

***Protecting Our Water Environment***



***Metropolitan Water Reclamation District of Greater Chicago***

**RESEARCH AND DEVELOPMENT  
DEPARTMENT**

***REPORT NO. 91-16-B***

***WATER AND SEDIMENT QUALITY ALONG THE  
ILLINOIS WATERWAY FROM THE  
LOCKPORT LOCK AND DAM TO THE PEORIA LOCK AND DAM  
DURING 1984 AND 1985***

***VOLUME 2***

***APPENDICES***

***I. Polls  
S.J. Sedita  
D.R. Zenz  
C. Lue-Hing***

***June 1991***

WATER AND SEDIMENT QUALITY ALONG THE  
ILLINOIS WATERWAY FROM THE  
LOCKPORT LOCK AND DAM TO THE PEORIA LOCK AND DAM  
DURING 1984 AND 1985  
VOLUME 2  
APPENDICES

by

Irwin Polls  
Biologist III

Salvador J. Sedita  
Microbiologist IV

David R. Zenz  
Research and Technical Services Manager

Cecil Lue-Hing  
Director of Research and Development

APPENDIX AI

WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, MAY 1984

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	20
Dissolved Oxygen	2.5	2.6
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	8	8
Total Suspended Solids	11	16
Total Ammonia Nitrogen	3.9	4.1
Nitrite Plus Nitrate Nitrogen	2.84	3.86
Total Phosphorus	0.44	0.61
pH (units)	6.9	6.8
Total Cyanides	0.008	0.006
Phenol	0.037	0.015
Fats, Oils and Greases	34	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.03
Total Iron	0.40	0.40
Total Lead	0.02	0.00
Total Manganese	0.08	0.08
Total Mercury	0.0003	0.0004
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.60	0.00
Fecal Coliform (cfu/100mL)	190	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	18
Dissolved Oxygen	2.7	5.0
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	8	8
Total Suspended Solids	16	19
Total Ammonia Nitrogen	4.0	4.2
Nitrite Plus Nitrate Nitrogen	2.86	4.38
Total Phosphorus	0.50	0.61
pH (units)	6.9	6.9
Total Cyanides	0.009	0.006
Phenol	0.028	0.017
Fats,Oils and Greases	6	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.50	0.30
Total Lead	0.01	0.00
Total Manganese	0.07	0.07
Total Mercury	0.0002	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.30	0.00
Fecal Coliform (cfu/100mL)	350	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	19
Dissolved Oxygen	5.0	4.9
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	9	9
Total Suspended Solids	17	20
Total Ammonia Nitrogen	3.0	3.2
Nitrite Plus Nitrate Nitrogen	2.93	4.37
Total Phosphorus	0.45	0.56
pH (units)	7.0	7.1
Total Cyanides	0.008	0.005
Phenol	0.029	0.020
Fats, Oils and Greases	9	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.40	0.40
Total Lead	0.02	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0000	0.0002
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	1,200	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	18
Dissolved Oxygen	4.8	4.7
Five-Day Biochemical Oxygen Demand	4	7
Total Organic Carbon	9	9
Total Suspended Solids	20	64
Total Ammonia Nitrogen	3.0	3.1
Nitrite Plus Nitrate Nitrogen	2.26	4.04
Total Phosphorus	0.45	0.78
pH (units)	7.3	7.2
Total Cyanides	0.008	0.007
Phenol	0.024	0.018
Fats,Oils and Greases	7	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.03
Total Iron	0.40	1.00
Total Lead	0.02	0.02
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.30	0.20
Fecal Coliform (cfu/100mL)	290	160

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	17	19
Dissolved Oxygen	9.3	9.2
Five-Day Biochemical Oxygen Demand	4	8
Total Organic Carbon	8	9
Total Suspended Solids	16	27
Total Ammonia Nitrogen	2.6	3.0
Nitrite Plus Nitrate Nitrogen	3.51	4.10
Total Phosphorus	0.44	0.59
pH (units)	7.3	7.1
Total Cyanides	0.007	0.005
Phenol	0.023	0.019
Fats, Oils and Greases	15	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.50	0.60
Total Lead	0.02	0.00
Total Manganese	0.07	0.08
Total Mercury	0.0002	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.30	0.00
Fecal Coliform (cfu/100mL)	360	1,500

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	17	20
Dissolved Oxygen	8.5	7.5
Five-Day Biochemical Oxygen Demand	6	9
Total Organic Carbon	8	9
Total Suspended Solids	18	30
Total Ammonia Nitrogen	2.6	3.3
Nitrite Plus Nitrate Nitrogen	3.71	4.36
Total Phosphorus	0.52	0.65
pH (units)	7.1	7.2
Total Cyanides	0.007	0.005
Phenol	0.023	0.024
Fats, Oils and Greases	7	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.40	0.30
Total Lead	0.03	0.02
Total Manganese	0.08	0.08
Total Mercury	0.0000	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.60	0.00
Fecal Coliform (cfu/100mL)	310	500

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	17	20
Dissolved Oxygen	8.0	8.0
Five-Day Biochemical Oxygen Demand	6	9
Total Organic Carbon	9	9
Total Suspended Solids	17	33
Total Ammonia Nitrogen	2.6	3.3
Nitrite Plus Nitrate Nitrogen	3.90	2.95
Total Phosphorus	0.48	0.75
pH (units)	7.2	7.3
Total Cyanides	0.007	0.005
Phenol	0.019	0.025
Fats, Oils and Greases	3	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.40	0.40
Total Lead	0.06	0.00
Total Manganese	0.07	0.09
Total Mercury	0.0000	0.0004
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.50	0.00
Fecal Coliform (cfu/100mL)	180	340

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	19
Dissolved Oxygen	8.3	8.1
Five-Day Biochemical Oxygen Demand	6	11
Total Organic Carbon	9	10
Total Suspended Solids	22	90
Total Ammonia Nitrogen	2.5	3.0
Nitrite Plus Nitrate Nitrogen	3.94	3.36
Total Phosphorus	0.46	1.05
pH (units)	7.3	7.3
Total Cyanides	0.007	0.005
Phenol	0.019	0.024
Fats, Oils and Greases	4	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.03
Total Iron	0.40	0.50
Total Lead	0.07	0.03
Total Manganese	0.08	0.11
Total Mercury	0.0000	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.30	0.00
Fecal Coliform (cfu/100mL)	190	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/18
Water Temperature (°C)	16	19
Dissolved Oxygen	8.2	8.1
Five-Day Biochemical Oxygen Demand	4	8
Total Organic Carbon	8	9
Total Suspended Solids	37	34
Total Ammonia Nitrogen	2.1	2.8
Nitrite Plus Nitrate Nitrogen	3.69	3.74
Total Phosphorus	0.51	0.67
pH (units)	7.2	7.3
Total Cyanides	0.007	0.005
Phenol	0.022	0.020
Fats, Oils and Greases	80	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.60	0.30
Total Lead	0.03	0.02
Total Manganese	0.08	0.11
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	130	60

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	17	19
Dissolved Oxygen	7.3	4.4
Five-Day Biochemical Oxygen Demand	7	9
Total Organic Carbon	8	8
Total Suspended Solids	41	56
Total Ammonia Nitrogen	2.3	3.0
Nitrite Plus Nitrate Nitrogen	3.94	3.56
Total Phosphorus	0.50	0.83
pH (units)	6.9	6.9
Total Cyanides	0.006	0.006
Phenol	0.021	0.023
Fats, Oils and Greases	11	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.02
Total Iron	8.10	0.70
Total Lead	0.00	0.02
Total Manganese	0.10	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	20
Dissolved Oxygen	9.3	6.6
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	6	7
Total Suspended Solids	31	17
Total Ammonia Nitrogen	0.6	0.2
Nitrite Plus Nitrate Nitrogen	3.68	3.01
Total Phosphorus	0.18	0.14
pH (units)	7.0	6.8
Total Cyanides	0.003	0.002
Phenol	0.018	0.015
Fats, Oils and Greases	8	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.60	1.20
Total Lead	0.00	0.00
Total Manganese	0.08	0.03
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	17	19
Dissolved Oxygen	10.0	4.8
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	7
Total Suspended Solids	33	33
Total Ammonia Nitrogen	1.0	1.3
Nitrite Plus Nitrate Nitrogen	3.71	3.54
Total Phosphorus	0.26	0.38
pH (units)	6.7	7.1
Total Cyanides	0.005	0.006
Phenol	0.019	0.017
Fats, Oils and Greases	8	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	0.60	1.30
Total Lead	0.00	0.00
Total Manganese	0.08	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	30	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	19
Dissolved Oxygen	9.8	8.2
Five-Day Biochemical Oxygen Demand	6	5
Total Organic Carbon	8	7
Total Suspended Solids	44	29
Total Ammonia Nitrogen	1.0	1.1
Nitrite Plus Nitrate Nitrogen	3.71	3.50
Total Phosphorus	0.31	0.33
pH (units)	7.0	7.1
Total Cyanides	0.005	0.005
Phenol	0.018	0.018
Fats, Oils and Greases	7	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.70	0.90
Total Lead	0.00	0.02
Total Manganese	0.08	0.05
Total Mercury	0.0001	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	<10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	15	19
Dissolved Oxygen	10.0	11.5
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	7	8
Total Suspended Solids	33	26
Total Ammonia Nitrogen	0.9	1.1
Nitrite Plus Nitrate Nitrogen	3.69	3.55
Total Phosphorus	0.24	0.35
pH (units)	7.2	7.2
Total Cyanides	0.004	0.008
Phenol	0.009	0.021
Fats, Oils and Greases	6	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.50	1.00
Total Lead	0.00	0.00
Total Manganese	0.07	0.06
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	19
Dissolved Oxygen	9.9	11.2
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	8
Total Suspended Solids	26	27
Total Ammonia Nitrogen	1.0	1.1
Nitrite Plus Nitrate Nitrogen	3.70	3.54
Total Phosphorus	0.31	0.31
pH (units)	7.2	7.4
Total Cyanides	0.004	0.007
Phenol	0.010	0.017
Fats,Oils and Greases	6	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.50	1.20
Total Lead	0.00	0.00
Total Manganese	0.08	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	18
Dissolved Oxygen	7.2	10.4
Five-Day Biochemical Oxygen Demand	5	1
Total Organic Carbon	7	8
Total Suspended Solids	29	28
Total Ammonia Nitrogen	0.9	1.0
Nitrite Plus Nitrate Nitrogen	4.10	3.54
Total Phosphorus	0.24	0.26
pH (units)	7.0	5.6
Total Cyanides	0.004	0.006
Phenol	0.009	0.016
Fats, Oils and Greases	6	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.50	1.30
Total Lead	0.00	0.03
Total Manganese	0.09	0.06
Total Mercury	0.0001	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	18
Dissolved Oxygen	5.6	10.8
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	7	7
Total Suspended Solids	30	19
Total Ammonia Nitrogen	0.8	1.0
Nitrite Plus Nitrate Nitrogen	4.07	3.81
Total Phosphorus	0.24	0.27
pH (units)	7.1	7.2
Total Cyanides	0.003	0.004
Phenol	0.007	0.016
Fats, Oils and Greases	6	17
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	3.70	1.30
Total Lead	0.00	0.06
Total Manganese	0.10	0.05
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.30
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	19
Dissolved Oxygen	6.3	5.2
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	7	7
Total Suspended Solids	38	28
Total Ammonia Nitrogen	0.7	0.8
Nitrite Plus Nitrate Nitrogen	4.08	3.81
Total Phosphorus	0.24	0.32
pH (units)	7.1	7.2
Total Cyanides	0.003	0.004
Phenol	0.010	0.017
Fats,Oils and Greases	7	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.90	0.50
Total Lead	0.00	0.00
Total Manganese	0.08	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	19
Dissolved Oxygen	6.8	6.4
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	7	7
Total Suspended Solids	45	24
Total Ammonia Nitrogen	0.7	0.7
Nitrite Plus Nitrate Nitrogen	4.10	3.80
Total Phosphorus	0.34	0.23
pH (units)	7.0	7.4
Total Cyanides	0.005	0.004
Phenol	0.100	0.008
Fats, Oils and Greases	5	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	1.00	0.40
Total Lead	0.00	0.00
Total Manganese	0.09	0.09
Total Mercury	0.0004	0.0004
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	19
Dissolved Oxygen	9.4	6.1
Five-Day Biochemical Oxygen Demand	6	7
Total Organic Carbon	7	7
Total Suspended Solids	55	24
Total Ammonia Nitrogen	0.7	0.6
Nitrite Plus Nitrate Nitrogen	4.23	3.78
Total Phosphorus	0.32	0.23
pH (units)	7.1	7.5
Total Cyanides	0.005	0.004
Phenol	0.008	0.007
Fats,Oils and Greases	6	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.70	0.30
Total Lead	0.00	0.00
Total Manganese	0.10	0.07
Total Mercury	0 0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	15	18
Dissolved Oxygen	9.6	7.6
Five-Day Biochemical Oxygen Demand	2	7
Total Organic Carbon	8	7
Total Suspended Solids	45	37
Total Ammonia Nitrogen	0.6	0.6
Nitrite Plus Nitrate Nitrogen	4.39	4.35
Total Phosphorus	0.24	0.30
pH (units)	5.6	7.3
Total Cyanides	0.005	0.004
Phenol	0.011	0.007
Fats, Oils and Greases	8	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	6.10	0.40
Total Lead	0.00	0.02
Total Manganese	0.10	0.10
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	<10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	17
Dissolved Oxygen	9.7	6.0
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	6	7
Total Suspended Solids	45	28
Total Ammonia Nitrogen	0.7	0.7
Nitrite Plus Nitrate Nitrogen	4.38	4.10
Total Phosphorus	0.31	0.27
pH (units)	6.8	6.8
Total Cyanides	0.005	0.005
Phenol	0.005	0.010
Fats, Oils and Greases	7	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.09	0.20
Total Lead	0.02	0.00
Total Manganese	0.10	0.09
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	16	18
Dissolved Oxygen	9.9	5.2
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	6	7
Total Suspended Solids	71	30
Total Ammonia Nitrogen	0.6	0.6
Nitrite Plus Nitrate Nitrogen	4.49	4.28
Total Phosphorus	0.30	0.25
pH (units)	7.1	7.3
Total Cyanides	0.005	0.004
Phenol	0.018	0.010
Fats, Oils and Greases	5	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.10	0.10
Total Lead	0.02	0.02
Total Manganese	0.11	0.08
Total Mercury	0.0000	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	20	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	15	17
Dissolved Oxygen	10.4	5.3
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	7	7
Total Suspended Solids	41	50
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	4.36	3.52
Total Phosphorus	0.24	0.27
pH (units)	7.0	7.2
Total Cyanides	0.005	0.003
Phenol	0.019	0.012
Fats, Oils and Greases	7	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.00	0.00
Total Iron	1.30	0.30
Total Lead	0.00	0.02
Total Manganese	0.10	0.09
Total Mercury	0.0000	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	15	18
Dissolved Oxygen	10.6	7.1
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	7	8
Total Suspended Solids	53	32
Total Ammonia Nitrogen	0.3	0.3
Nitrite Plus Nitrate Nitrogen	3.99	3.67
Total Phosphorus	0.27	0.22
pH (units)	7.0	7.5
Total Cyanides	0.005	0.003
Phenol	0.019	0.011
Fats, Oils and Greases	8	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.40	0.30
Total Lead	0.02	0.02
Total Manganese	0.11	0.08
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/17
Water Temperature (°C)	15	18
Dissolved Oxygen	8.1	6.5
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	7	9
Total Suspended Solids	46	29
Total Ammonia Nitrogen	0.3	0.3
Nitrite Plus Nitrate Nitrogen	4.17	3.65
Total Phosphorus	0.24	0.22
pH (units)	7.1	7.2
Total Cyanides	0.005	0.003
Phenol	0.017	0.012
Fats, Oils and Greases	6	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	13.00	0.30
Total Lead	0.01	0.00
Total Manganese	0.10	0.06
Total Mercury	0.0001	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	9.4	15.3
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	8	12
Total Suspended Solids	62	29
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	3.64	3.78
Total Phosphorus	0.35	0.27
pH (units)	6.7	7.2
Total Cyanides	0.007	0.004
Phenol	0.017	0.018
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	0.90	0.10
Total Lead	0.00	0.02
Total Manganese	0.08	0.07
Total Mercury	0.0002	0.0001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	30	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	19
Dissolved Oxygen	10.2	11.8
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	7	9
Total Suspended Solids	49	36
Total Ammonia Nitrogen	0.4	0.1
Nitrite Plus Nitrate Nitrogen	4.35	4.17
Total Phosphorus	0.32	0.29
pH (units)	6.6	7.2
Total Cyanides	0.007	0.004
Phenol	0.017	0.017
Fats, Oils and Greases	3	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	0.60	0.20
Total Lead	0.00	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0001	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.20
Fecal Coliform (cfu/100mL)	30	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	10.1	13.5
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	8	5
Total Suspended Solids	44	52
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	4.18	4.04
Total Phosphorus	0.35	0.37
pH (units)	6.6	7.3
Total Cyanides	0.007	0.004
Phenol	0.018	0.017
Fats, Oils and Greases	8	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.70	0.50
Total Lead	0.02	0.00
Total Manganese	0.07	0.12
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	50

