE | COE | COE | COE | COE | COE | COE | COE | | |
| C H C S | ug/kg | a-BHC | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | | < 0.79 | |
| | ug/kg | b-BHC | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | | < 0.79 | |
| | ug/kg | BHC | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | | < 0.79 | |
| | ug/kg | g-BHC (lindane) | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | | < 0.79 | |
| | ug/kg | Heptachlor | < 1 | < 0.7 | < 1.2 | < 1 | < 0.08 | < 0.8 | <1.9 | | < 0.79 | |
| | ug/kg | Aldrin | | | | | | <1.9 | | | | |
| | ug/kg | Heptachlorepoxyde | | | | | < 1.48 | <1.9 | | | | |
| | ug/kg | Endosulfan I | | | | | | <1.9 | | | | |
| | ug/kg | Dieldrin | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | 1.9 | < 10 | < 0.79 |
| | ug/kg | 4,4'-DDE | < 1 | < 0.7 | 3.6 | 1.4 | < 0.12 | < 0.8 | <1.9 | 0 | < 10 | < 0.79 |
| | ug/kg | Endrin | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | 0 | < 10 | < 0.79 |
| | ug/kg | Endosulfan II | | | | | | | <1.9 | | | |
| | ug/kg | 4,4'-DDD | < 1 | < 0.7 | < 1.2 | < 1 | < 0.12 | < 0.8 | <1.9 | 3.8 | < 10 | < 0.79 |
| | ug/kg | Endrinaldehyde | | | | | | | <1.9 | | | |
| | ug/kg | Sulfan sulfate | | | | | | | | | | |
| | ug/kg | 4,4'-DDT | < 1 | < 0.7 | < 1.2 | < 1 | < 0.24 | < 0.8 | <1.9 | 0 | < 10 | < 0.79 |
| | ug/kg | Methoxychlor | | | | | | | <1.9 | | | |
| | ug/kg | Endrinetone | | | | | | | <1.9 | | | |
| ug/kg | Chlorodane | < 1 | < 0.7 | < 1.2 | < 1 | < 0.36 | < 0.8 | <40 | 9 | < 10 | < 0.79 | |
| ug/kg | Oxychlorane | | | | | < 0.52 | | | | | | |
| ug/kg | Toxaphene | | | | | | | <40 | | | | |
| M E T A L S | mg/kg | Ag (silver) | | | | | | | | | | |
| | mg/kg | Al (aluminum) | | | | | | | | | | |
| | mg/kg | As (arsenic) | 5.1 | 2.2 | 6.9 | 3.6 | 1.4 | 1.9 | 1.4 | 2 | < 0.8 | 1.3 |
| | mg/kg | B (boron) | | | | | | | | | | |
| | mg/kg | Ba (barium) | | | | | | | | 100 | | |
| | mg/kg | Be (beryllium) | | | | | | | | | | |
| | mg/kg | Cd (cadmium) | 0.29 | 0.12 | 1 | 0.26 | 0.4 | 0.09 | <0.56 | < 10 | 0.9 | 0.06 |
| | mg/kg | Cr (chromium) | 10 | 3.4 | 15 | 8.7 | 6.58 | 4.9 | 5.8 | 10 | 9 | 2.5 |
| | mg/kg | Cu (copper) | 16 | 4 | 42 | 13 | 4.04 | 4.3 | <2.8 | 20 | 2 | 1.4 |
| | mg/kg | Fe (iron) | | | | | | | | 12000 | | |
| | mg/kg | Hg (mercury) | < 0.1 | < 0.1 | 0.13 | < 0.1 | < 0.005 | < 0.1 | <0.029 | 0 | 1.1 | < 0.1 |
| | mg/kg | Mg (magnesium) | | | | | | | | | | |
| | mg/kg | Mn (manganese) | 940 | 260 | 1400 | 690 | 266 | 280 | 340 | 1300 | | 140 |
| | mg/kg | Mo (molybdenum) | | | | | | | | | | |
| | mg/kg | Ni (nickel) | 14 | 4.7 | 13 | 11 | 10.9 | 6.2 | 6.1 | 30 | 5 | 2.9 |
| mg/kg | Pb (lead) | 8.9 | < 2.5 | 35 | < 9.7 | 4.52 | < 2.5 | 3.8 | 60 | < 9 | < 2.5 | |
| mg/kg | Sb (antimony) | | | | | | | | | | | |
