APPENDIX D

HEAVY METAL CONCENTRATIONS IN LOWER DETROIT RIVER INTERSTITIAL WATERS: ANALYSES CONDUCTED BY THE LARGE LAKES RESEARCH STATION

STATION: TC0064 RETRIEVAL DATE: 18-NOV-87 LATITUDE: 4212130 LONGITUDE: 8308540 DEPTH: 0.0
IPP STA 25- PT HENNEPIN MACROPHYTE BED

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016001IN1	860501	1	0.0V	0.629	2.67	5.718	16.53	6.10	11.46	62.	
MSE016001IN2	860501	1	0.0V	NC	NC	NC	14.56	NC	NC	NC	NC

STATION: DR0019 RETRIEVAL DATE: 18-NOV-87 LATITUDE: 4212020 LONGITUDE: 8308440 DEPTH: 0.0
IPP STA 25A- PT HENNEPIN EAST

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016002IN1	860501	1	0.0V	0.678	1.15	1.334	15.6[illegible]	8.86J	3.06J	31.	
MSE016002IN2	860501	1	0.0V	NC	NC		NC	NC	NC	27.	NC

STATION: TC0065 RETRIEVAL DATE: 18-NOV-87 LATITUDE: 4210480 LONGITUDE: 8309790 DEPTH: 1.8
IPP STA 30 UP- MONGUAGON CREEK UPSTREAM

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016003IN1	860501	1	0.0V	0.818	5.79	9.908	19.01	12.34	20.96J	97.	

STATION: TC0066 RETRIEVAL DATE: 18-NOV-87 LATITUDE: 4210410 LONGITUDE: 8309880 DEPTH: 0.0
IPP STA 30CR- IN MONGUAGON CREEK

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016004IN1	860501	1	0.0V	0.819	1.73	3.315	16.13	9.72	2.19J	25.	
MSE016004IN2	860501	1	0.0V	NC	NC	1.286	NC	NC	2.48J	NC	NC

IPP STA 77- PT HENNEPIN WEST

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016005IN1	860501	1	0.0V	1.521J	1.06T	1.344	13.40	5.18	2.34J	56.	
MSE016005IN2	860501	1	0.0V	NC	NC	NC	12.86	NC	NC	NC	NC

STATION: TC0068 RETRIEVAL DATE: 18-NOV-87
IPP STA 30- MONGUAGON CREEK DOWNSTREAM

LATITUDE: 4210280 LONGITUDE: 9309820 DEPTH: 0.6

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE016006IN1	860501	1	0.0V	1.134	5.25	8.669	10.08	1.5[illegible]	26.15J	64.	
MSE016006IN2	860501	1	0.0V	1.219J	4.78	NC	NC	NC	NC	NC	NC

STATION: TC0069 RETRIEVAL DATE: 18-NOV-87
IPP STA 53- GIBRALTAR BAY

LATITUDE: 4204730 LONGITUDE: 8311460 DEPTH: 1.5

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE136001IN1	860513	1	0.0V	0.378	2.44	1.238	15.10	0.79T	1.88J	27.	

STATION: TC0070 RETRIEVAL DATE: 18-NOV-87
IPP STA 54- GIBRALTAR DOWNSTREAM 1

LATITUDE: 4204450 LONGITUDE: 8311250 DEPTH: 3.4

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE136002IN1	860513	1	0.0V	0.596	0.94T	0.987J	15.76	0.48T	2.53J	66.	

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE136003IN1	860513	1	0.0V	0.233	1.49	1.087	9.06	0.47W	3.01J	76.	
MSE136003IN2	860513	1	0.0V	NC	NC	NC	7.63	NC	NC	NC	NC

STATION: TC0072 RETRIEVAL DATE: 18-NOV-87
IPP STA 104- UPSTREAM OF 'BLACK LAGOON'

LATITTUDE: 4209150 LONGITUDE: 8310250 DEPTH: 4.3

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296001IN1	860529	1	0.0V	27.400	0.82T	0.178T	4.17	2.05	0.73T	25.	