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	10.3	12.8
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	7	6
Total Suspended Solids	66	43
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	4.43	4.68
Total Phosphorus	0.32	0.29
pH (units)	6.9	7.2
Total Cyanides	0.007	0.004
Phenol	0.018	0.018
Fats,Oils and Greases	12	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.00
Total Copper	0.02	0.00
Total Iron	0.80	0.20
Total Lead	0.00	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.10
Total Silver	0.01	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	30	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	13	18
Dissolved Oxygen	10.1	4.7
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	7	7
Total Suspended Solids	64	47
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	4.72	4.54
Total Phosphorus	0.39	0.28
pH (units)	7.0	7.3
Total Cyanides	0.006	0.003
Phenol	0.017	0.016
Fats, Oils and Greases	2	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.03	0.00
Total Iron	0.80	0.40
Total Lead	0.00	0.00
Total Manganese	0.09	0.10
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	50	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	10.1	7.4
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	7	6
Total Suspended Solids	87	65
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	5.12	4.71
Total Phosphorus	0.35	0.30
pH (units)	6.9	7.2
Total Cyanides	0.007	0.004
Phenol	0.017	0.018
Fats,Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	1.00	0.05
Total Lead	0.00	0.00
Total Manganese	0.10	0.09
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	20	110

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	9.9	8.0
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	6	6
Total Suspended Solids	75	50
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	4.93	4.43
Total Phosphorus	0.34	0.30
pH (units)	6.8	7.3
Total Cyanides	0.007	0.003
Phenol	0.018	0.016
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.90	0.10
Total Lead	0.02	0.00
Total Manganese	0.10	0.09
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	30	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	14	18
Dissolved Oxygen	9.7	9.5
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	7	7
Total Suspended Solids	89	60
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	4.86	4.64
Total Phosphorus	0.38	0.36
pH (units)	7.0	7.4
Total Cyanides	0.007	0.004
Phenol	0.019	0.014
Fats,Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	0.60	0.40
Total Lead	0.00	0.00
Total Manganese	0.08	0.10
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	18
Dissolved Oxygen	5.5	7.9
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	7
Total Suspended Solids	67	69
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.15	4.17
Total Phosphorus	0.35	0.34
pH (units)	7.0	7.4
Total Cyanides	0.004	0.003
Phenol	0.014	0.020
Fats,Oils and Greases	1	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.20	0.50
Total Lead	0.00	0.02
Total Manganese	0.09	0.12
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	70	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	18
Dissolved Oxygen	9.0	7.2
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	7	8
Total Suspended Solids	60	46
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.16	4.49
Total Phosphorus	0.32	0.30
pH (units)	6.9	7.3
Total Cyanides	0.004	0.003
Phenol	0.016	0.014
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.90	0.40
Total Lead	0.00	0.02
Total Manganese	0.08	0.11
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.01
Fecal Coliform (cfu/100mL)	50	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	20
Dissolved Oxygen	8.7	7.3
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	7	8
Total Suspended Solids	78	34
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	5.11	4.61
Total Phosphorus	0.37	0.34
pH (units)	6.9	7.3
Total Cyanides	0.004	0.003
Phenol	0.016	0.015
Fats,Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	0.90	1.20
Total Lead	0.00	0.00
Total Manganese	0.10	0.10
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	20	20

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	16	18
Dissolved Oxygen	8.5	7.0
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	6	9
Total Suspended Solids	69	30
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	5.36	4.72
Total Phosphorus	0.28	0.35
pH (units)	7.0	7.4
Total Cyanides	0.003	0.002
Phenol	0.018	0.016
Fats, Oils and Greases	2	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.00	0.50
Total Lead	0.00	0.02
Total Manganese	0.08	0.13
Total Mercury	0.0001	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	18
Dissolved Oxygen	6.1	10.0
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	6	8
Total Suspended Solids	81	90
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.36	4.52
Total Phosphorus	0.18	0.32
pH (units)	6.9	7.5
Total Cyanides	0.004	0.005
Phenol	0.019	0.015
Fats,Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	0.90	0.90
Total Lead	0.00	0.03
Total Manganese	0.09	0.15
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	16	18
Dissolved Oxygen	7.6	11.9
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	6	8
Total Suspended Solids	83	45
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.38	4.50
Total Phosphorus	0.36	0.25
pH (units)	6.8	7.4
Total Cyanides	0.004	0.005
Phenol	0.017	0.015
Fats, Oils and Greases	3	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.00
Total Iron	1.10	0.50
Total Lead	0.00	0.03
Total Manganese	0.09	0.11
Total Mercury	0.0000	0.0001
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	18
Dissolved Oxygen	7.2	10.8
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	7	9
Total Suspended Solids	89	55
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.40	4.58
Total Phosphorus	0.35	0.30
pH (units)	6.8	7.3
Total Cyanides	0.004	0.004
Phenol	0.015	0.016
Fats, Oils and Greases	0	1
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.20	0.60
Total Lead	0.00	0.02
Total Manganese	0.09	0.15
Total Mercury	0.0001	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.30
Fecal Coliform (cfu/100mL)	30	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/16
Water Temperature (°C)	15	18
Dissolved Oxygen	6.8	11.0
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	6	10
Total Suspended Solids	122	71
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.63	4.57
Total Phosphorus	0.41	0.32
pH (units)	6.8	7.3
Total Cyanides	0.004	0.004
Phenol	0.017	0.016
Fats, Oils and Greases	1	1
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.10	0.70
Total Lead	0.00	0.10
Total Manganese	0.12	0.13
Total Mercury	0.0001	0.0001
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	15	16
Dissolved Oxygen	9.7	7.6
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	6	8
Total Suspended Solids	83	62
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.39	4.75
Total Phosphorus	0.19	0.30
pH (units)	7.4	7.1
Total Cyanides	0.005	0.004
Phenol	0.013	0.018
Fats, Oils and Greases	10	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.00	0.00
Total Copper	0.00	0.03
Total Iron	1.40	0.70
Total Lead	0.00	0.00
Total Manganese	0.07	0.09
Total Mercury	0.0002	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	16
Dissolved Oxygen	9.4	5.8
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	8
Total Suspended Solids	71	50
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	5.60	4.95
Total Phosphorus	0.18	0.26
pH (units)	7.4	7.1
Total Cyanides	0.004	0.004
Phenol	0.018	0.014
Fats,Oils and Greases	5	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	1.80	0.60
Total Lead	0.00	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	17
Dissolved Oxygen	9.7	8.2
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	7	7
Total Suspended Solids	65	62
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	5.76	4.94
Total Phosphorus	0.22	0.23
pH (units)	7.6	7.1
Total Cyanides	0.004	0.004
Phenol	0.013	0.029
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.00	0.00
Total Copper	0.04	0.02
Total Iron	1.10	0.60
Total Lead	0.05	0.02
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0004
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	18
Dissolved Oxygen	7.0	8.0
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	8
Total Suspended Solids	78	42
Total Ammonia Nitrogen	0.4	0.2
Nitrite Plus Nitrate Nitrogen	5.83	4.97
Total Phosphorus	0.22	0.21
pH (units)	7.6	7.0
Total Cyanides	0.004	0.004
Phenol	0.018	0.006
Fats, Oils and Greases	4	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	2.40	0.90
Total Lead	0.00	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	18
Dissolved Oxygen	8.2	6.8
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	5	7
Total Suspended Solids	71	56
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	5.79	5.00
Total Phosphorus	0.17	0.24
pH (units)	7.6	7.1
Total Cyanides	0.004	0.003
Phenol	0.013	0.006
Fats, Oils and Greases	16	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.02
Total Iron	4.00	1.40
Total Lead	0.00	0.00
Total Manganese	0.08	0.11
Total Mercury	0.0003	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	18
Dissolved Oxygen	8.5	7.5
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	7
Total Suspended Solids	74	62
Total Ammonia Nitrogen	0.2	0.2
Nitrite Plus Nitrate Nitrogen	5.83	5.04
Total Phosphorus	0.19	0.24
pH (units)	7.7	7.1
Total Cyanides	0.004	0.003
Phenol	0.013	0.010
Fats,Oils and Greases	16	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	4.00	1.00
Total Lead	0.00	0.00
Total Manganese	0.08	0.11
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
MAY 1984

Constituents <sup>a</sup>	Sampling Dates	
	5/10	5/15
Water Temperature (°C)	14	18
Dissolved Oxygen	7.0	8.7
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	7	6
Total Suspended Solids	68	61
Total Ammonia Nitrogen	0.2	0.3
Nitrite Plus Nitrate Nitrogen	5.81	5.07
Total Phosphorus	0.16	0.24
pH (units)	7.8	7.2
Total Cyanides	0.004	0.003
Phenol	0.011	0.010
Fats,Oils and Greases	8	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.07
Total Iron	0.70	1.10
Total Lead	0.00	0.00
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	10

<sup>a</sup>Expressed in mg/L except where noted.

APPENDIX AII

WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, AUGUST 1984

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	NA	NA
Dissolved Oxygen	NA	NA
Five-Day Biochemical Oxygen Demand	NA	NA
Total Organic Carbon	NA	NA
Total Suspended Solids	NA	NA
Total Ammonia Nitrogen	NA	NA
Nitrite Plus Nitrate Nitrogen	NA	NA
Total Phosphorus	NA	NA
pH (units)	NA	NA
Total Cyanides	NA	NA
Phenol	NA	NA
Fats, Oils and Greases	NA	NA
Total Arsenic	NA	NA
Total Cadmium	NA	NA
Total Chromium	NA	NA
Total Copper	NA	NA
Total Iron	NA	NA
Total Lead	NA	NA
Total Manganese	NA	NA
Total Mercury	NA	NA
Total Nickel	NA	NA
Total Silver	NA	NA
Total Zinc	NA	NA
Fecal Coliform (cfu/100mL)	NA	NA

<sup>a</sup>Expressed in mg/L except where noted.  
NA = No analysis.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	NA	NA
Dissolved Oxygen	NA	NA
Five-Day Biochemical Oxygen Demand	NA	NA
Total Organic Carbon	NA	NA
Total Suspended Solids	NA	NA
Total Ammonia Nitrogen	NA	NA
Nitrite Plus Nitrate Nitrogen	NA	NA
Total Phosphorus	NA	NA
pH (units)	NA	NA
Total Cyanides	NA	NA
Phenol	NA	NA
Fats, Oils and Greases	NA	NA
Total Arsenic	NA	NA
Total Cadmium	NA	NA
Total Chromium	NA	NA
Total Copper	NA	NA
Total Iron	NA	NA
Total Lead	NA	NA
Total Manganese	NA	NA
Total Mercury	NA	NA
Total Nickel	NA	NA
Total Silver	NA	NA
Total Zinc	NA	NA
Fecal Coliform (cfu/100mL)	NA	NA

<sup>a</sup>Expressed in mg/L except where noted.  
NA = No analysis.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	NA	NA
Dissolved Oxygen	NA	NA
Five-Day Biochemical Oxygen Demand	NA	NA
Total Organic Carbon	NA	NA
Total Suspended Solids	NA	NA
Total Ammonia Nitrogen	NA	NA
Nitrite Plus Nitrate Nitrogen	NA	NA
Total Phosphorus	NA	NA
pH (units)	NA	NA
Total Cyanides	NA	NA
Phenol	NA	NA
Fats, Oils and Greases	NA	NA
Total Arsenic	NA	NA
Total Cadmium	NA	NA
Total Chromium	NA	NA
Total Copper	NA	NA
Total Iron	NA	NA
Total Lead	NA	NA
Total Manganese	NA	NA
Total Mercury	NA	NA
Total Nickel	NA	NA
Total Silver	NA	NA
Total Zinc	NA	NA
Fecal Coliform (cfu/100mL)	NA	NA

<sup>a</sup>Expressed in mg/L except where noted.  
NA = No analysis.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	NA	NA
Dissolved Oxygen	NA	NA
Five-Day Biochemical Oxygen Demand	NA	NA
Total Organic Carbon	NA	NA
Total Suspended Solids	NA	NA
Total Ammonia Nitrogen	NA	NA
Nitrite Plus Nitrate Nitrogen	NA	NA
Total Phosphorus	NA	NA
pH (units)	NA	NA
Total Cyanides	NA	NA
Phenol	NA	NA
Fats, Oils and Greases	NA	NA
Total Arsenic	NA	NA
Total Cadmium	NA	NA
Total Chromium	NA	NA
Total Copper	NA	NA
Total Iron	NA	NA
Total Lead	NA	NA
Total Manganese	NA	NA
Total Mercury	NA	NA
Total Nickel	NA	NA
Total Silver	NA	NA
Total Zinc	NA	NA
Fecal Coliform (cfu/100mL)	NA	NA

<sup>a</sup>Expressed in mg/L except where noted.  
NA = No analysis.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	30	27
Dissolved Oxygen	9.0	6.6
Five-Day Biochemical Oxygen Demand	8	6
Total Organic Carbon	8	5
Total Suspended Solids	14	13
Total Ammonia Nitrogen	2.3	2.0
Nitrite Plus Nitrate Nitrogen	2.38	2.48
Total Phosphorus	0.35	0.49
pH (units)	7.9	7.4
Total Cyanides	0.008	0.006
Phenol	0.016	0.021
Fats, Oils and Greases	3	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.10	0.30
Total Lead	0.00	0.02
Total Manganese	0.04	0.04
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.00
Total Silver	0.01	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	1,600	15,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	34	30
Dissolved Oxygen	7.6	4.8
Five-Day Biochemical Oxygen Demand	7	7
Total Organic Carbon	8	5
Total Suspended Solids	8	10
Total Ammonia Nitrogen	3.0	1.9
Nitrite Plus Nitrate Nitrogen	2.24	2.67
Total Phosphorus	0.40	0.46
pH (units)	7.8	7.4
Total Cyanides	0.005	0.008
Phenol	0.020	0.018
Fats, Oils and Greases	0	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.20	0.20
Total Lead	0.00	0.00
Total Manganese	0.04	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	2,500	4,100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	31	29
Dissolved Oxygen	8.0	4.7
Five-Day Biochemical Oxygen Demand	8	10
Total Organic Carbon	7	5
Total Suspended Solids	11	14
Total Ammonia Nitrogen	2.8	1.9
Nitrite Plus Nitrate Nitrogen	2.30	2.51
Total Phosphorus	0.32	0.45
pH (units)	7.7	7.5
Total Cyanides	0.005	0.005
Phenol	0.017	0.015
Fats,Oils and Greases	1	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.03	0.02
Total Iron	0.10	2.00
Total Lead	0.01	0.03
Total Manganese	0.03	0.04
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	1,100	6,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	31	29
Dissolved Oxygen	7.3	4.5
Five-Day Biochemical Oxygen Demand	7	10
Total Organic Carbon	7	5
Total Suspended Solids	14	17
Total Ammonia Nitrogen	2.6	1.9
Nitrite Plus Nitrate Nitrogen	2.33	2.50
Total Phosphorus	0.35	0.47
pH (units)	7.7	7.4
Total Cyanides	0.004	0.004
Phenol	0.015	0.016
Fats, Oils and Greases	1	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.10	0.30
Total Lead	0.00	0.02
Total Manganese	0.03	0.04
Total Mercury	0.0001	0.0003
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	15,000	3,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/17
Water Temperature (°C)	31	28
Dissolved Oxygen	7.5	4.8
Five-Day Biochemical Oxygen Demand	5	7
Total Organic Carbon	9	5
Total Suspended Solids	12	14
Total Ammonia Nitrogen	2.5	1.8
Nitrite Plus Nitrate Nitrogen	2.46	2.93
Total Phosphorus	0.38	0.38
pH (units)	7.5	7.4
Total Cyanides	0.008	0.004
Phenol	0.012	0.015
Fats, Oils and Greases	1	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.20	0.30
Total Lead	0.00	0.00
Total Manganese	0.03	0.04
Total Mercury	0.0001	0.0005
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	230	2,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	30	28
Dissolved Oxygen	5.2	8.6
Five-Day Biochemical Oxygen Demand	7	8
Total Organic Carbon	8	5
Total Suspended Solids	27	31
Total Ammonia Nitrogen	2.6	1.0
Nitrite Plus Nitrate Nitrogen	2.21	3.07
Total Phosphorus	0.53	0.50
pH (units)	7.0	7.0
Total Cyanides	0.004	0.004
Phenol	0.013	0.010
Fats,Oils and Greases	2	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.50	0.40
Total Lead	0.00	0.03
Total Manganese	0.05	0.04
Total Mercury	0.0000	0.0007
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	210	800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	30	29
Dissolved Oxygen	5.5	9.3
Five-Day Biochemical Oxygen Demand	8	8
Total Organic Carbon	8	6
Total Suspended Solids	33	23
Total Ammonia Nitrogen	2.4	0.9
Nitrite Plus Nitrate Nitrogen	2.32	3.02
Total Phosphorus	0.48	0.42
pH (units)	7.0	7.2
Total Cyanides	0.003	0.004
Phenol	0.012	0.011
Fats, Oils and Greases	3	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.02	0.00
Total Iron	0.40	0.20
Total Lead	0.00	0.02
Total Manganese	0.04	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	190	210