| mg/kg | Se (selenium) | | | | | | | | | | | |
| mg/kg | Sn (tin) | | | | | | | | | | | |
| mg/kg | Sr (strontium) | | | | | | | | | | | |
| mg/kg | Ti (titanium) | | | | | | | | | | | |
| mg/kg | Zn (zinc) | 49 | 15 | 100 | 45 | 14.6 | 21 | 17 | 70 | 12 | 9.4 | |
| mg/kg | V (vanadium) | | | | | | | | | | | |
| P C B S | ug/kg | Aroclor-1006 | < 10 | < 7 | < 12 | < 10 | | < 8 | <96 | | < 7.9 | |
| | ug/kg | Aroclor-1221 | < 10 | < 7 | < 12 | < 10 | | < 8 | | | < 7.9 | |
| | ug/kg | Aroclor-1232 | < 10 | < 7 | < 12 | < 10 | | < 8 | | | < 7.9 | |
| | ug/kg | Aroclor-1242 | < 10 | < 7 | < 12 | < 10 | | < 8 | | | < 7.9 | |
| | ug/kg | Aroclor-1248 | < 10 | < 7 | < 12 | < 10 | | < 8 | <96 | | < 7.9 | |
| | ug/kg | Aroclor-1254 | < 10 | < 7 | < 12 | < 10 | | < 8 | <96 | | < 7.9 | |
| | ug/kg | Aroclor-1260 | < 10 | < 7 | < 12 | < 10 | | < 8 | <96 | | < 7.9 | |
| | ug/kg | Total PCB's | | | | | < 0.88 | | 200 | 0 | | |
| S I Z E | C O A R S E | 3 in | | | | | | | 100 | 100 | | |
| | | 1 1/2 | | | | | | | 100 | 100 | | |
| | | 3/4 | | | | | | | 100 | 100 | | |
| | | 3/8 | | | | | | | 100 | 100 | | |
| | | 4 | | | | | 99.7 | | 99.7 | 100 | 100 | |
| | | 8 | | | | | | | | | 96 | |
| | M E D I U M | 10 | | | | | 93.6 | | 96 | 100 | | |
| | | 16 | | | | | | | | | 90.0 | |
| | | 18 | | | | | 78.6 | | | | | |
| | | 20 | | | | | | | 77.7 | 100 | | |
| | | 30 | | | | | | | 39.6 | 100 | 20.0 | |
| | | 40 | | | | | | | | | | |
| | F I N E | 50 | | | | | 9.1 | | | | | |
| | | 60 | | | | | | | 21.1 | | | |
| | | 70 | | | | | 5 | | | | | |
| | | 80 | | | | | | | | 94.0 | | |
| | | 100 | | | | | 1.7 | | | | 0.0 | |
| | | 140 | | | | | 0.5 | | 3.8 | | | |
| T Y P E | 170 | | | | | | | | | | | |
| | 200 | 51.2 | 6.5 | 64.6 | 48.4 | 0.1 | 20.9 | 3.0 | 83.0 | 0.0 | 2.5 | |
| | 230 | | | | | 0.1 | | | | | | |
| | 270 | | | | | | | | | | | |
| | 0.20 mm | | | | | | | | 45.0 | 0.0 | | |
| 0.05 mm | | | | | | | | 22.0 | 0.0 | | | |
| M I S C | % | Total Organic Car | 1.77 | 0.3 | 3.48 | 1.85 | 0.03 | 0.58 | 5900 | | 0.28 | |
| | mg/kg | Chem Oxy Demand | | | | | | | 73000 | 1874 | | |
| | mg/kg | Kjedahl Nitrogen | | | | | | | 132 | 7300 | 134 | |
| | mg/kg | Total Phosph | | | | | | | 16 | 960 | 210 | |
| | mg/kg | Oil and Grease | | | | | | | 0 | 318 | | |
| | mg/kg | Cyanide, Total | < 5 | < 5 | < 5 | < 5 | 0.18 | < 5 | <0.3 | | < 5 | |
| | mg/kg | Ammonia | | | | | 9 | | 9.2 | | | |
| | mg/l | Ammonia Elutriate | 15 | 0.49 | 30 | 14 | | 1.7 | | | 3.7 | |
| | % | Moisture | | | | | 15.2 | | 17.6 | | | |
| | % | Total Solids | 63 | 78.3 | 47.8 | 57.6 | 84.8 | 68.1 | 82.3 | | 76.3 | |
| % | Volatile Solids | 4.8 | 1.2 | 9.4 | 4.9 | 0.37 | 1.7 | <0.01 | | 1.2 | | |

Table 4. Contaminant Data for Pool 2 of the Upper Mississippi River