STATION: TC0073 RETRIEVAL DATE: 18-NOV-87
IPP STA 105- OFFSHORE FROM RIVERSIDE HOSPITAL

LATITTUDE: 4208890 LONGITUDE: 8310390 DEPTH: 1.2

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296002IN1	860529	1	0.0V	26.650	2.13	3.070	7.19	3.2J	20.28J	38.	

STATION: TC0074 RETRIEVAL DATE: 18-NOV-87
IPP STA 107- OFF SHORE FROM WEST ROAD

LATITTUDE: 4208450 LONGITUDE. 8310500 DEPTH: 3.4

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296003IN1	860529	1	0.0V	27.390	2.33	1.677	7.07	10.06J	7.82	42.	
MSE296003IN2	860529	1	0.0V	NC	NC	NC	9.58	NC	NC	NC	NC

STATION: TC0075 RETRIEVAL DATE: 18-NOV-87
IPP STA 34- 'BLACK LAGOON'
LATITUDE: 4209110 LONGITUDE: 8310310 DEPTH: 1.2

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296004IN1	860529	1	0.0V	7.925J	2.25	0.966J	6.69	1.45	6.02	48.	

STATION: TC0076 RETRIEVAL DATE: 18-NOV-87
IPP STA 30AC- ACROSS FROM STATION 30
LATITUDE: 4210250 LONGITUDE: 8309640 DEPTH: 1.2

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296005IN1	860529	1	0.0V	25.410	5.07	0.956J	7.19	1.00T	2.03J	39.	

STATION: TC0077 RETRIEVAL DATE: 18-NOV-87
IPP STA 41- ACROSS FROM ELIZABETH PARK
LATITUDE: 4208090 LONGITUDE: 8310250 DEPTH: 1.8

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSE296006IN1	860529	1	0.0V	22.680	0.86T	1.910	8.45	2.30	8.09	39.	
MSE296006IN2	860529	1	0.0V	NC	0.86T	NC	NC	NC	5.22	NC	NC

STATION: TC0078 RETRIEVAL DATE: 18-NOV-87
IPP STA 42- MONSANTO LAGOON
LATITUDE: 4206980 LONGITUDE: 8310900 DEPTH: 1.5

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF106001IN1	860610	1	0.0V	0.762	1.75	1.541	13.11	4.84	5.02	30.	
MSF106001IN2	860610	1	0.0V	NC	NC	NC	NC	4.11	NC	NC	NC

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF106002IN1	860610	1	0.0V	0.283	1.16	0.550J	6.69	4.20	2.83J	47.	

STATION: TC0080 RETRIEVAL DATE: 18-NOV-87
IPP STA 45- DOWNSTREAM OF MONSANTO

LATITTIUDE: 4206340 LONGITUDE: 8311120 DEPTH: 0.9

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF106003IN1	860610	1	0.0V	0.212	4.18	0.597J	10.5J	4.32	0.44T	44.	

STATION: TC0081 RETRIEVAL DATE: 18-NOV-87
IPP STA 47- SWAN ISLAND

LATITTIUDE: 4206130 LONGITUDE: 8310520 DEPTH: 1.8

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF246001IN1	860624	1	0.0V	0.245	1.01T	0.157T	10.43	2.17	0.38W	38.	

STATION: TC0082 RETRIEVAL DATE: 18-NOV-87
IPP STA 49- NOS GAUGE HOUSE

LATITTIUDE: 4205470 LONGITUDE: 8311160 DEPTH: 0.9

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF246002IN1	860623	1	0.0V	0.338	1.24	0.362T	11.42	3.07	5.22		

STATION: TC0083 RETRIEVAL DATE: 18-NOV-87
IPP STA 51- FORD YACHT CLUB

LATITTUDE: 4205510 LONGITUDE: 8310350 DEPTH: 0.9

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF246003IN1	860624	1	0.0V	0.157	0.73T	0.283T	10.43	1.7[illegible]	2.23J	37.	
MSF246003IN2	860624	1	0.0V	NC	0.88T	NC	NC	NC	NC	NC	NC