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	5.5	7.2
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	8	6
Total Suspended Solids	27	27
Total Ammonia Nitrogen	1.5	0.8
Nitrite Plus Nitrate Nitrogen	2.16	2.38
Total Phosphorus	0.42	0.41
pH (units)	7.1	7.2
Total Cyanides	0.003	0.002
Phenol	0.010	0.009
Fats,Oils and Greases	3	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.30	0.40
Total Lead	0.01	0.02
Total Manganese	0.05	0.05
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	100	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	6.5	7.7
Five-Day Biochemical Oxygen Demand	6	5
Total Organic Carbon	8	6
Total Suspended Solids	27	23
Total Ammonia Nitrogen	1.5	0.7
Nitrite Plus Nitrate Nitrogen	2.27	2.36
Total Phosphorus	0.45	0.50
pH (units)	7.1	7.1
Total Cyanides	0.003	0.004
Phenol	0.009	0.008
Fats, Oils and Greases	8	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	0.30	0.30
Total Lead	0.00	0.03
Total Manganese	0.04	0.04
Total Mercury	0.0000	0.0003
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	200	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	7.5	6.6
Five-Day Biochemical Oxygen Demand	7	6
Total Organic Carbon	7	5
Total Suspended Solids	36	26
Total Ammonia Nitrogen	1.4	0.8
Nitrite Plus Nitrate Nitrogen	2.36	2.49
Total Phosphorus	0.46	0.51
pH (units)	7.2	7.2
Total Cyanides	0.003	0.003
Phenol	0.009	0.009
Fats, Oils and Greases	3	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.40	0.30
Total Lead	0.00	0.03
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	90,000	180

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	7.0	6.7
Five-Day Biochemical Oxygen Demand	7	7
Total Organic Carbon	7	6
Total Suspended Solids	31	28
Total Ammonia Nitrogen	1.4	0.8
Nitrite Plus Nitrate Nitrogen	2.34	2.40
Total Phosphorus	0.46	0.39
pH (units)	7.1	7.1
Total Cyanides	0.002	0.006
Phenol	0.012	0.009
Fats, Oils and Greases	2	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.40	0.30
Total Lead	0.00	0.02
Total Manganese	0.05	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	180

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	7.0	6.7
Five-Day Biochemical Oxygen Demand	7	6
Total Organic Carbon	7	5
Total Suspended Solids	21	21
Total Ammonia Nitrogen	1.4	0.8
Nitrite Plus Nitrate Nitrogen	2.42	2.38
Total Phosphorus	0.44	0.39
pH (units)	7.0	7.1
Total Cyanides	0.003	0.004
Phenol	0.008	0.009
Fats, Oils and Greases	3	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.20	0.30
Total Lead	0.00	0.03
Total Manganese	0.04	0.05
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	80

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	6.8	5.7
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	7	5
Total Suspended Solids	24	23
Total Ammonia Nitrogen	1.1	0.7
Nitrite Plus Nitrate Nitrogen	2.62	2.43
Total Phosphorus	0.41	0.39
pH (units)	7.1	7.1
Total Cyanides	0.008	0.004
Phenol	0.012	0.008
Fats, Oils and Greases	14	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.20	0.30
Total Lead	0.00	0.04
Total Manganese	0.04	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	60	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	30
Dissolved Oxygen	8.2	7.1
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	7	5
Total Suspended Solids	21	14
Total Ammonia Nitrogen	0.8	0.6
Nitrite Plus Nitrate Nitrogen	2.63	2.35
Total Phosphorus	0.38	0.40
pH (units)	7.2	7.1
Total Cyanides	0.006	0.003
Phenol	0.012	0.016
Fats, Oils and Greases	2	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.00
Total Iron	0.30	0.20
Total Lead	0.00	0.00
Total Manganese	0.03	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	29
Dissolved Oxygen	7.8	6.1
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	7	6
Total Suspended Solids	22	20
Total Ammonia Nitrogen	0.6	0.6
Nitrite Plus Nitrate Nitrogen	2.62	2.47
Total Phosphorus	0.36	0.40
pH (units)	7.3	7.1
Total Cyanides	0.002	0.003
Phenol	0.014	0.016
Fats, Oils and Greases	5	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.30	0.20
Total Lead	0.00	0.00
Total Manganese	0.03	0.04
Total Mercury	0.0001	0.0009
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	20	70

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	33	29
Dissolved Oxygen	8.5	6.4
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	6
Total Suspended Solids	24	22
Total Ammonia Nitrogen	0.5	0.5
Nitrite Plus Nitrate Nitrogen	2.56	2.53
Total Phosphorus	0.33	0.41
pH (units)	7.2	7.2
Total Cyanides	0.002	0.004
Phenol	0.011	0.016
Fats,Oils and Greases	2	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.00
Total Iron	0.30	0.20
Total Lead	0.00	0.00
Total Manganese	0.04	0.04
Total Mercury	0.0001	0.0006
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	80	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	33	28
Dissolved Oxygen	10.5	6.8
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	8	5
Total Suspended Solids	20	20
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.42	2.36
Total Phosphorus	0.32	0.39
pH (units)	7.2	7.1
Total Cyanides	0.002	0.003
Phenol	0.013	0.012
Fats, Oils and Greases	1	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.00
Total Iron	0.20	0.20
Total Lead	0.00	0.00
Total Manganese	0.03	0.04
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	33	29
Dissolved Oxygen	8.9	8.0
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	7	6
Total Suspended Solids	20	18
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.42	2.56
Total Phosphorus	0.32	0.39
pH (units)	7.2	7.1
Total Cyanides	0.002	0.003
Phenol	0.012	0.013
Fats, Oils and Greases	6	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.00
Total Iron	0.40	0.30
Total Lead	0.02	0.00
Total Manganese	0.05	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	60

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	29
Dissolved Oxygen	10.1	6.3
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	8	6
Total Suspended Solids	23	16
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.51	2.52
Total Phosphorus	0.33	0.37
pH (units)	7.2	7.2
Total Cyanides	0.003	0.003
Phenol	0.015	0.015
Fats,Oils and Greases	4	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.40	0.20
Total Lead	0.00	0.00
Total Manganese	0.00	0.04
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	32	28
Dissolved Oxygen	5.5	10.1
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	7	8
Total Suspended Solids	26	22
Total Ammonia Nitrogen	0.5	0.1
Nitrite Plus Nitrate Nitrogen	2.57	2.35
Total Phosphorus	0.62	0.34
pH (units)	7.1	7.3
Total Cyanides	0.005	0.002
Phenol	0.014	0.009
Fats, Oils and Greases	17	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.40	0.30
Total Lead	0.00	0.00
Total Manganese	0.05	0.04
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	130	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	30	28
Dissolved Oxygen	9.3	6.6
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	8	6
Total Suspended Solids	20	21
Total Ammonia Nitrogen	0.0	0.2
Nitrite Plus Nitrate Nitrogen	2.18	2.36
Total Phosphorus	0.33	0.38
pH (units)	7.1	7.2
Total Cyanides	0.002	0.003
Phenol	0.009	0.015
Fats,Oils and Greases	10	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.00
Total Iron	0.30	0.30
Total Lead	0.00	0.02
Total Manganese	0.04	0.05
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	110

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/16
Water Temperature (°C)	30	28
Dissolved Oxygen	8.9	8.4
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	8	6
Total Suspended Solids	29	23
Total Ammonia Nitrogen	0.0	0.1
Nitrite Plus Nitrate Nitrogen	2.28	2.26
Total Phosphorus	0.33	0.39
pH (units)	7.2	7.4
Total Cyanides	0.002	0.002
Phenol	0.013	0.017
Fats, Oils and Greases	23	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.20	0.20
Total Lead	0.00	0.02
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0008
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	100	160

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	29	28
Dissolved Oxygen	7.6	12.0
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	9	6
Total Suspended Solids	21	24
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	2.14	2.34
Total Phosphorus	0.28	0.39
pH (units)	7.3	7.0
Total Cyanides	0.001	0.003
Phenol	0.012	0.011
Fats, Oils and Greases	23	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.05	0.03
Total Iron	0.20	0.60
Total Lead	0.03	0.02
Total Manganese	0.04	0.06
Total Mercury	0.0002	0.0001
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	90

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	28
Dissolved Oxygen	7.2	11.6
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	8	5
Total Suspended Solids	32	33
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	2.21	2.43
Total Phosphorus	0.90	0.40
pH (units)	7.3	7.1
Total Cyanides	0.001	0.003
Phenol	0.012	0.019
Fats, Oils and Greases	23	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.04	0.03
Total Iron	0.10	0.50
Total Lead	0.07	0.03
Total Manganese	0.04	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	28
Dissolved Oxygen	7.0	9.1
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	8	6
Total Suspended Solids	25	37
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	2.09	2.50
Total Phosphorus	0.31	0.36
pH (units)	7.2	7.1
Total Cyanides	0.002	0.003
Phenol	0.012	0.023
Fats, Oils and Greases	6	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.03
Total Iron	0.20	0.40
Total Lead	0.03	0.03
Total Manganese	0.05	0.06
Total Mercury	0.0002	0.0002
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	28
Dissolved Oxygen	6.9	11.3
Five-Day Biochemical Oxygen Demand	2	5
Total Organic Carbon	8	6
Total Suspended Solids	27	31
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	2.11	2.52
Total Phosphorus	0.30	0.33
pH (units)	7.2	6.9
Total Cyanides	0.002	0.002
Phenol	0.013	0.025
Fats, Oils and Greases	12	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.000
Total Copper	0.02	0.03
Total Iron	0.50	0.40
Total Lead	0.04	0.03
Total Manganese	0.05	0.06
Total Mercury	0.0001	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	29
Dissolved Oxygen	6.7	10.2
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	8	5
Total Suspended Solids	32	36
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	2.14	2.51
Total Phosphorus	0.33	0.28
pH (units)	7.1	6.7
Total Cyanides	0.003	0.002
Phenol	0.011	0.021
Fats, Oils and Greases	23	9
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.04
Total Iron	0.50	1.20
Total Lead	0.02	0.02
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	210	60

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	30
Dissolved Oxygen	7.0	8.8
Five-Day Biochemical Oxygen Demand	2	6
Total Organic Carbon	9	6
Total Suspended Solids	28	35
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	2.20	2.55
Total Phosphorus	0.33	0.36
pH (units)	7.1	7.1
Total Cyanides	0.003	0.002
Phenol	0.018	0.020
Fats, Oils and Greases	16	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.03
Total Iron	0.90	1.30
Total Lead	0.03	0.00
Total Manganese	0.14	0.06
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	32	33
Dissolved Oxygen	7.3	9.6
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	8	6
Total Suspended Solids	20	29
Total Ammonia Nitrogen	0.1	0.0
Nitrite Plus Nitrate Nitrogen	2.25	2.77
Total Phosphorus	0.31	0.33
pH (units)	7.4	7.1
Total Cyanides	0.003	0.002
Phenol	0.018	0.014
Fats, Oils and Greases	17	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.04
Total Iron	0.10	0.30
Total Lead	0.03	0.00
Total Manganese	0.14	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	140

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	29
Dissolved Oxygen	8.1	8.5
Five-Day Biochemical Oxygen Demand	2	5
Total Organic Carbon	8	5
Total Suspended Solids	24	27
Total Ammonia Nitrogen	0.0	0.1
Nitrite Plus Nitrate Nitrogen	2.32	2.69
Total Phosphorus	0.37	0.35
pH (units)	7.3	7.0
Total Cyanides	0.004	0.003
Phenol	0.020	0.015
Fats,Oils and Greases	29	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.04
Total Iron	0.20	0.30
Total Lead	0.02	0.00
Total Manganese	0.14	0.05
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	31	30
Dissolved Oxygen	8.6	7.8
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	8	5
Total Suspended Solids	21	29
Total Ammonia Nitrogen	0.0	0.2
Nitrite Plus Nitrate Nitrogen	2.31	2.64
Total Phosphorus	0.33	0.25
pH (units)	7.3	7.0
Total Cyanides	0.003	0.003
Phenol	0.019	0.016
Fats, Oils and Greases	19	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.04
Total Iron	0.20	1.60
Total Lead	0.00	0.02
Total Manganese	0.06	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	6,000	230

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	31	35
Dissolved Oxygen	8.0	8.4
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	8	6
Total Suspended Solids	33	29
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	2.32	2.62
Total Phosphorus	0.31	0.32
pH (units)	7.0	6.9
Total Cyanides	0.003	0.002
Phenol	0.021	0.017
Fats, Oils and Greases	22	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.07
Total Iron	0.60	0.40
Total Lead	0.01	0.02
Total Manganese	0.06	0.07
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.40
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	33	30
Dissolved Oxygen	9.3	9.8
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	8	7
Total Suspended Solids	30	23
Total Ammonia Nitrogen	0.0	0.1
Nitrite Plus Nitrate Nitrogen	2.33	2.57
Total Phosphorus	0.30	0.34
pH (units)	7.0	7.0
Total Cyanides	0.003	0.002
Phenol	0.019	0.016
Fats, Oils and Greases	23	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.03
Total Iron	0.30	0.70
Total Lead	0.00	0.00
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	10	80