| Record # | | | 5B | 5C | 5T | 4T | 51 | 52 | W3 | | | | | |
|--------------|-----------------|-------------------|----------------------|----------------------|----------------------|----------------------|-------------|----------------------|----------------------|------------------------|----------------------|-------------|------|-----|
| River Mile | | | 837.2 | 837.2 | 837.2 | 837.2 | 837.2 | 837.19 | 837 | 837 | 836.8 | | | |
| Location | | | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | STPBGH 2 | ST. PAUL BARGE TERM. | ST. PAUL BARGE TERM. | SAINT PAUL TERMINAL #1 | Wetland/Holman Field | | | |
| Year | | | 1992 | 1992 | 1992 | 1992 | 1994 | 1978 | 1980 | 2002 | 2008 | 1992 | | |
| System | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Habitat Type | | | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | | |
| Pool | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| Sam. Gear | | | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | Grab | 2 | | |
| Sam. Depth | | | 229 10-229 | | 10 | 0-168 | 10 | 10 | 10 | 10 | 10 | 10 | | |
| Lab | | | | | | | | | | | STAT | | | |
| Data Cit. | | | COE | COE | COE | COE | COE | COE | COE | COE | COE | COE | | |
| CHCS | ug/kg | a-BHC | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.23 | | | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | b-BHC | < 0.79 | < 0.9 | < 0.9 | < 0.86 | 0.45 | | | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | BHC | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.23 | | | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | g-BHC (lindane) | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.23 | | | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | Heptachlor | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.23 | | | < 0.08 | <2.1 | < 1.2 | | |
| | ug/kg | Aldrin | | | | | | | | | <2.1 | | | |
| | ug/kg | Heptachlorepoxide | | | | | | | | < 1.48 | <2.1 | | | |
| | ug/kg | Endosulfan I | | | | | | | | | <2.1 | | | |
| | ug/kg | Dieldrin | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.45 | 0 | 0.66 | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | 4,4'-DDE | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.45 | 0 | < 0.2 | < 0.12 | <2.1 | 2.6 | | |
| | ug/kg | Endrin | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.45 | 0 | 0.2 | < 0.12 | <2.1 | < 1.2 | | |
| | ug/kg | Endosulfan II | | | | | | | | | <2.1 | | | |
| | ug/kg | 4,4'-DDD | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.45 | 0.3 | 1.43 | < 0.12 | <2.1 | 1.8 | | |
| | ug/kg | Endrin aldehyde | | | | | | | | | <2.1 | | | |
| | ug/kg | Sulfan sulfate | | | | | | | | | <2.1 | | | |
| | ug/kg | 4,4'-DDT | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.45 | 0 | 1.68 | < 0.24 | <2.1 | < 1.2 | | |