STATION: TC0084 RETRIEVAL DATE: 18-NOV-87
IPP STA 52- HICKORY ISLAND

LATITTUDE: 4205170 LONGITUDE: 8309560 DEPTH: 0.0

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSF246004IN1	860624	1	0.0V	0.149	0.58T	0.236T	12.57	2.52	0.76T	37.	
MSF246004IN2	860624	1	0.0V	NC	0.65T	NC	NC	NC	NC	NC	NC

STATION: TC0085 RETRIEVAL DATE: 18-NOV-87
IPP STA 44A- ACROSS FROM MONSANTO

LATITTUDE: 4206750 LONGITUDE: 8310470 DEPTH: 1.5

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086001IN1	860708	1	0.0V	0.743	2.61	0.173T	11.62	2.06	3.53J	47.	

STATION: TC0086 RETRIEVAL DATE: 18-NOV-87
IPP STA 110- OFF OF FIRESTONE STEEL PRODUCTS

LATITTUDE: 4210810 LONGITUDE: 8309570 DEPTH: 1.2

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086002IN1	860708	1	0.0V	3.408	2.17	1.352	6.41	4.00	11.07	51.	
MSG086002IN2	860708	1	0.0V	NC	NC	NC	6.66	NC	NC	53.	NC

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086003IN1	860708	1	0.0V	1.321	4.97	2.955	11.97	4.01	15.13	30.	
MSG086003IN2	860708	1	0.0V	NC	NC	2.217	NC	NC	NC	NC	NC

STATION: TC0088 RETRIEVAL DATE: 18-NOV-87
IPP STA 112- ELIZABETH PARK CHANNEL

LATITTUDE: 4208190 LONGITUDE: 8310570 DEPTH: 0.6

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086004IN1	860708	1	0.0V	0.180	5.53	5.785	6.92	2.04	18.61	59.	
MSG086004IN2	860708	1	0.0V	NC	5.35	NC	NC	1.63	NC	NC	NC

STATION: TC0089 RETRIEVAL DATE: 18-NOV-87
IPP STA 113- GIBRALTAR, UPSTREAM #45

LATITTUDE: 4206610 LONGITUDE: 8311030 DEPTH: 1.5

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086005IN1	860708	1	0.0V	0.249	1.41	0.362T	11.28	0.91T	2.37J	33.	
MSG086005IN2	860708	1	0.0V	0.279	NC	NC	NC	NC	NC	NC	NC

STATION: TC0090 RETRIEVAL DATE: 18-NOV-87
IPP STA 114- GIBRALTAR, DOWNSTREAM #45

LATITTUDE: 4206130 LONGITUDE: 8311290 DEPTH: 0.0

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSG086006IN1	860708	1	0.0V	0.800	1.04T	0.393T	9.66	1.24	4.38	38.	

STATION: DR0020 RETRIEVAL DATE: 18-NOV-87
IPP STA 82- FIGHTING ISLAND NORTH END- REFERENCE

LATITUDE: 4213830 LONGITUDE: 8307620 DEPTH: 1.2

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSH286001IN1	860828	1	0.0V	0.143	1.07T	0.204T	11.11	1.01T	2.10J	42.	

STATION: DR0021 RETRIEVAL DATE: 18-NOV-87
IPP STA 83- FIGHTING ISLAND - REFERENCE

LATITUDE: 4212740 LONGITUDE: 8307550 DEPTH: 1.8

SAMPLE ID	DATE YYMMDD	TIME 24HR	DEPTH M	1027 Tot Cd ug/L	1034 Tot Cr ug/L	1037 Tot Co ug/L	1042 Tot Cu ug/L	1051 Tot Pb ug/L	1067 Tot Ni ug/L	1092 Tot Zn ug/L	71900 Tot Hg ug/L
MSH286002IN1	860828	1	0.0V	0.111	1.67	0.283T	36.74	1.90	2.83J	49.	