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	30	30
Dissolved Oxygen	7.6	9.2
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	9	6
Total Suspended Solids	35	35
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	1.92	2.41
Total Phosphorus	0.29	0.37
pH (units)	7.1	7.1
Total Cyanides	0.002	0.002
Phenol	0.016	0.018
Fats, Oils and Greases	13	15
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.03
Total Iron	0.60	0.80
Total Lead	0.02	0.03
Total Manganese	0.09	0.08
Total Mercury	0.0001	0.0000
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	32	30
Dissolved Oxygen	8.6	6.8
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	9	7
Total Suspended Solids	55	33
Total Ammonia Nitrogen	0.0	0.1
Nitrite Plus Nitrate Nitrogen	2.19	2.47
Total Phosphorus	0.29	0.31
pH (units)	7.2	7.1
Total Cyanides	0.003	0.002
Phenol	0.012	0.016
Fats, Oils and Greases	9	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.04
Total Iron	0.60	1.80
Total Lead	0.01	0.02
Total Manganese	0.07	0.07
Total Mercury	0.0000	0.0002
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	32	28
Dissolved Oxygen	9.0	7.6
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	8	6
Total Suspended Solids	37	40
Total Ammonia Nitrogen	0.0	0.2
Nitrite Plus Nitrate Nitrogen	1.11	2.49
Total Phosphorus	0.26	0.33
pH (units)	7.1	6.9
Total Cyanides	0.003	0.002
Phenol	0.012	0.016
Fats, Oils and Greases	8	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.03
Total Iron	0.40	0.70
Total Lead	0.00	0.02
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	32	28
Dissolved Oxygen	7.2	5.6
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	8	6
Total Suspended Solids	30	43
Total Ammonia Nitrogen	0.0	0.1
Nitrite Plus Nitrate Nitrogen	2.09	2.35
Total Phosphorus	0.26	0.32
pH (units)	7.1	7.0
Total Cyanides	0.002	0.002
Phenol	0.015	0.016
Fats, Oils and Greases	10	5
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.00
Total Copper	0.02	0.03
Total Iron	0.50	0.70
Total Lead	0.00	0.02
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/15
Water Temperature (°C)	31	29
Dissolved Oxygen	7.2	6.9
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	8	6
Total Suspended Solids	32	43
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	2.08	2.46
Total Phosphorus	0.45	0.33
pH (units)	7.1	7.1
Total Cyanides	0.002	0.003
Phenol	0.016	0.010
Fats, Oils and Greases	18	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.03
Total Iron	0.40	0.50
Total Lead	0.00	0.04
Total Manganese	0.06	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	31	28
Dissolved Oxygen	4.9	4.2
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	8	7
Total Suspended Solids	40	44
Total Ammonia Nitrogen	0.1	0.4
Nitrite Plus Nitrate Nitrogen	1.98	2.17
Total Phosphorus	0.38	0.35
pH (units)	7.1	7.0
Total Cyanides	0.003	0.003
Phenol	0.014	0.009
Fats,Oils and Greases	6	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.02	0.02
Total Iron	0.70	0.70
Total Lead	0.01	0.02
Total Manganese	0.05	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	30	26
Dissolved Oxygen	5.1	6.3
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	16	6
Total Suspended Solids	47	46
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	1.63	1.98
Total Phosphorus	0.34	0.32
pH (units)	7.1	7.2
Total Cyanides	0.001	0.002
Phenol	0.012	0.009
Fats, Oils and Greases	14	4
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	0.80	0.90
Total Lead	0.01	0.02
Total Manganese	0.09	0.08
Total Mercury	0.0001	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	31	25
Dissolved Oxygen	6.0	5.0
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	9	6
Total Suspended Solids	26	50
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	1.28	1.62
Total Phosphorus	0.44	0.31
pH (units)	7.0	7.3
Total Cyanides	0.002	0.002
Phenol	0.010	0.010
Fats, Oils and Greases	14	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	0.80	1.80
Total Lead	0.00	0.00
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	30	26
Dissolved Oxygen	6.4	4.6
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	8	6
Total Suspended Solids	39	37
Total Ammonia Nitrogen	0.1	0.1
Nitrite Plus Nitrate Nitrogen	1.45	1.60
Total Phosphorus	0.34	0.29
pH (units)	7.1	7.3
Total Cyanides	0.002	0.002
Phenol	0.019	0.008
Fats, Oils and Greases	14	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.60	0.90
Total Lead	0.00	0.00
Total Manganese	0.07	0.09
Total Mercury	0.0002	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	20	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	31	27
Dissolved Oxygen	5.3	6.2
Five-Day Biochemical Oxygen Demand	2	12
Total Organic Carbon	11	6
Total Suspended Solids	48	47
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.32	1.53
Total Phosphorus	0.21	0.30
pH (units)	7.1	7.4
Total Cyanides	0.002	0.002
Phenol	0.012	0.010
Fats, Oils and Greases	20	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.02	0.02
Total Iron	0.70	1.60
Total Lead	0.01	0.02
Total Manganese	0.07	0.08
Total Mercury	0.0001	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	31	27
Dissolved Oxygen	5.5	5.5
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	10	6
Total Suspended Solids	37	47
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.39	1.62
Total Phosphorus	0.18	0.34
pH (units)	7.1	7.4
Total Cyanides	0.004	0.002
Phenol	0.012	0.009
Fats, Oils and Greases	9	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.10	0.02
Total Iron	0.50	0.90
Total Lead	0.04	0.03
Total Manganese	0.06	0.11
Total Mercury	0.0001	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	230

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
AUGUST 1984

Constituents <sup>a</sup>	Sampling Dates	
	8/9	8/14
Water Temperature (°C)	31	27
Dissolved Oxygen	4.8	5.7
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	9	6
Total Suspended Solids	34	35
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.43	1.59
Total Phosphorus	0.15	0.32
pH (units)	7.1	7.2
Total Cyanides	0.002	0.004
Phenol	0.014	0.010
Fats,Oils and Greases	10	20
Total Arsenic	0.20	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.70	1.10
Total Lead	0.01	0.02
Total Manganese	0.06	0.10
Total Mercury	0.0001	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.20
Fecal Coliform (cfu/100mL)	<10	100

<sup>a</sup>Expressed in mg/L except where noted.

*copy*

APPENDIX AIII

WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, OCTOBER 1984

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	3.2	2.6
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	8	7
Total Suspended Solids	10	9
Total Ammonia Nitrogen	2.6	2.9
Nitrite Plus Nitrate Nitrogen	2.23	1.74
Total Phosphorus	0.50	0.37
pH (units)	7.0	7.1
Total Cyanides	0.007	0.007
Phenol	0.038	0.045
Fats, Oils and Greases	15	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.04	0.04
Total Iron	0.50	0.00
Total Lead	0.03	0.04
Total Manganese	0.05	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	8,000	2,200

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	19	19
Dissolved Oxygen	2.9	4.0
Five-Day Biochemical Oxygen Demand	3	1
Total Organic Carbon	7	9
Total Suspended Solids	27	14
Total Ammonia Nitrogen	2.4	2.6
Nitrite Plus Nitrate Nitrogen	2.20	2.08
Total Phosphorus	0.61	0.45
pH (units)	6.9	7.3
Total Cyanides	0.006	0.007
Phenol	0.038	0.033
Fats, Oils and Greases	17	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.00
Total Iron	0.60	0.00
Total Lead	0.05	0.02
Total Manganese	0.05	0.03
Total Mercury	0.0003	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	5,700	2,700

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	19	19
Dissolved Oxygen	3.8	5.5
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	7	6
Total Suspended Solids	15	28
Total Ammonia Nitrogen	2.0	2.3
Nitrite Plus Nitrate Nitrogen	2.72	2.09
Total Phosphorus	0.52	0.48
pH (units)	7.0	7.3
Total Cyanides	0.006	0.007
Phenol	0.038	0.035
Fats, Oils and Greases	17	0
Total Arsenic	0.00	0.10
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.02
Total Iron	0.40	1.00
Total Lead	0.04	0.03
Total Manganese	0.06	0.04
Total Mercury	0.0005	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	3,200	2,100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	19	19
Dissolved Oxygen	3.8	2.8
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	7	5
Total Suspended Solids	47	9
Total Ammonia Nitrogen	1.9	2.0
Nitrite Plus Nitrate Nitrogen	2.66	1.97
Total Phosphorus	0.74	0.36
pH (units)	7.0	7.2
Total Cyanides	0.005	0.007
Phenol	0.036	0.034
Fats,Oils and Greases	10	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.00
Total Iron	0.90	0.00
Total Lead	0.05	0.01
Total Manganese	0.07	0.02
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	2,800	1,600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	8.6	5.3
Five-Day Biochemical Oxygen Demand	2	1
Total Organic Carbon	6	6
Total Suspended Solids	19	12
Total Ammonia Nitrogen	1.8	2.3
Nitrite Plus Nitrate Nitrogen	2.93	1.97
Total Phosphorus	0.57	0.33
pH (units)	7.0	7.2
Total Cyanides	0.004	0.006
Phenol	0.034	0.032
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.00
Total Iron	0.50	0.00
Total Lead	0.03	0.02
Total Manganese	0.07	0.03
Total Mercury	0.0004	0.0002
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	1,500	1,300

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	7.5	5.2
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	8
Total Suspended Solids	17	15
Total Ammonia Nitrogen	1.7	2.0
Nitrite Plus Nitrate Nitrogen	2.97	2.24
Total Phosphorus	0.60	0.31
pH (units)	7.0	7.4
Total Cyanides	0.003	0.006
Phenol	0.034	0.031
Fats, Oils and Greases	18	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.03	0.00
Total Iron	0.50	0.00
Total Lead	0.04	0.02
Total Manganese	0.06	0.04
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	2,100	1,400

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	5.9	6.2
Five-Day Biochemical Oxygen Demand	8	2
Total Organic Carbon	10	7
Total Suspended Solids	65	15
Total Ammonia Nitrogen	2.1	2.0
Nitrite Plus Nitrate Nitrogen	3.11	2.31
Total Phosphorus	1.07	0.26
pH (units)	7.0	7.1
Total Cyanides	0.004	0.006
Phenol	0.035	0.032
Fats, Oils and Greases	11	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.02
Total Copper	0.04	0.00
Total Iron	1.10	0.00
Total Lead	0.05	0.02
Total Manganese	0.08	0.03
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	7,000	1,900

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	6.5	6.7
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	7	7
Total Suspended Solids	14	17
Total Ammonia Nitrogen	2.1	2.1
Nitrite Plus Nitrate Nitrogen	3.26	2.53
Total Phosphorus	0.58	0.23
pH (units)	7.1	7.0
Total Cyanides	0.003	0.004
Phenol	0.050	0.035
Fats, Oils and Greases	5	0
Total Arsenic	0.00	0.20
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.00
Total Iron	0.40	0.00
Total Lead	0.04	0.03
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	2,000	360

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/1	10/12
Water Temperature (°C)	20	20
Dissolved Oxygen	7.1	2.8
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	6	8
Total Suspended Solids	23	14
Total Ammonia Nitrogen	1.9	2.4
Nitrite Plus Nitrate Nitrogen	3.20	2.54
Total Phosphorus	0.58	0.08
pH (units)	6.9	7.3
Total Cyanides	0.004	0.012
Phenol	0.031	0.036
Fats, Oils and Greases	5	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.03	0.00
Total Iron	0.40	0.00
Total Lead	0.02	0.03
Total Manganese	0.07	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.20	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	3,500	1,000

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	4.3	5.9
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	6	8
Total Suspended Solids	23	43
Total Ammonia Nitrogen	2.1	2.4
Nitrite Plus Nitrate Nitrogen	3.02	2.33
Total Phosphorus	0.72	0.76
pH (units)	6.9	7.5
Total Cyanides	0.004	0.008
Phenol	0.035	0.028
Fats, Oils and Greases	4	2
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.03
Total Iron	0.40	1.00
Total Lead	0.00	0.01
Total Manganese	0.04	0.02
Total Mercury	0.0004	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	2,500	240

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	5.3	5.8
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	6	8
Total Suspended Solids	16	14
Total Ammonia Nitrogen	1.9	2.8
Nitrite Plus Nitrate Nitrogen	2.89	2.28
Total Phosphorus	0.64	0.63
pH (units)	7.2	7.4
Total Cyanides	0.003	0.006
Phenol	0.033	0.031
Fats, Oils and Greases	4	20
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.01
Total Manganese	0.04	0.01
Total Mercury	0.0005	0.0006
Total Nickel	0.00	0.30
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	1,700	270

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	8.6	8.2
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	6	7
Total Suspended Solids	42	18
Total Ammonia Nitrogen	1.5	1.9
Nitrite Plus Nitrate Nitrogen	2.79	2.16
Total Phosphorus	0.70	0.56
pH (units)	7.0	7.4
Total Cyanides	0.003	0.006
Phenol	0.031	0.027
Fats,Oils and Greases	3	1
Total Arsenic	0.10	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.00	0.02
Total Iron	0.50	1.00
Total Lead	0.00	0.00
Total Manganese	0.00	0.02
Total Mercury	0.0005	0.0001
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	1,800	100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	9.1	7.6
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	7	7
Total Suspended Solids	28	17
Total Ammonia Nitrogen	1.4	1.9
Nitrite Plus Nitrate Nitrogen	2.75	2.15
Total Phosphorus	0.64	0.54
pH (units)	6.9	7.4
Total Cyanides	0.003	0.005
Phenol	0.030	0.026
Fats, Oils and Greases	16	3
Total Arsenic	0.20	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.40	0.00
Total Lead	0.00	0.01
Total Manganese	0.06	0.04
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	1,300	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	8.1	7.4
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	6	6
Total Suspended Solids	34	20
Total Ammonia Nitrogen	1.4	1.9
Nitrite Plus Nitrate Nitrogen	2.76	2.24
Total Phosphorus	0.62	0.55
pH (units)	7.1	7.4
Total Cyanides	0.004	0.005
Phenol	0.030	0.029
Fats, Oils and Greases	15	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.02
Total Iron	0.50	0.00
Total Lead	0.00	0.00
Total Manganese	0.05	0.02
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	800	200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.8	7.0
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	6	7
Total Suspended Solids	34	22
Total Ammonia Nitrogen	1.3	1.8
Nitrite Plus Nitrate Nitrogen	2.77	2.31
Total Phosphorus	0.62	0.52
pH (units)	7.0	7.5
Total Cyanides	0.003	0.005
Phenol	0.030	0.027
Fats,Oils and Greases	16	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.40	0.00
Total Lead	0.00	0.01
Total Manganese	0.06	0.03
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	460	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	9.0	3.5
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	11	7
Total Suspended Solids	37	25
Total Ammonia Nitrogen	1.3	1.6
Nitrite Plus Nitrate Nitrogen	2.77	2.33
Total Phosphorus	0.64	0.50
pH (units)	7.0	7.4
Total Cyanides	0.004	0.005
Phenol	0.030	0.036
Fats, Oils and Greases	17	5
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.02
Total Iron	0.30	0.00
Total Lead	0.00	0.01
Total Manganese	0.06	0.02
Total Mercury	0.0003	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	560	170

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.8	3.0
Five-Day Biochemical Oxygen Demand	2	5
Total Organic Carbon	7	7
Total Suspended Solids	16	19
Total Ammonia Nitrogen	1.2	1.3
Nitrite Plus Nitrate Nitrogen	3.11	2.53
Total Phosphorus	0.51	0.44
pH (units)	6.8	7.4
Total Cyanides	0.004	0.005
Phenol	0.027	0.031
Fats,Oils and Greases	15	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.30	0.00
Total Lead	0.00	0.01
Total Manganese	0.00	0.01
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	180	60

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.3	2.8
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	10	6
Total Suspended Solids	20	15
Total Ammonia Nitrogen	1.2	1.2
Nitrite Plus Nitrate Nitrogen	3.07	2.51
Total Phosphorus	0.51	0.43
pH (units)	7.7	7.4
Total Cyanides	0.003	0.004
Phenol	0.028	0.030
Fats, Oils and Greases	16	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.03
Total Copper	0.01	0.01
Total Iron	0.20	0.00
Total Lead	0.00	0.00
Total Manganese	0.08	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	380	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	6.6	4.6
Five-Day Biochemical Oxygen Demand	1	5
Total Organic Carbon	12	6
Total Suspended Solids	18	18
Total Ammonia Nitrogen	1.1	1.2
Nitrite Plus Nitrate Nitrogen	3.01	2.60
Total Phosphorus	0.49	0.13
pH (units)	6.9	7.4
Total Cyanides	0.003	0.005
Phenol	0.027	0.029
Fats, Oils and Greases	15	2
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.02
Total Copper	0.01	0.01
Total Iron	0.20	0.00
Total Lead	0.00	0.00
Total Manganese	0.08	0.04
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	120	180

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	6.6	4.6
Five-Day Biochemical Oxygen Demand	1	4
Total Organic Carbon	12	7
Total Suspended Solids	13	16
Total Ammonia Nitrogen	0.9	2.4
Nitrite Plus Nitrate Nitrogen	2.59	2.34
Total Phosphorus	0.46	0.74
pH (units)	6.9	7.4
Total Cyanides	0.003	0.004
Phenol	0.026	0.028
Fats, Oils and Greases	18	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.00
Total Manganese	0.14	0.04
Total Mercury	0.0004	0.0003
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	50	60