| | ug/kg | Methoxychlor | | | | | | | | | <2.1 | | | |
| ug/kg | Endrin ketone | | | | | | | | | <2.1 | | | | |
| ug/kg | Chlorodane | < 0.79 | < 0.9 | < 0.9 | < 0.86 | < 0.23 | 1 | 3.05 | < 0.36 | <41 | < 1.2 | | | |
| ug/kg | Oxychlorane | | | | | | | | < 0.52 | | | | | |
| ug/kg | Toxaphene | | | | | | | | | <42 | | | | |
| METALS | mg/kg | Ag (silver) | | | | | | | | | | | | |
| | mg/kg | Al (aluminum) | | | | | | | | | | | | |
| | mg/kg | As (arsenic) | 2.3 | 5.4 | 3.9 | 3 | 1.9 | 0 | | 3.01 | 1.5 | 4.8 | | |
| | mg/kg | B (boron) | | | | | | | | | | | | |
| | mg/kg | Ba (barium) | | | | | | 10 | | | | | | |
| | mg/kg | Be (beryllium) | | | | | | | | | | | | |
| | mg/kg | Cd (cadmium) | 0.17 | 0.29 | 0.23 | 0.16 | 0.41 | < 10 | 0.75 | 0.82 | <0.57 | 1.1 | | |
| | mg/kg | Cr (chromium) | 5.6 | 8.6 | 8.3 | 6.7 | 11.3 | < 10 | 38.5 | 11.6 | 6.4 | 20 | | |
| | mg/kg | Cu (copper) | 5.8 | 10 | 10 | 7 | 3.4 | < 10 | 8.8 | 9.81 | 4.1 | 37 | | |
| | mg/kg | Fe (iron) | | | | | | 2600 | 14500 | | | | | |
| | mg/kg | Hg (mercury) | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.04 | 0 | < 0.01 | 0.008 | <0.032 | 0.14 | | |
| | mg/kg | Mg (magnesium) | | | | | | | | | | | | |
| | mg/kg | Mn (manganese) | 300 | 620 | 600 | 400 | 345 | 130 | | 588 | 370 | 1200 | | |
| | mg/kg | Mo (molybdenum) | | | | | | | | | | | | |
| | mg/kg | Ni (nickel) | 7 | 11 | 10 | 7.5 | 11.1 | < 10 | 22.4 | 17.4 | 7 | 21 | | |
| | mg/kg | Pb (lead) | 6.5 | 7 | 4.2 | 3.7 | 2.3 | 10 | 19.5 | 11.8 | 4.2 | 37 | | |
| | mg/kg | Sb (antimony) | | | | < | | | | | | | | |
| mg/kg | Se (selenium) | | | | | | | | | | | | | |
| mg/kg | Sn (tin) | | | | | | | | | | | | | |
| mg/kg | Sr (strontium) | | | | | | | | | | | | | |
| mg/kg | Ti (titanium) | | | | | | | | | | | | | |
| mg/kg | Zn (zinc) | 27 | 40 | 38 | 27 | 17.6 | 10 | 202 | 41.8 | 21 | 110 | | | |
| mg/kg | V (vanadium) | | | | | | | | | | | | | |
| PCBS | ug/kg | Aroclor-1006 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1221 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1232 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1242 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1248 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1254 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Aroclor-1260 | < 7.9 | < 9 | < 9 | < 8.6 | < 4.5 | | | <100 | < 12 | | | |
| | ug/kg | Total PCB's | | | | | | 11 | 15.9 | < 0.88 | | | | |
| % FINE SIZES | COARSE | 3 in | | | | | 100 | 100 | | | | | | |
| | | 1 1/2 | | | | | 100 | 100 | | | | | | |
| | MEDIUM | 3/4 | | | | | | 100 | 100 | | | | | |
| | | 3/8 | | | | | | 100 | 100 | | | | | |
| | | 4 | | | | | 71.6 | 100 | 100 | 100 | 100 | | | |
| | | 8 | | | | | | | | | | | | |
| | | 10 | | | | | 52.7 | 100 | | 100 | 99.7 | | | |
| | FINE | 16 | | | | | | | 100 | | | | | |
| | | 18 | | | | | | | | 98.8 | | | | |
| | | 20 | | | | | 35.0 | 90.0 | | | 98.9 | | | |
| | | 30 | | | | | | | | | | | | |
| | | 40 | | | | | 16.0 | 34.0 | 100 | | 83.2 | | | |
| | | 50 | | | | | | | | 37.7 | | | | |
| | TOTAL | 60 | | | | | | | | | 20.7 | | | |
| | | 70 | | | | | | | | 24.7 | | | | |
| | | 80 | | | | | | 9.0 | | | | | | |
| 100 | | | | | | 3.8 | | 76.0 | 18.9 | | | | | |
| 140 | | | | | | 3.6 | | | 15.1 | 4.1 | | | | |
| 170 | | | | | | | | | | | | | | |
| SILT CLAY | 200 | | | | | 19.9 | 37.4 | 43.0 | 26.5 | 3.0 | 4.0 | 42.0 | 11.3 | 3.3 |
| | 230 | | | | | | | | | | | | 11 | |
| | 270 | | | | | | | | | | | | | |
| | 0.20 mm | | | | | | | | | 0.0 | | | | |
| | 0.05 mm | | | | | | | | | 0.0 | 19.0 | | | |
| MISC | % | Total Organic Car | 0.7 | 1.21 | 1.7 | 0.76 | 0.075 | | | 0.98 | 11000 | | | |
| | mg/kg | Chem Oxy Demand | | | | | | 3500 | 18400 | | | | | |
| | mg/kg | Kjedahl Nitrogen | | | | | | 230 | -- | | 389 | | | |
| | mg/kg | Total Phosph | | | | | | 100 | 1770 | | 4.5 | | | |
| | mg/kg | Oil and Grease | | | | | | 0 | 560 | | | | | |
| | mg/kg | Cyanide, Total | < 5 | < 5 | < 5 | < 5 | < 0.06 | | | < 0.10 | <0.32 | 0.5 | | |
| | mg/kg | Ammonia | | | | | | | | 68 | 27 | 0.82 | | |
| | mg/l | Ammonia Elutriate | 4.7 | 8.3 | 4.1 | 5.1 | < 0.06 | | | | | | | |
| | % | Moisture | | | | | 15.7 | | | 37.8 | 22.3 | | | |
| | % | Total Solids | 72.8 | 67.2 | 63.6 | 70.3 | 84.3 | | | 62.2 | 77.8 | 43.4 | | |
| % | Volatile Solids | 2.7 | 4.5 | 5.1 | 3.5 | 1.21 | | | 3.08 | <0.01 | 11.5 | | | |

Table 4. Contaminant Data for Pool 2 of the Upper Mississippi River

| Record # | | W1 | W2 | 412 | |
|--|----------------------------|-----------------------------|-----------------------------|----------------------------|--------|
| River Mile | | 836.8 | 836.8 | 836.6 | |
| Location | | Wetland/H olman Field | Wetland/H olman Field | ST. PAUL BARGE TERM. | |
| Year | | 1992 | 1992 | 1989 | |
| System | | 1 | 1 | 1 | |
| Habitat Type | | | | 1 | |
| Pool | | 2 | 2 | 2 | |
| Sam. Gear | | Grab | Grab | 1 | |
| Sam. Depth | | 10 | 10 | 10 | |
| Lab | | | | | |
| Data Cit. | | COE | COE | COE | |
| C H C L S | ug/kg | a-BHC | < 1.4 | < 1.2 | < 0.1 |
| | ug/kg | b-BHC | < 1.4 | < 1.2 | < 0.21 |
| | ug/kg | BHC | < 1.4 | < 1.2 | < 0.31 |
| | ug/kg | g-BHC (lindane) | < 1.4 | < 1.2 | < 0.14 |
| | ug/kg | Heptachlor | < 1.4 | < 1.2 | < 0.1 |
| | ug/kg | Aldrin | | | < 0.14 |
| | ug/kg | Heptachlorepoxide | | | < 0.17 |
| | ug/kg | Endosulfan I | | | < 0.17 |
| | ug/kg | Dieldrin | < 1.4 | < 1.2 | < 0.17 |
| | ug/kg | 4,4'-DDE | 2.2 | 2.6 | < 0.14 |
| | ug/kg | Endrin | < 1.4 | < 1.2 | < 0.31 |