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.5	3.8
Five-Day Biochemical Oxygen Demand	4	5
Total Organic Carbon	5	5
Total Suspended Solids	22	24
Total Ammonia Nitrogen	1.0	0.7
Nitrite Plus Nitrate Nitrogen	2.39	2.98
Total Phosphorus	0.42	0.74
pH (units)	7.0	7.4
Total Cyanides	0.003	0.005
Phenol	0.027	0.026
Fats, Oils and Greases	16	0
Total Arsenic	0.10	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.01
Total Iron	0.20	0.00
Total Lead	0.00	0.01
Total Manganese	0.13	0.05
Total Mercury	0.0000	0.0004
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	140	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	22
Dissolved Oxygen	8.5	7.3
Five-Day Biochemical Oxygen Demand	7	4
Total Organic Carbon	5	6
Total Suspended Solids	24	30
Total Ammonia Nitrogen	0.7	0.8
Nitrite Plus Nitrate Nitrogen	2.68	2.88
Total Phosphorus	0.52	0.72
pH (units)	6.8	7.4
Total Cyanides	0.001	0.004
Phenol	0.027	0.028
Fats, Oils and Greases	18	1
Total Arsenic	0.10	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.01
Total Manganese	0.11	0.05
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	120	100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.8	7.2
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	9	7
Total Suspended Solids	17	26
Total Ammonia Nitrogen	0.8	0.7
Nitrite Plus Nitrate Nitrogen	2.67	3.00
Total Phosphorus	0.48	0.80
pH (units)	7.0	7.4
Total Cyanides	0.003	0.004
Phenol	0.027	0.026
Fats, Oils and Greases	16	5
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.20	0.00
Total Lead	0.00	0.01
Total Manganese	0.08	0.08
Total Mercury	0.0001	0.0005
Total Nickel	0.10	0.20
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	90	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	8.4	7.5
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	9	6
Total Suspended Solids	22	29
Total Ammonia Nitrogen	0.7	0.6
Nitrite Plus Nitrate Nitrogen	2.42	2.85
Total Phosphorus	0.5	0.82
pH (units)	7.1	7.4
Total Cyanides	0.003	0.004
Phenol	0.059	0.026
Fats, Oils and Greases	16	0
Total Arsenic	0.00	0.10
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.01
Total Iron	0.20	1.00
Total Lead	0.00	0.01
Total Manganese	0.09	0.07
Total Mercury	0.0008	0.0001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	180	470

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	19	19
Dissolved Oxygen	7.8	6.9
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	7	6
Total Suspended Solids	24	13
Total Ammonia Nitrogen	0.7	0.7
Nitrite Plus Nitrate Nitrogen	2.43	3.11
Total Phosphorus	0.51	0.80
pH (units)	7.0	7.4
Total Cyanides	0.003	0.004
Phenol	0.063	0.035
Fats, Oils and Greases	17	1
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.20	0.00
Total Lead	0.00	0.02
Total Manganese	0.10	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	140	330

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/2	10/11
Water Temperature (°C)	18	18
Dissolved Oxygen	7.6	6.7
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	11	6
Total Suspended Solids	21	17
Total Ammonia Nitrogen	0.7	0.5
Nitrite Plus Nitrate Nitrogen	2.42	3.19
Total Phosphorus	0.53	0.78
pH (units)	7.1	7.4
Total Cyanides	0.003	0.004
Phenol	0.064	0.025
Fats, Oils and Greases	18	0
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.02
Total Manganese	0.09	0.07
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.10
Total Silver	0.10	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	140	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	8.3	4.1
Five-Day Biochemical Oxygen Demand	2	5
Total Organic Carbon	6	7
Total Suspended Solids	19	17
Total Ammonia Nitrogen	0.4	0.6
Nitrite Plus Nitrate Nitrogen	2.50	3.24
Total Phosphorus	0.53	0.79
pH (units)	7.1	7.0
Total Cyanides	0.004	0.003
Phenol	0.034	0.032
Fats,Oils and Greases	16	15
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.00
Total Manganese	0.06	0.04
Total Mercury	0.0003	0.0001
Total Nickel	0.20	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	80	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	10.4	8.4
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	5	6
Total Suspended Solids	27	24
Total Ammonia Nitrogen	0.3	0.5
Nitrite Plus Nitrate Nitrogen	2.50	3.34
Total Phosphorus	0.54	0.53
pH (units)	6.9	7.1
Total Cyanides	0.002	0.003
Phenol	0.029	0.028
Fats, Oils and Greases	21	11
Total Arsenic	0.00	0.10
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.50	0.00
Total Lead	0.00	0.04
Total Manganese	0.07	0.06
Total Mercury	0.0000	0.0010
Total Nickel	0.20	0.10
Total Silver	0.01	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	60	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	10.1	9.0
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	6	6
Total Suspended Solids	25	22
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	2.46	3.39
Total Phosphorus	0.58	0.72
pH (units)	7.2	7.2
Total Cyanides	0.002	0.003
Phenol	0.028	0.019
Fats, Oils and Greases	18	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.30	0.00
Total Lead	0.00	0.03
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0002
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	90	100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	9.5	9.0
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	5	7
Total Suspended Solids	25	20
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	2.46	3.31
Total Phosphorus	0.58	0.84
pH (units)	7.2	6.5
Total Cyanides	0.001	0.003
Phenol	0.025	0.019
Fats, Oils and Greases	20	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.40	0.00
Total Lead	0.00	0.05
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0005
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	90	100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	10.1	8.4
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	8	7
Total Suspended Solids	24	27
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	2.50	3.34
Total Phosphorus	0.52	0.85
pH (units)	7.1	7.1
Total Cyanides	0.002	0.003
Phenol	0.024	0.027
Fats, Oils and Greases	5	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.50	0.00
Total Lead	0.00	0.04
Total Manganese	0.06	0.07
Total Mercury	0.0005	0.0004
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	220	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	8.2	8.4
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	7	6
Total Suspended Solids	67	30
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	2.61	3.37
Total Phosphorus	0.62	0.85
pH (units)	7.1	7.0
Total Cyanides	0.002	0.004
Phenol	0.028	0.028
Fats, Oils and Greases	4	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	1.00	0.00
Total Lead	0.00	0.04
Total Manganese	0.09	0.08
Total Mercury	0.0003	0.0007
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	80	150

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	7.0	8.1
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	11	7
Total Suspended Solids	32	28
Total Ammonia Nitrogen	0.4	0.5
Nitrite Plus Nitrate Nitrogen	2.74	3.41
Total Phosphorus	0.52	0.82
pH (units)	6.9	7.1
Total Cyanides	0.003	0.005
Phenol	0.034	0.030
Fats, Oils and Greases	4	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.60	0.00
Total Lead	0.01	0.02
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.30	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	100	110

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	7.5	3.9
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	9	6
Total Suspended Solids	56	22
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.82	3.33
Total Phosphorus	0.60	0.77
pH (units)	7.2	7.2
Total Cyanides	0.003	0.004
Phenol	0.028	0.019
Fats, Oils and Greases	6	10
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.90	0.00
Total Lead	0.03	0.02
Total Manganese	0.11	0.07
Total Mercury	0.0005	0.0000
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	80	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	19	19
Dissolved Oxygen	8.5	3.7
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	7	8
Total Suspended Solids	144	27
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.99	3.22
Total Phosphorus	1.02	0.76
pH (units)	7.0	7.2
Total Cyanides	0.002	0.004
Phenol	0.029	0.031
Fats, Oils and Greases	3	9
Total Arsenic	0.20	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.01
Total Copper	0.02	0.01
Total Iron	3.40	0.00
Total Lead	0.02	0.01
Total Manganese	0.17	0.08
Total Mercury	0.0002	0.0000
Total Nickel	0.10	0.00
Total Silver	0.01	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	300	270

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	10.5	3.4
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	7	7
Total Suspended Solids	20	26
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.03	3.13
Total Phosphorus	0.44	0.73
pH (units)	7.1	7.3
Total Cyanides	0.002	0.004
Phenol	0.025	0.030
Fats, Oils and Greases	8	14
Total Arsenic	0.10	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.50	0.00
Total Lead	0.00	0.03
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0001
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	140	200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	10.6	8.0
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	9	6
Total Suspended Solids	18	19
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.84	3.17
Total Phosphorus	0.56	0.71
pH (units)	7.0	7.2
Total Cyanides	0.003	0.003
Phenol	0.026	0.032
Fats,Oils and Greases	3	12
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.01	0.02
Total Iron	0.50	0.00
Total Lead	0.01	0.03
Total Manganese	0.07	0.07
Total Mercury	0.0001	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	1,420	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	10.3	8.0
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	6	7
Total Suspended Solids	119	23
Total Ammonia Nitrogen	0.4	0.2
Nitrite Plus Nitrate Nitrogen	2.63	2.92
Total Phosphorus	0.86	0.73
pH (units)	7.1	7.2
Total Cyanides	0.020	0.004
Phenol	0.023	0.032
Fats, Oils and Greases	7	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.02	0.02
Total Iron	1.70	0.00
Total Lead	0.00	0.04
Total Manganese	0.13	0.07
Total Mercury	0.0004	0.0000
Total Nickel	0.10	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	100	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	9.1	7.8
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	11	7
Total Suspended Solids	119	29
Total Ammonia Nitrogen	0.4	0.2
Nitrite Plus Nitrate Nitrogen	2.63	2.56
Total Phosphorus	0.86	0.75
pH (units)	7.1	7.2
Total Cyanides	0.003	0.003
Phenol	0.038	0.035
Fats,Oils and Greases	5	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.60	0.00
Total Lead	0.00	0.02
Total Manganese	0.07	0.06
Total Mercury	0.0002	0.0005
Total Nickel	0.30	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	7.6	7.7
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	6	7
Total Suspended Solids	38	37
Total Ammonia Nitrogen	0.8	0.2
Nitrite Plus Nitrate Nitrogen	2.78	2.40
Total Phosphorus	0.49	0.77
pH (units)	6.9	7.2
Total Cyanides	0.003	0.003
Phenol	0.043	0.032
Fats, Oils and Greases	3	9
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.02
Total Iron	0.70	1.00
Total Lead	0.01	0.01
Total Manganese	0.07	0.08
Total Mercury	0.0001	0.0000
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	8.3	4.0
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	5	7
Total Suspended Solids	38	30
Total Ammonia Nitrogen	0.8	0.3
Nitrite Plus Nitrate Nitrogen	2.78	2.31
Total Phosphorus	0.49	0.72
pH (units)	6.9	7.3
Total Cyanides	0.003	0.003
Phenol	0.043	0.030
Fats,Oils and Greases	3	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.10	0.02
Total Iron	0.70	0.00
Total Lead	0.04	0.02
Total Manganese	0.08	0.07
Total Mercury	0.0005	0.0004
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/3	10/10
Water Temperature (°C)	18	18
Dissolved Oxygen	6.8	3.6
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	7
Total Suspended Solids	39	90
Total Ammonia Nitrogen	0.8	0.3
Nitrite Plus Nitrate Nitrogen	2.72	2.21
Total Phosphorus	0.51	0.83
pH (units)	7.0	7.3
Total Cyanides	0.003	0.003
Phenol	0.036	0.036
Fats, Oils and Greases	9	9
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.90	1.00
Total Lead	0.04	0.03
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0000
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	40	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	6.9	7.7
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	9	7
Total Suspended Solids	53	67
Total Ammonia Nitrogen	0.9	0.2
Nitrite Plus Nitrate Nitrogen	2.60	2.28
Total Phosphorus	0.46	0.43
pH (units)	7.5	7.4
Total Cyanides	0.002	0.004
Phenol	0.038	0.025
Fats,Oils and Greases	6	0
Total Arsenic	0.10	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.80	1.00
Total Lead	0.03	0.01
Total Manganese	0.08	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.20	0.30
Total Silver	0.01	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	<10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	7.1	8.0
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	8	7
Total Suspended Solids	36	56
Total Ammonia Nitrogen	0.7	0.2
Nitrite Plus Nitrate Nitrogen	2.86	2.30
Total Phosphorus	0.42	0.43
pH (units)	7.5	7.3
Total Cyanides	0.005	0.003
Phenol	0.042	0.025
Fats, Oils and Greases	3	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.80	1.00
Total Lead	0.01	0.02
Total Manganese	0.09	0.07
Total Mercury	0.0000	0.0006
Total Nickel	0.10	0.20
Total Silver	0.01	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	19	19
Dissolved Oxygen	10.8	8.5
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	11	6
Total Suspended Solids	55	52
Total Ammonia Nitrogen	0.4	0.1
Nitrite Plus Nitrate Nitrogen	2.90	2.30
Total Phosphorus	0.40	0.40
pH (units)	7.4	7.4
Total Cyanides	0.003	0.004
Phenol	0.043	0.025
Fats, Oils and Greases	5	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.70	1.00
Total Lead	0.02	0.02
Total Manganese	0.08	0.07
Total Mercury	0.0004	0.0004
Total Nickel	0.20	0.20
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	10.3	8.0
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	10	6
Total Suspended Solids	54	41
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.94	2.29
Total Phosphorus	0.39	0.39
pH (units)	7.7	7.3
Total Cyanides	0.003	0.004
Phenol	0.040	0.025
Fats, Oils and Greases	5	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.80	1.00
Total Lead	0.02	0.01
Total Manganese	0.09	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.20
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	10.2	8.1
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	6	7
Total Suspended Solids	47	158
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	2.94	2.08
Total Phosphorus	0.36	0.55
pH (units)	7.6	7.3
Total Cyanides	0.006	0.003
Phenol	0.038	0.035
Fats,Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.80	2.00
Total Lead	0.02	0.02
Total Manganese	0.09	0.14
Total Mercury	0.0005	0.0003
Total Nickel	0.10	0.30
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	6,400

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	9.7	7.7
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	6	7
Total Suspended Solids	71	93
Total Ammonia Nitrogen	0.3	0.2
Nitrite Plus Nitrate Nitrogen	2.92	2.17
Total Phosphorus	0.43	0.48
pH (units)	7.2	7.2
Total Cyanides	0.004	0.003
Phenol	0.039	0.037
Fats, Oils and Greases	2	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.01
Total Iron	0.80	1.00
Total Lead	0.01	0.02
Total Manganese	0.11	0.10
Total Mercury	0.0000	0.0005
Total Nickel	0.10	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	90	19,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
OCTOBER 1984

Constituents <sup>a</sup>	Sampling Dates	
	10/4	10/9
Water Temperature (°C)	18	18
Dissolved Oxygen	10.1	8.0
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	7	6
Total Suspended Solids	48	71
Total Ammonia Nitrogen	0.3	0.2
Nitrite Plus Nitrate Nitrogen	2.95	2.19
Total Phosphorus	0.40	0.43
pH (units)	7.6	7.2
Total Cyanides	0.004	0.003
Phenol	0.040	0.031
Fats, Oils and Greases	7	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.01	0.01
Total Iron	0.80	2.00
Total Lead	0.03	0.02
Total Manganese	0.09	0.09
Total Mercury	0.0003	0.0001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	8,000

<sup>a</sup>Expressed in mg/L except where noted.