| | ug/kg | Endosulfan II | | | < 0.35 |
| | ug/kg | 4,4'-DDD | < 1.4 | 2.4 | < 0.38 |
| | ug/kg | Endrinaldehyde | | | < 0.38 |
| | ug/kg | Sulfan sulfate | | | < 0.38 |
| | ug/kg | 4,4'-DDT | < 1.4 | < 1.2 | < 0.45 |
| | ug/kg | Methoxychlor | | | < 0.77 |
| | ug/kg | Endringtonone | | | < 0.38 |
| | ug/kg | Chlorodane | < 1.4 | < 1.2 | < 2.09 |
| | ug/kg | Oxychlorodane | | | |
| ug/kg | Toxaphene | | | < 2.05 | |
| M E T A L S | mg/kg | Ag (silver) | | | |
| | mg/kg | Al (aluminum) | | | |
| | mg/kg | As (arsenic) | 5.7 | 7 | 3.1 |
| | mg/kg | B (boron) | | | |
| | mg/kg | Ba (barium) | | | |
| | mg/kg | Be (beryllium) | | | |
| | mg/kg | Cd (cadmium) | 1 | 0.89 | < 1.6 |
| | mg/kg | Cr (chromium) | 18 | 18 | 11.1 |
| | mg/kg | Cu (copper) | 34 | 32 | 10.8 |
| | mg/kg | Fe (iron) | | | |
| | mg/kg | Hg (mercury) | < 0.1 | 0.12 | 0.048 |
| | mg/kg | Mg (magnesium) | | | |
| | mg/kg | Mn (manganese) | 1200 | 1300 | 609 |
| | mg/kg | Mo (molybdenum) | | | |
| | mg/kg | Ni (nickel) | 20 | 19 | 9.2 |
| | mg/kg | Pb (lead) | 36 | 40 | 21.8 |
| mg/kg | Sb (antimony) | | | | |
| mg/kg | Se (selenium) | | | < 1.2 | |
| mg/kg | Sn (tin) | | | | |
| mg/kg | Sr (strontium) | | | | |
| mg/kg | Ti (titanium) | | | | |
| mg/kg | Zn (zinc) | 100 | 98 | 55.6 | |
| mg/kg | V (vanadium) | | | | |
| P C B S | ug/kg | Aroclor-1006 | < 14 | < 12 | < 2.09 |
| | ug/kg | Aroclor-1221 | < 14 | < 12 | < 2.09 |
| | ug/kg | Aroclor-1232 | < 14 | < 12 | < 2.09 |
| | ug/kg | Aroclor-1242 | < 14 | < 12 | < 2.09 |
| | ug/kg | Aroclor-1248 | < 14 | < 12 | < 2.09 |
| | ug/kg | Aroclor-1254 | < 14 | < 12 | < 4.35 |
| | ug/kg | Aroclor-1260 | < 14 | < 12 | < 4.35 |
| | ug/kg | Total PCB's | | | |
| P A R T I C L E S I Z E % F I N E R | S I Z E | f i n e | 3 in | | |
| | | | 1 1/2 | | |
| | | | 3/4 | | |
| | | | 3/8 | | |
| | | | 4 | | 100 |
| | | | 8 | | |
| | | | 10 | | 100 |
| | S I Z E | m e d i u m | 16 | | 99.5 |
| | | | 18 | | |
| | | | 20 | | |
| | | | 30 | | 97.8 |
| | | | 40 | | |
| | | | 50 | | 97.8 |
| | | | 60 | | |
| S I Z E | c o a r s e | 70 | | 85.6 | |
| | | 80 | | 33.0 | |
| | | 100 | | 29.0 | |
| | | 140 | | | |
| | | 170 | | | |
| | | 200 | | 19.5 | |
| | | 230 | | | |
| S I Z E | T Y P E | 270 | | 13.3 | |
| | | 0.20 mm | | 9.3 | |
| | | 0.05 mm | | 8.8 | |
| | | | | | |
| M I S C | % | Total Organic Car | | | 6.69 |
| | mg/kg | Chem Oxy Demand | | | |
| | mg/kg | Kjedahl Nitrogen | | | |
| | mg/kg | Total Phosph | | | |
| | mg/kg | Oil and Grease | | | |
| | mg/kg | Cyanide, Total | 0.5 | 0.5 | < 0.89 |
| | mg/kg | Ammonia | 3.8 | 0.18 | 77 |
| | mg/l | Ammonia Elutriate | | | |
| | % | Moisture | | | 43.7 |
| | % | Total Solids | 44.2 | 50 | 56.3 |
| % | Volatile Solids | 10.7 | 10.3 | 4 | |