APPENDIX AIV  
WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, MAY 1985

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	18	20
Dissolved Oxygen	3.0	0.6
Five-Day Biochemical Oxygen Demand	1	4
Total Organic Carbon	13	10
Total Suspended Solids	9	11
Total Ammonia Nitrogen	4.5	4.2
Nitrite Plus Nitrate Nitrogen	1.88	0.62
Total Phosphorus	0.58	0.87
pH (units)	5.1	7.1
Total Cyanides	0.006	0.007
Phenol	0.037	0.041
Fats, Oils and Greases	0	19
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.04	0.00
Total Copper	0.02	0.00
Total Iron	0.30	0.50
Total Lead	0.00	0.01
Total Manganese	0.05	0.09
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	1,000	120,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	19	20
Dissolved Oxygen	3.4	0.7
Five-Day Biochemical Oxygen Demand	2	6
Total Organic Carbon	12	10
Total Suspended Solids	11	8
Total Ammonia Nitrogen	4.7	4.7
Nitrite Plus Nitrate Nitrogen	1.98	0.40
Total Phosphorus	0.57	1.06
pH (units)	5.8	7.1
Total Cyanides	0.006	0.009
Phenol	0.031	0.053
Fats, Oils and Greases	0	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.02	0.00
Total Iron	0.40	0.60
Total Lead	0.03	0.01
Total Manganese	0.05	0.11
Total Mercury	0.0003	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	500	180,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	19	20
Dissolved Oxygen	4.5	1.6
Five-Day Biochemical Oxygen Demand	2	6
Total Organic Carbon	12	10
Total Suspended Solids	14	13
Total Ammonia Nitrogen	3.5	4.6
Nitrite Plus Nitrate Nitrogen	2.62	1.21
Total Phosphorus	0.54	0.94
pH (units)	5.9	7.2
Total Cyanides	0.005	0.007
Phenol	0.042	0.058
Fats, Oils and Greases	0	12
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.09	0.03
Total Iron	0.40	0.60
Total Lead	0.03	0.01
Total Manganese	0.05	0.10
Total Mercury	0.0001	0.0000
Total Nickel	0.10	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	1,000	170,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	18	20
Dissolved Oxygen	4.4	1.1
Five-Day Biochemical Oxygen Demand	2	5
Total Organic Carbon	10	10
Total Suspended Solids	11	57
Total Ammonia Nitrogen	3.1	4.4
Nitrite Plus Nitrate Nitrogen	2.88	1.87
Total Phosphorus	0.49	0.81
pH (units)	5.9	7.2
Total Cyanides	0.006	0.009
Phenol	0.015	0.051
Fats, Oils and Greases	0	29
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.02	0.03
Total Iron	0.30	1.30
Total Lead	0.00	0.02
Total Manganese	0.05	0.10
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	1,800	3,200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	18	19
Dissolved Oxygen	8.4	7.2
Five-Day Biochemical Oxygen Demand	2	7
Total Organic Carbon	11	9
Total Suspended Solids	13	15
Total Ammonia Nitrogen	3.5	4.2
Nitrite Plus Nitrate Nitrogen	2.97	1.96
Total Phosphorus	0.52	0.58
pH (units)	5.8	7.2
Total Cyanides	0.005	0.006
Phenol	0.015	0.043
Fats, Oils and Greases	0	9
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.03	0.00
Total Iron	0.20	0.50
Total Lead	0.01	0.01
Total Manganese	0.05	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.01	0.20
Total Silver	0.01	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	1,500	4,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	20	19
Dissolved Oxygen	8.8	6.8
Five-Day Biochemical Oxygen Demand	4	8
Total Organic Carbon	10	9
Total Suspended Solids	27	21
Total Ammonia Nitrogen	3.7	4.1
Nitrite Plus Nitrate Nitrogen	2.81	2.58
Total Phosphorus	0.60	0.56
pH (units)	6.2	7.3
Total Cyanides	0.006	0.007
Phenol	0.014	0.054
Fats,Oils and Greases	0	19
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.03	0.01
Total Copper	0.01	0.01
Total Iron	0.70	0.60
Total Lead	0.02	0.02
Total Manganese	0.06	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	900	2,300

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	20	19
Dissolved Oxygen	7.3	6.4
Five-Day Biochemical Oxygen Demand	3	8
Total Organic Carbon	14	9
Total Suspended Solids	63	21
Total Ammonia Nitrogen	3.9	3.9
Nitrite Plus Nitrate Nitrogen	2.81	2.75
Total Phosphorus	0.89	0.58
pH (units)	5.8	7.3
Total Cyanides	0.005	0.008
Phenol	0.023	0.054
Fats, Oils and Greases	4	19
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.02	0.00
Total Copper	0.03	0.02
Total Iron	1.00	0.60
Total Lead	0.00	0.01
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	500	1,400

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	20	19
Dissolved Oxygen	8.4	5.7
Five-Day Biochemical Oxygen Demand	8	5
Total Organic Carbon	9	8
Total Suspended Solids	22	21
Total Ammonia Nitrogen	3.5	4.1
Nitrite Plus Nitrate Nitrogen	2.98	2.83
Total Phosphorus	0.52	0.58
pH (units)	6.1	7.0
Total Cyanides	0.004	0.007
Phenol	0.017	0.050
Fats, Oils and Greases	8	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.02
Total Iron	0.50	0.70
Total Lead	0.03	0.02
Total Manganese	0.06	0.08
Total Mercury	0.0004	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	220	800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/6	5/17
Water Temperature (°C)	20	18
Dissolved Oxygen	8.1	6.1
Five-Day Biochemical Oxygen Demand	7	7
Total Organic Carbon	9	8
Total Suspended Solids	32	26
Total Ammonia Nitrogen	3.1	4.4
Nitrite Plus Nitrate Nitrogen	3.08	2.81
Total Phosphorus	0.55	0.61
pH (units)	6.5	7.0
Total Cyanides	0.005	0.008
Phenol	0.048	0.057
Fats, Oils and Greases	3	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.01
Total Iron	0.50	0.80
Total Lead	0.00	0.00
Total Manganese	0.07	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.01
Fecal Coliform (cfu/100mL)	190	150

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	18	20
Dissolved Oxygen	7.5	5.8
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	11	9
Total Suspended Solids	22	48
Total Ammonia Nitrogen	2.9	4.9
Nitrite Plus Nitrate Nitrogen	3.23	2.21
Total Phosphorus	0.44	0.72
pH (units)	5.8	6.3
Total Cyanides	0.007	0.009
Phenol	0.045	0.032
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.02
Total Copper	0.02	0.04
Total Iron	0.40	1.20
Total Lead	0.00	0.01
Total Manganese	0.06	0.10
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	80	250

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	7.4	5.8
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	10	8
Total Suspended Solids	25	24
Total Ammonia Nitrogen	2.9	4.6
Nitrite Plus Nitrate Nitrogen	2.96	2.10
Total Phosphorus	0.41	0.60
pH (units)	6.5	6.3
Total Cyanides	0.007	0.007
Phenol	0.049	0.042
Fats, Oils and Greases	2	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.00	0.02
Total Iron	0.60	0.60
Total Lead	0.00	0.01
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	90	160

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	10.2	8.2
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	9	9
Total Suspended Solids	24	40
Total Ammonia Nitrogen	1.4	2.8
Nitrite Plus Nitrate Nitrogen	2.58	2.06
Total Phosphorus	0.20	0.42
pH (units)	5.9	6.1
Total Cyanides	0.006	0.005
Phenol	0.046	0.038
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.03
Total Iron	0.50	1.00
Total Lead	0.00	0.01
Total Manganese	0.06	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	30	150

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	9.4	7.3
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	10	8
Total Suspended Solids	24	36
Total Ammonia Nitrogen	1.5	2.6
Nitrite Plus Nitrate Nitrogen	2.62	2.05
Total Phosphorus	0.21	0.42
pH (units)	5.6	6.2
Total Cyanides	0.006	0.005
Phenol	0.038	0.038
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.02
Total Iron	0.50	0.80
Total Lead	0.00	0.01
Total Manganese	0.07	0.09
Total Mercury	0.0004	0.0001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	150

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	9.4	6.8
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	9	8
Total Suspended Solids	22	28
Total Ammonia Nitrogen	1.2	2.3
Nitrite Plus Nitrate Nitrogen	2.69	2.34
Total Phosphorus	0.16	0.33
pH (units)	5.7	6.9
Total Cyanides	0.006	0.005
Phenol	0.036	0.040
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.40	0.60
Total Lead	0.00	0.01
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	8.9	7.3
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	7	8
Total Suspended Solids	24	24
Total Ammonia Nitrogen	1.1	2.4
Nitrite Plus Nitrate Nitrogen	2.65	2.46
Total Phosphorus	0.15	0.35
pH (units)	6.9	6.5
Total Cyanides	0.005	0.005
Phenol	0.045	0.036
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.40	0.60
Total Lead	0.00	0.01
Total Manganese	0.05	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	110

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	8.9	6.1
Five-Day Biochemical Oxygen Demand	14	2
Total Organic Carbon	28	18
Total Suspended Solids	19	26
Total Ammonia Nitrogen	1.1	2.9
Nitrite Plus Nitrate Nitrogen	2.70	2.42
Total Phosphorus	0.14	0.42
pH (units)	5.7	5.8
Total Cyanides	0.005	0.006
Phenol	0.042	0.039
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.40	0.60
Total Lead	0.00	0.01
Total Manganese	0.06	0.08
Total Mercury	0.0003	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	<10	140

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	8.8	6.7
Five-Day Biochemical Oxygen Demand	6	8
Total Organic Carbon	9	8
Total Suspended Solids	23	27
Total Ammonia Nitrogen	1.4	2.8
Nitrite Plus Nitrate Nitrogen	3.09	2.94
Total Phosphorus	0.19	0.64
pH (units)	5.8	7.0
Total Cyanides	0.004	0.006
Phenol	0.041	0.041
Fats,Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.04	0.00
Total Copper	0.02	0.02
Total Iron	0.50	0.60
Total Lead	0.00	0.01
Total Manganese	0.07	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.01	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	20	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	9.6	6.7
Five-Day Biochemical Oxygen Demand	5	10
Total Organic Carbon	9	8
Total Suspended Solids	21	19
Total Ammonia Nitrogen	1.3	2.7
Nitrite Plus Nitrate Nitrogen	3.13	2.70
Total Phosphorus	0.16	0.47
pH (units)	5.8	6.9
Total Cyanides	0.004	0.006
Phenol	0.039	0.040
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.04	0.00
Total Copper	0.02	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.00
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	110

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	8.9	6.4
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	9	9
Total Suspended Solids	16	14
Total Ammonia Nitrogen	1.1	2.6
Nitrite Plus Nitrate Nitrogen	2.98	2.72
Total Phosphorus	0.14	0.42
pH (units)	5.9	6.4
Total Cyanides	0.004	0.006
Phenol	0.044	0.039
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.05	0.00
Total Copper	0.01	0.02
Total Iron	0.20	0.40
Total Lead	0.02	0.01
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	40	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	8.9	6.5
Five-Day Biochemical Oxygen Demand	5	7
Total Organic Carbon	8	8
Total Suspended Solids	18	17
Total Ammonia Nitrogen	1.2	2.5
Nitrite Plus Nitrate Nitrogen	3.01	2.72
Total Phosphorus	0.15	0.36
pH (units)	6.1	6.9
Total Cyanides	0.005	0.006
Phenol	0.037	0.043
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.04	0.00
Total Copper	0.02	0.02
Total Iron	0.20	0.40
Total Lead	0.01	0.00
Total Manganese	0.06	0.06
Total Mercury	0.0003	0.001
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	10.6	5.9
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	10	8
Total Suspended Solids	17	16
Total Ammonia Nitrogen	1.0	1.6
Nitrite Plus Nitrate Nitrogen	3.17	2.84
Total Phosphorus	0.15	0.33
pH (units)	5.9	6.9
Total Cyanides	0.004	0.005
Phenol	0.042	0.039
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.03	0.00
Total Copper	0.00	0.02
Total Iron	0.30	0.40
Total Lead	0.00	0.01
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	9.6	6.5
Five-Day Biochemical Oxygen Demand	6	2
Total Organic Carbon	8	8
Total Suspended Solids	24	21
Total Ammonia Nitrogen	1.0	1.9
Nitrite Plus Nitrate Nitrogen	3.31	2.97
Total Phosphorus	0.18	0.38
pH (units)	6.8	6.8
Total Cyanides	0.004	0.006
Phenol	0.036	0.038
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.05	0.00
Total Copper	0.01	0.01
Total Iron	0.30	0.60
Total Lead	0.01	0.00
Total Manganese	0.06	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	9.0	5.1
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	9	8
Total Suspended Solids	26	23
Total Ammonia Nitrogen	1.0	1.5
Nitrite Plus Nitrate Nitrogen	3.40	2.98
Total Phosphorus	0.16	0.37
pH (units)	6.0	7.0
Total Cyanides	0.005	0.006
Phenol	0.042	0.051
Fats, Oils and Greases	3	11
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.05	0.00
Total Copper	0.01	0.02
Total Iron	0.40	0.60
Total Lead	0.01	0.01
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	19
Dissolved Oxygen	10.8	6.3
Five-Day Biochemical Oxygen Demand	6	6
Total Organic Carbon	10	3
Total Suspended Solids	27	22
Total Ammonia Nitrogen	0.5	1.2
Nitrite Plus Nitrate Nitrogen	2.17	2.75
Total Phosphorus	0.10	0.33
pH (units)	5.8	7.4
Total Cyanides	0.005	0.006
Phenol	0.044	0.029
Fats, Oils and Greases	5	3
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.05	0.00
Total Copper	0.01	0.01
Total Iron	0.20	0.40
Total Lead	0.00	0.01
Total Manganese	0.07	0.07
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	220	280

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	19	20
Dissolved Oxygen	10.1	6.3
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	8	7
Total Suspended Solids	25	21
Total Ammonia Nitrogen	0.9	1.2
Nitrite Plus Nitrate Nitrogen	3.13	2.85
Total Phosphorus	0.15	0.33
pH (units)	5.7	7.0
Total Cyanides	0.004	0.006
Phenol	0.040	0.037
Fats, Oils and Greases	3	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.00
Total Copper	0.02	0.01
Total Iron	0.20	0.60
Total Lead	0.01	0.01
Total Manganese	0.07	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/7	5/16
Water Temperature (°C)	20	20
Dissolved Oxygen	10.6	4.4
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	8	7
Total Suspended Solids	19	22
Total Ammonia Nitrogen	0.7	1.0
Nitrite Plus Nitrate Nitrogen	3.05	2.73
Total Phosphorus	0.16	0.33
pH (units)	5.7	7.0
Total Cyanides	0.006	0.006
Phenol	0.039	0.039
Fats, Oils and Greases	12	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.00
Total Iron	0.20	0.40
Total Lead	0.01	0.01
Total Manganese	0.06	0.08
Total Mercury	0.0001	0.0001
Total Nickel	0.00	0.10
Total Silver	0.01	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	50	80

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	19	20
Dissolved Oxygen	9.9	8.1
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	53	10
Total Suspended Solids	20	24
Total Ammonia Nitrogen	0.7	0.6
Nitrite Plus Nitrate Nitrogen	2.95	2.70
Total Phosphorus	0.17	0.26
pH (units)	5.7	6.9
Total Cyanides	0.004	0.004
Phenol	0.039	0.037
Fats, Oils and Greases	7	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.03	0.03
Total Copper	0.01	0.01
Total Iron	0.20	0.40
Total Lead	0.00	0.00
Total Manganese	0.06	0.10
Total Mercury	0.0000	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	30	260

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	19	20
Dissolved Oxygen	9.8	8.7
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	8	8
Total Suspended Solids	22	32
Total Ammonia Nitrogen	0.7	0.7
Nitrite Plus Nitrate Nitrogen	3.05	2.86
Total Phosphorus	0.18	0.31
pH (units)	6.0	6.6
Total Cyanides	0.004	0.004
Phenol	0.041	0.039
Fats, Oils and Greases	4	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.02	0.02
Total Copper	0.00	0.01
Total Iron	0.10	0.70
Total Lead	0.00	0.00
Total Manganese	0.05	0.11
Total Mercury	0.0006	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	370

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	19	20
Dissolved Oxygen	9.9	8.8
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	8	9
Total Suspended Solids	22	29
Total Ammonia Nitrogen	0.6	0.7
Nitrite Plus Nitrate Nitrogen	2.08	2.65
Total Phosphorus	0.20	0.29
pH (units)	5.9	6.7
Total Cyanides	0.004	0.005
Phenol	0.040	0.040
Fats, Oils and Greases	5	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.40	0.60
Total Lead	0.03	0.00
Total Manganese	0.09	0.10
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	40	200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	19	20
Dissolved Oxygen	9.8	8.6
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	8	9
Total Suspended Solids	26	33
Total Ammonia Nitrogen	0.6	0.7
Nitrite Plus Nitrate Nitrogen	3.24	2.96
Total Phosphorus	0.19	0.32
pH (units)	6.0	6.2
Total Cyanides	0.006	0.005
Phenol	0.033	0.038
Fats,Oils and Greases	4	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.03
Total Copper	0.00	0.00
Total Iron	0.30	0.70
Total Lead	0.00	0.01
Total Manganese	0.06	0.12
Total Mercury	0.0000	0.0001
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	20	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	20
Dissolved Oxygen	9.1	8.8
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	9	8
Total Suspended Solids	28	38
Total Ammonia Nitrogen	0.5	0.6
Nitrite Plus Nitrate Nitrogen	3.39	3.27
Total Phosphorus	0.21	0.28
pH (units)	5.8	7.2
Total Cyanides	0.006	0.006
Phenol	0.044	0.040
Fats, Oils and Greases	3	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.02	0.02
Total Copper	0.00	0.00
Total Iron	0.40	0.60
Total Lead	0.03	0.00
Total Manganese	0.07	0.11
Total Mercury	0.0009	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	30	100

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	20
Dissolved Oxygen	9.5	6.2
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	12	9
Total Suspended Solids	37	40
Total Ammonia Nitrogen	0.5	0.5
Nitrite Plus Nitrate Nitrogen	3.35	3.17
Total Phosphorus	0.22	0.28
pH (units)	5.9	6.9
Total Cyanides	0.006	0.006
Phenol	0.037	0.036
Fats, Oils and Greases	3	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.01	0.01
Total Copper	0.00	0.00
Total Iron	0.10	0.80
Total Lead	0.02	0.00
Total Manganese	0.09	0.11
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	20	270

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	20
Dissolved Oxygen	9.5	5.5
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	10	11
Total Suspended Solids	12	44
Total Ammonia Nitrogen	0.3	0.5
Nitrite Plus Nitrate Nitrogen	3.44	3.10
Total Phosphorus	0.28	0.32
pH (units)	6.0	6.1
Total Cyanides	0.007	0.004
Phenol	0.046	0.035
Fats, Oils and Greases	0	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.02
Total Chromium	0.03	0.01
Total Copper	0.00	0.00
Total Iron	0.40	1.00
Total Lead	0.00	0.00
Total Manganese	0.08	0.13
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	50	550

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	21
Dissolved Oxygen	10.1	7.3
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	9	9
Total Suspended Solids	30	44
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	3.52	3.20
Total Phosphorus	0.22	0.39
pH (units)	6.0	6.5
Total Cyanides	0.004	0.004
Phenol	0.040	0.035
Fats, Oils and Greases	5	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.02	0.02
Total Copper	0.00	0.02
Total Iron	0.40	0.70
Total Lead	0.02	0.01
Total Manganese	0.09	0.12
Total Mercury	0.0000	0.0006
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.01
Fecal Coliform (cfu/100mL)	40	330

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	20
Dissolved Oxygen	9.7	8.1
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	11	9
Total Suspended Solids	34	37
Total Ammonia Nitrogen	0.3	0.4
Nitrite Plus Nitrate Nitrogen	3.37	3.00
Total Phosphorus	0.22	0.31
pH (units)	5.9	6.8
Total Cyanides	0.004	0.005
Phenol	0.038	0.034
Fats, Oils and Greases	0	23
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.01	0.00
Total Copper	0.01	0.01
Total Iron	0.50	0.70
Total Lead	0.01	0.00
Total Manganese	0.09	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	50	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	21
Dissolved Oxygen	9.2	7.6
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	9	10
Total Suspended Solids	34	35
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.53	3.19
Total Phosphorus	0.20	0.27
pH (units)	6.2	5.9
Total Cyanides	0.004	0.005
Phenol	0.049	0.031
Fats, Oils and Greases	2	4
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.00
Total Iron	0.40	1.00
Total Lead	0.01	0.01
Total Manganese	0.07	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	21
Dissolved Oxygen	8.9	7.2
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	8	9
Total Suspended Solids	41	33
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.54	3.24
Total Phosphorus	0.25	0.25
pH (units)	6.5	6.4
Total Cyanides	0.006	0.005
Phenol	0.042	0.034
Fats, Oils and Greases	2	13
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.70	0.80
Total Lead	0.01	0.00
Total Manganese	0.07	0.13
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	9	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	21
Dissolved Oxygen	8.9	6.8
Five-Day Biochemical Oxygen Demand	3	1
Total Organic Carbon	8	10
Total Suspended Solids	43	43
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.55	3.24
Total Phosphorus	0.26	0.25
pH (units)	6.4	6.0
Total Cyanides	0.004	0.005
Phenol	0.048	0.035
Fats, Oils and Greases	3	2
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.80	1.00
Total Lead	0.01	0.00
Total Manganese	0.10	0.13
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	<10	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	20	20
Dissolved Oxygen	8.4	6.2
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	10	10
Total Suspended Solids	42	116
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.38	3.33
Total Phosphorus	0.25	0.34
pH (units)	6.1	6.0
Total Cyanides	0.007	0.004
Phenol	0.039	0.033
Fats, Oils and Greases	0	11
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.05	0.01
Total Copper	0.02	0.01
Total Iron	0.50	2.00
Total Lead	0.00	0.03
Total Manganese	0.09	0.18
Total Mercury	0.0006	0.0013
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	21	21
Dissolved Oxygen	8.4	5.6
Five-Day Biochemical Oxygen Demand	3	1
Total Organic Carbon	9	9
Total Suspended Solids	40	52
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	3.32	3.46
Total Phosphorus	0.21	0.28
pH (units)	6.3	6.1
Total Cyanides	0.006	0.005
Phenol	0.037	0.040
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.01
Total Chromium	0.04	0.01
Total Copper	0.01	0.01
Total Iron	0.50	1.20
Total Lead	0.00	0.04
Total Manganese	0.90	0.16
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	<10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	21	20
Dissolved Oxygen	7.6	5.2
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	8	9
Total Suspended Solids	47	58
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	3.32	3.44
Total Phosphorus	0.23	0.29
pH (units)	6.1	6.6
Total Cyanides	0.004	0.005
Phenol	0.045	0.035
Fats, Oils and Greases	2	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.00	0.00
Total Copper	0.01	0.01
Total Iron	0.50	1.30
Total Lead	0.00	0.04
Total Manganese	0.10	0.16
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/8	5/15
Water Temperature (°C)	21	20
Dissolved Oxygen	6.9	6.1
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	7	11
Total Suspended Solids	60	90
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	3.46	3.40
Total Phosphorus	0.23	0.34
pH (units)	6.3	6.6
Total Cyanides	0.005	0.005
Phenol	0.040	0.037
Fats, Oils and Greases	2	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.02	0.04
Total Copper	0.01	0.02
Total Iron	0.70	1.70
Total Lead	0.00	0.04
Total Manganese	0.10	0.15
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	20	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	19	21
Dissolved Oxygen	6.8	6.1
Five-Day Biochemical Oxygen Demand	6	5
Total Organic Carbon	8	8
Total Suspended Solids	74	60
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	3.44	3.35
Total Phosphorus	0.22	0.29
pH (units)	6.5	7.4
Total Cyanides	0.006	0.004
Phenol	0.044	0.032
Fats, Oils and Greases	0	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.02	0.01
Total Copper	0.02	0.02
Total Iron	0.90	0.80
Total Lead	0.01	0.01
Total Manganese	0.12	0.13
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	19	21
Dissolved Oxygen	7.1	6.8
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	8	10
Total Suspended Solids	63	104
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	3.44	3.33
Total Phosphorus	0.19	0.25
pH (units)	5.8	6.2
Total Cyanides	0.006	0.005
Phenol	0.042	0.052
Fats, Oils and Greases	8	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.02
Total Iron	0.70	1.00
Total Lead	0.00	0.02
Total Manganese	0.13	0.15
Total Mercury	0.0000	0.0005
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	21	20
Dissolved Oxygen	7.1	7.2
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	9	8
Total Suspended Solids	53	88
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.53	3.34
Total Phosphorus	0.16	0.22
pH (units)	5.6	6.1
Total Cyanides	0.006	0.003
Phenol	0.039	0.041
Fats, Oils and Greases	0	4
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.01	0.01
Total Copper	0.02	0.00
Total Iron	0.70	0.90
Total Lead	0.00	0.01
Total Manganese	0.14	0.14
Total Mercury	0.0001	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.02	0.00
Fecal Coliform (cfu/100mL)	<10	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	20	21
Dissolved Oxygen	7.2	6.7
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	7	8
Total Suspended Solids	57	60
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.58	3.42
Total Phosphorus	0.14	0.21
pH (units)	5.8	6.7
Total Cyanides	0.006	0.005
Phenol	0.041	0.041
Fats, Oils and Greases	2	6
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.01
Total Copper	0.02	0.01
Total Iron	0.90	0.60
Total Lead	0.02	0.01
Total Manganese	0.14	0.13
Total Mercury	0.0004	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	21	21
Dissolved Oxygen	7.2	5.5
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	8	11
Total Suspended Solids	53	84
Total Ammonia Nitrogen	0.3	0.3
Nitrite Plus Nitrate Nitrogen	3.58	3.43
Total Phosphorus	0.14	0.22
pH (units)	5.7	5.8
Total Cyanides	0.006	0.006
Phenol	0.041	0.038
Fats,Oils and Greases	0	2
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.01
Total Chromium	0.02	0.00
Total Copper	0.02	0.03
Total Iron	0.80	0.90
Total Lead	0.01	0.01
Total Manganese	0.14	0.14
Total Mercury	0.0001	0.0001
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.20	0.00
Fecal Coliform (cfu/100mL)	<10	400

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	20	20
Dissolved Oxygen	7.2	5.2
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	8	9
Total Suspended Solids	65	112
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.57	3.44
Total Phosphorus	0.13	0.26
pH (units)	5.7	5.9
Total Cyanides	0.006	0.005
Phenol	0.036	0.048
Fats, Oils and Greases	8	4
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.03	0.01
Total Copper	0.01	0.01
Total Iron	0.70	1.40
Total Lead	0.00	0.01
Total Manganese	0.12	0.17
Total Mercury	0.0001	0.0001
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	<10	460

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIV-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
MAY 1985

Constituents <sup>a</sup>	Sampling Dates	
	5/9	5/14
Water Temperature (°C)	21	21
Dissolved Oxygen	7.1	6.7
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	8	9
Total Suspended Solids	46	77
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	3.59	3.43
Total Phosphorus	0.14	0.24
pH (units)	5.8	6.0
Total Cyanides	0.005	0.004
Phenol	0.041	0.039
Fats, Oils and Greases	2	1
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.02	0.03
Total Copper	0.01	0.02
Total Iron	0.80	1.60
Total Lead	0.00	0.00
Total Manganese	0.17	0.16
Total Mercury	0.0000	0.0008
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.40	0.00
Fecal Coliform (cfu/100mL)	30	2,900

<sup>a</sup>Expressed in mg/L except where noted.

APPENDIX AV

WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, AUGUST 1985

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	1.4	1.8
Five-Day Biochemical Oxygen Demand	2	2
Total Organic Carbon	9	6
Total Suspended Solids	6	12
Total Ammonia Nitrogen	2.4	2.9
Nitrite Plus Nitrate Nitrogen	1.55	0.97
Total Phosphorus	0.33	0.54
pH (units)	7.0	7.1
Total Cyanides	0.010	0.008
Phenol	0.029	0.031
Fats,Oils and Greases	33	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.04	0.01
Total Copper	0.01	0.01
Total Iron	0.30	0.70
Total Lead	0.01	0.00
Total Manganese	0.04	0.34
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	100,000	4,700

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	2.4	1.8
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	18	6
Total Suspended Solids	9	22
Total Ammonia Nitrogen	2.4	3.3
Nitrite Plus Nitrate Nitrogen	1.57	1.10
Total Phosphorus	0.34	0.56
pH (units)	7.0	7.1
Total Cyanides	0.003	0.009
Phenol	0.032	0.031
Fats, Oils and Greases	17	30
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.02	0.02
Total Copper	0.01	0.01
Total Iron	0.40	0.50
Total Lead	0.01	0.01
Total Manganese	0.04	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	4,900	5,100

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	1.5	2.0
Five-Day Biochemical Oxygen Demand	3	1
Total Organic Carbon	41	6
Total Suspended Solids	8	20
Total Ammonia Nitrogen	2.3	2.9
Nitrite Plus Nitrate Nitrogen	1.69	1.46
Total Phosphorus	0.37	0.63
pH (units)	7.0	7.1
Total Cyanides	0.006	0.009
Phenol	0.034	0.030
Fats, Oils and Greases	16	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.03	0.02
Total Copper	0.03	0.01
Total Iron	0.30	0.50
Total Lead	0.02	0.02
Total Manganese	0.05	0.05
Total Mercury	0.0000	0.0004
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	4,500	3,400

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	2.1	1.9
Five-Day Biochemical Oxygen Demand	2	1
Total Organic Carbon	6	6
Total Suspended Solids	6	10
Total Ammonia Nitrogen	2.2	2.8
Nitrite Plus Nitrate Nitrogen	1.75	1.52
Total Phosphorus	0.34	0.72
pH (units)	7.1	7.1
Total Cyanides	0.007	0.008
Phenol	0.034	0.030
Fats, Oils and Greases	16	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.03	0.01
Total Copper	0.02	0.00
Total Iron	0.20	0.30
Total Lead	0.01	0.01
Total Manganese	0.04	0.05
Total Mercury	0.0008	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	3,300	3,900

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	6.2	6.2
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	6	6
Total Suspended Solids	9	14
Total Ammonia Nitrogen	1.6	2.5
Nitrite Plus Nitrate Nitrogen	2.27	1.94
Total Phosphorus	0.34	0.61
pH (units)	7.1	7.1
Total Cyanides	0.007	0.008
Phenol	0.033	0.028
Fats, Oils and Greases	41	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.05	0.01
Total Copper	0.02	0.01
Total Iron	0.30	0.50
Total Lead	0.01	0.01
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	2,600	7,000

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	25
Dissolved Oxygen	5.9	5.3
Five-Day Biochemical Oxygen Demand	6	5
Total Organic Carbon	7	6
Total Suspended Solids	9	27
Total Ammonia Nitrogen	1.6	1.7
Nitrite Plus Nitrate Nitrogen	2.27	2.29
Total Phosphorus	0.34	0.82
pH (units)	7.1	7.1
Total Cyanides	0.008	0.008
Phenol	0.032	0.025
Fats, Oils and Greases	18	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.04	0.02
Total Copper	0.01	0.01
Total Iron	0.30	0.60
Total Lead	0.00	0.01
Total Manganese	0.04	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.01	0.10
Fecal Coliform (cfu/100mL)	4,200	600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	26
Dissolved Oxygen	5.5	5.5
Five-Day Biochemical Oxygen Demand	3	4
Total Organic Carbon	6	6
Total Suspended Solids	17	27
Total Ammonia Nitrogen	1.5	1.7
Nitrite Plus Nitrate Nitrogen	2.34	2.41
Total Phosphorus	0.51	0.63
pH (units)	7.1	7.1
Total Cyanides	0.007	0.008
Phenol	0.034	0.024
Fats, Oils and Greases	12	12
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.03	0.02
Total Copper	0.02	0.01
Total Iron	0.50	0.60
Total Lead	0.00	0.02
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	4,000	11,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	25
Dissolved Oxygen	4.7	4.3
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	6	6
Total Suspended Solids	15	22
Total Ammonia Nitrogen	1.7	1.8
Nitrite Plus Nitrate Nitrogen	2.64	2.61
Total Phosphorus	0.86	0.57
pH (units)	7.2	7.1
Total Cyanides	0.008	0.008
Phenol	0.034	0.024
Fats, Oils and Greases	22	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.03	0.02
Total Copper	0.02	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.02
Total Manganese	0.04	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	4,400	600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/5	8/16
Water Temperature (°C)	23	25
Dissolved Oxygen	5.3	4.0
Five-Day Biochemical Oxygen Demand	8	5
Total Organic Carbon	6	7
Total Suspended Solids	18	19
Total Ammonia Nitrogen	1.6	2.0
Nitrite Plus Nitrate Nitrogen	3.12	2.56
Total Phosphorus	0.50	0.50
pH (units)	7.0	7.1
Total Cyanides	0.008	0.007
Phenol	0.030	0.020
Fats, Oils and Greases	18	8
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.02
Total Copper	0.02	0.01
Total Iron	0.30	0.60
Total Lead	0.00	0.01
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	1,500	6,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	25	26
Dissolved Oxygen	5.2	5.3
Five-Day Biochemical Oxygen Demand	2	6
Total Organic Carbon	7	5
Total Suspended Solids	18	29
Total Ammonia Nitrogen	1.6	1.9
Nitrite Plus Nitrate Nitrogen	2.36	2.16
Total Phosphorus	0.45	0.57
pH (units)	6.7	7.3
Total Cyanides	0.006	0.016
Phenol	0.015	0.018
Fats, Oils and Greases	6	1
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.50	0.50
Total Lead	0.00	0.00
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	4,400	5,600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	28	26
Dissolved Oxygen	4.5	5.0
Five-Day Biochemical Oxygen Demand	4	7
Total Organic Carbon	7	5
Total Suspended Solids	13	38
Total Ammonia Nitrogen	1.3	1.8
Nitrite Plus Nitrate Nitrogen	2.55	2.20
Total Phosphorus	0.41	0.74
pH (units)	6.8	7.2
Total Cyanides	0.006	0.015
Phenol	0.012	0.018
Fats, Oils and Greases	6	0
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.02
Total Copper	0.01	0.01
Total Iron	0.40	0.70
Total Lead	0.01	0.01
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	3,600	3,700

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	25	26
Dissolved Oxygen	7.0	7.1
Five-Day Biochemical Oxygen Demand	3	6
Total Organic Carbon	7	5
Total Suspended Solids	25	23
Total Ammonia Nitrogen	0.9	1.2
Nitrite Plus Nitrate Nitrogen	2.59	2.36
Total Phosphorus	0.44	0.46
pH (units)	7.1	7.3
Total Cyanides	0.005	0.013
Phenol	0.014	0.015
Fats, Oils and Greases	7	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.02
Total Copper	0.01	0.01
Total Iron	0.50	0.50
Total Lead	0.00	0.01
Total Manganese	0.06	0.05
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	700	800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	28	26
Dissolved Oxygen	4.5	7.4
Five-Day Biochemical Oxygen Demand	5	5
Total Organic Carbon	7	5
Total Suspended Solids	25	16
Total Ammonia Nitrogen	1.0	1.2
Nitrite Plus Nitrate Nitrogen	2.66	2.64
Total Phosphorus	0.46	0.61
pH (units)	6.9	7.2
Total Cyanides	0.006	0.013
Phenol	0.010	0.015
Fats, Oils and Greases	6	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.02
Total Copper	0.01	0.01
Total Iron	0.70	0.60
Total Lead	0.00	0.01
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0002
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	900	490

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	25	26
Dissolved Oxygen	7.4	6.0
Five-Day Biochemical Oxygen Demand	6	8
Total Organic Carbon	6	5
Total Suspended Solids	24	44
Total Ammonia Nitrogen	1.1	1.1
Nitrite Plus Nitrate Nitrogen	2.72	2.82
Total Phosphorus	0.47	0.63
pH (units)	7.1	7.2
Total Cyanides	0.005	0.014
Phenol	0.009	0.015
Fats, Oils and Greases	6	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.02
Total Copper	0.02	0.01
Total Iron	0.50	0.80
Total Lead	0.00	0.00
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	900	440

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	25	26
Dissolved Oxygen	7.4	7.1
Five-Day Biochemical Oxygen Demand	3	9
Total Organic Carbon	7	7
Total Suspended Solids	25	38
Total Ammonia Nitrogen	1.1	1.1
Nitrite Plus Nitrate Nitrogen	2.82	2.85
Total Phosphorus	0.49	0.57
pH (units)	7.0	7.1
Total Cyanides	0.005	0.017
Phenol	0.010	0.016
Fats, Oils and Greases	7	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.50	0.80
Total Lead	0.00	0.01
Total Manganese	0.06	0.06
Total Mercury	0.0000	0.0008
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	440	450

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	25	26
Dissolved Oxygen	6.9	7.3
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	6	5
Total Suspended Solids	21	19
Total Ammonia Nitrogen	1.0	1.0
Nitrite Plus Nitrate Nitrogen	2.89	2.73
Total Phosphorus	0.55	0.48
pH (units)	7.2	7.2
Total Cyanides	0.005	0.015
Phenol	0.010	0.015
Fats, Oils and Greases	5	6
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.02	0.00
Total Iron	0.40	0.50
Total Lead	0.00	0.01
Total Manganese	0.06	0.05
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	340	370

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	6.3	5.9
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	6	5
Total Suspended Solids	47	19
Total Ammonia Nitrogen	0.6	0.8
Nitrite Plus Nitrate Nitrogen	2.77	2.79
Total Phosphorus	0.55	0.45
pH (units)	7.0	7.0
Total Cyanides	0.005	0.014
Phenol	0.081	0.014
Fats, Oils and Greases	9	13
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.01	0.01
Total Copper	0.02	0.01
Total Iron	0.90	0.50
Total Lead	0.00	0.00
Total Manganese	0.10	0.06
Total Mercury	0.0001	0.0003
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	220	300

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	6.4	5.1
Five-Day Biochemical Oxygen Demand	5	6
Total Organic Carbon	6	5
Total Suspended Solids	46	19
Total Ammonia Nitrogen	0.5	0.8
Nitrite Plus Nitrate Nitrogen	2.77	2.80
Total Phosphorus	0.52	0.42
pH (units)	7.1	6.9
Total Cyanides	0.005	0.005
Phenol	0.009	0.013
Fats, Oils and Greases	8	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.70	0.50
Total Lead	0.00	0.00
Total Manganese	0.08	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.01
Fecal Coliform (cfu/100mL)	60	220

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	6.6	5.4
Five-Day Biochemical Oxygen Demand	5	7
Total Organic Carbon	6	5
Total Suspended Solids	37	19
Total Ammonia Nitrogen	0.5	1.0
Nitrite Plus Nitrate Nitrogen	2.80	2.98
Total Phosphorus	0.45	0.59
pH (units)	7.0	6.8
Total Cyanides	0.004	0.015
Phenol	0.009	0.013
Fats, Oils and Greases	5	15
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.40	0.60
Total Lead	0.00	0.00
Total Manganese	0.06	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	150	10,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	27
Dissolved Oxygen	5.2	5.4
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	6	5
Total Suspended Solids	17	16
Total Ammonia Nitrogen	0.4	1.2
Nitrite Plus Nitrate Nitrogen	2.70	2.68
Total Phosphorus	0.37	0.48
pH (units)	7.2	6.9
Total Cyanides	0.006	0.013
Phenol	0.008	0.013
Fats, Oils and Greases	9	15
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.07
Total Iron	0.40	0.50
Total Lead	0.00	0.00
Total Manganese	0.07	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	30	350

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	27	26
Dissolved Oxygen	7.2	5.9
Five-Day Biochemical Oxygen Demand	2	6
Total Organic Carbon	6	5
Total Suspended Solids	12	15
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.67	2.90
Total Phosphorus	0.34	0.38
pH (units)	7.0	7.0
Total Cyanides	0.004	0.005
Phenol	0.007	0.013
Fats, Oils and Greases	22	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.20	0.40
Total Lead	0.00	0.00
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	150	80

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	6.2	5.8
Five-Day Biochemical Oxygen Demand	4	8
Total Organic Carbon	6	5
Total Suspended Solids	23	73
Total Ammonia Nitrogen	0.3	0.6
Nitrite Plus Nitrate Nitrogen	2.75	3.19
Total Phosphorus	0.40	0.90
pH (units)	7.2	7.1
Total Cyanides	0.010	0.005
Phenol	0.008	0.015
Fats, Oils and Greases	9	10
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.00	0.02
Total Iron	0.40	1.10
Total Lead	0.00	0.00
Total Manganese	0.06	0.11
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	40	300

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	6.0	6.2
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	7	5
Total Suspended Solids	19	18
Total Ammonia Nitrogen	0.2	0.8
Nitrite Plus Nitrate Nitrogen	2.66	2.80
Total Phosphorus	0.36	0.50
pH (units)	6.8	7.1
Total Cyanides	0.005	0.005
Phenol	0.008	0.014
Fats, Oils and Greases	7	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.00
Total Iron	0.40	0.40
Total Lead	0.00	0.00
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	60	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	26
Dissolved Oxygen	5.8	5.5
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	7
Total Suspended Solids	22	26
Total Ammonia Nitrogen	0.2	0.5
Nitrite Plus Nitrate Nitrogen	2.26	2.57
Total Phosphorus	0.34	0.62
pH (units)	7.2	7.1
Total Cyanides	0.005	0.005
Phenol	0.008	0.014
Fats, Oils and Greases	12	17
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.00
Total Iron	0.30	0.40
Total Lead	0.00	0.00
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	7,000	270

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	27
Dissolved Oxygen	5.8	5.5
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	6
Total Suspended Solids	32	20
Total Ammonia Nitrogen	0.3	0.5
Nitrite Plus Nitrate Nitrogen	2.52	2.59
Total Phosphorus	0.37	0.52
pH (units)	6.8	7.0
Total Cyanides	0.005	0.005
Phenol	0.008	0.015
Fats, Oils and Greases	12	12
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.00	0.02
Total Iron	0.50	0.50
Total Lead	0.01	0.00
Total Manganese	0.08	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	9,000	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/6	8/15
Water Temperature (°C)	26	27
Dissolved Oxygen	7.3	5.6
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	7	5
Total Suspended Solids	16	22
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.66	2.63
Total Phosphorus	0.40	0.49
pH (units)	7.3	7.1
Total Cyanides	0.007	0.005
Phenol	0.008	0.018
Fats, Oils and Greases	25	16
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.12	0.01
Total Iron	0.30	0.50
Total Lead	0.01	0.00
Total Manganese	0.05	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	180	600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	6.7	6.9
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	7	5
Total Suspended Solids	18	22
Total Ammonia Nitrogen	0.3	0.3
Nitrite Plus Nitrate Nitrogen	2.46	2.67
Total Phosphorus	0.35	0.33
pH (units)	7.3	7.1
Total Cyanides	0.006	0.011
Phenol	0.005	0.010
Fats, Oils and Greases	45	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.30	0.40
Total Lead	0.00	0.00
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	460	2,400

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.8	7.0
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	4	5
Total Suspended Solids	25	29
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.57	2.59
Total Phosphorus	0.38	0.33
pH (units)	7.1	7.2
Total Cyanides	0.006	0.012
Phenol	0.011	0.016
Fats, Oils and Greases	14	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.30	0.60
Total Lead	0.01	0.00
Total Manganese	0.05	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	80	50

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.5	7.7
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	7	5
Total Suspended Solids	22	26
Total Ammonia Nitrogen	0.5	1.6
Nitrite Plus Nitrate Nitrogen	2.71	2.31
Total Phosphorus	0.42	0.31
pH (units)	7.1	7.2
Total Cyanides	0.006	0.013
Phenol	0.011	0.013
Fats, Oils and Greases	21	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.40	0.40
Total Lead	0.01	0.00
Total Manganese	0.05	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	40

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.6	8.2
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	7	5
Total Suspended Solids	25	22
Total Ammonia Nitrogen	0.5	0.3
Nitrite Plus Nitrate Nitrogen	2.83	2.50
Total Phosphorus	0.41	0.29
pH (units)	7.2	7.1
Total Cyanides	0.008	0.013
Phenol	0.012	0.012
Fats, Oils and Greases	14	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.40	0.40
Total Lead	0.00	0.00
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	90	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.6	8.0
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	8	6
Total Suspended Solids	27	18
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.98	2.50
Total Phosphorus	0.41	0.35
pH (units)	7.2	7.1
Total Cyanides	0.007	0.012
Phenol	0.012	0.013
Fats, Oils and Greases	24	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.40	0.40
Total Lead	0.00	0.00
Total Manganese	0.06	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	110	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.4	7.4
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	6	6
Total Suspended Solids	23	41
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.88	2.53
Total Phosphorus	0.38	0.27
pH (units)	7.2	7.1
Total Cyanides	0.006	0.012
Phenol	0.011	0.022
Fats, Oils and Greases	22	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.00
Total Manganese	0.06	0.07
Total Mercury	0.0000	0.0005
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	170	120

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.8	7.3
Five-Day Biochemical Oxygen Demand	8	4
Total Organic Carbon	6	8
Total Suspended Solids	22	25
Total Ammonia Nitrogen	0.3	0.2
Nitrite Plus Nitrate Nitrogen	2.86	2.54
Total Phosphorus	0.47	0.33
pH (units)	7.3	7.0
Total Cyanides	0.006	0.015
Phenol	0.011	0.022
Fats, Oils and Greases	14	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.01
Total Iron	0.30	0.80
Total Lead	0.00	0.00
Total Manganese	0.04	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	160	90

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.6	7.4
Five-Day Biochemical Oxygen Demand	2	3
Total Organic Carbon	6	7
Total Suspended Solids	28	25
Total Ammonia Nitrogen	0.3	0.2
Nitrite Plus Nitrate Nitrogen	2.74	2.64
Total Phosphorus	0.37	0.25
pH (units)	7.3	7.0
Total Cyanides	0.006	0.014
Phenol	0.011	0.021
Fats, Oils and Greases	20	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.02	0.01
Total Iron	0.30	0.40
Total Lead	0.01	0.00
Total Manganese	0.06	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	70	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	5.5	6.8
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	9	6
Total Suspended Solids	25	26
Total Ammonia Nitrogen	0.2	0.3
Nitrite Plus Nitrate Nitrogen	2.42	2.70
Total Phosphorus	0.34	0.22
pH (units)	7.3	7.0
Total Cyanides	0.006	0.014
Phenol	0.013	0.019
Fats, Oils and Greases	18	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.01	0.01
Total Copper	0.01	0.02
Total Iron	0.30	0.40
Total Lead	0.00	0.00
Total Manganese	0.06	0.06
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	100	230

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	6.3	6.2
Five-Day Biochemical Oxygen Demand	2	4
Total Organic Carbon	7	6
Total Suspended Solids	32	27
Total Ammonia Nitrogen	0.2	0.2
Nitrite Plus Nitrate Nitrogen	2.38	2.56
Total Phosphorus	0.36	0.39
pH (units)	7.3	6.9
Total Cyanides	0.006	0.015
Phenol	0.012	0.021
Fats, Oils and Greases	13	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.03	0.00
Total Iron	0.50	0.70
Total Lead	0.00	0.00
Total Manganese	0.07	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	40	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	5.9	6.4
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	8	6
Total Suspended Solids	32	29
Total Ammonia Nitrogen	0.1	0.2
Nitrite Plus Nitrate Nitrogen	2.48	2.41
Total Phosphorus	0.34	0.28
pH (units)	7.3	7.0
Total Cyanides	0.008	0.016
Phenol	0.012	0.021
Fats, Oils and Greases	16	4
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.60	0.40
Total Lead	0.00	0.00
Total Manganese	0.07	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	10	10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	26	27
Dissolved Oxygen	7.0	6.6
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	9	7
Total Suspended Solids	37	32
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.39	2.36
Total Phosphorus	0.38	0.31
pH (units)	7.6	7.0
Total Cyanides	0.009	0.016
Phenol	0.014	0.021
Fats, Oils and Greases	16	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.00
Total Iron	0.60	0.50
Total Lead	0.00	0.00
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	30	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	27	26
Dissolved Oxygen	7.8	6.6
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	8	6
Total Suspended Solids	45	44
Total Ammonia Nitrogen	0.2	0.3
Nitrite Plus Nitrate Nitrogen	2.45	2.34
Total Phosphorus	0.37	0.36
pH (units)	7.2	7.2
Total Cyanides	0.007	0.015
Phenol	0.012	0.020
Fats, Oils and Greases	25	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.02	0.00
Total Iron	0.70	0.70
Total Lead	0.00	0.01
Total Manganese	0.08	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	27	26
Dissolved Oxygen	7.4	6.3
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	7	6
Total Suspended Solids	37	40
Total Ammonia Nitrogen	0.2	0.3
Nitrite Plus Nitrate Nitrogen	2.30	2.29
Total Phosphorus	0.38	0.24
pH (units)	7.3	7.1
Total Cyanides	0.007	0.015
Phenol	0.014	0.016
Fats,Oils and Greases	23	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.70	0.70
Total Lead	0.00	0.00
Total Manganese	0.08	0.10
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	27	26
Dissolved Oxygen	6.6	5.1
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	7	7
Total Suspended Solids	10	35
Total Ammonia Nitrogen	0.3	0.3
Nitrite Plus Nitrate Nitrogen	2.26	2.24
Total Phosphorus	0.45	0.25
pH (units)	7.2	7.2
Total Cyanides	0.009	0.013
Phenol	0.015	0.017
Fats, Oils and Greases	18	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.80	0.60
Total Lead	0.00	0.00
Total Manganese	0.10	0.09
Total Mercury	0.0001	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	20	220

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/7	8/14
Water Temperature (°C)	27	26
Dissolved Oxygen	7.0	5.9
Five-Day Biochemical Oxygen Demand	1	3
Total Organic Carbon	9	6
Total Suspended Solids	34	16
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.28	2.31
Total Phosphorus	0.34	0.25
pH (units)	7.2	7.2
Total Cyanides	0.010	0.015
Phenol	0.014	0.015
Fats, Oils and Greases	14	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.01	0.01
Total Iron	0.50	0.70
Total Lead	0.00	0.00
Total Manganese	0.08	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	240

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	5.4	6.3
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	10	6
Total Suspended Solids	34	68
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	2.28	2.02
Total Phosphorus	0.34	0.43
pH (units)	7.2	7.5
Total Cyanides	0.010	0.013
Phenol	0.013	0.013
Fats, Oils and Greases	24	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.01
Total Iron	0.50	1.10
Total Lead	0.00	0.00
Total Manganese	0.07	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	8.4	6.3
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	9	9
Total Suspended Solids	33	63
Total Ammonia Nitrogen	0.0	0.4
Nitrite Plus Nitrate Nitrogen	1.96	2.07
Total Phosphorus	0.28	0.41
pH (units)	7.2	7.0
Total Cyanides	0.009	0.013
Phenol	0.017	0.012
Fats, Oils and Greases	12	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.05	0.01
Total Iron	0.50	1.00
Total Lead	0.00	0.00
Total Manganese	0.10	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	130	40

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	7.7	6.3
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	10	6
Total Suspended Solids	39	64
Total Ammonia Nitrogen	0.0	0.4
Nitrite Plus Nitrate Nitrogen	1.94	1.84
Total Phosphorus	0.27	0.41
pH (units)	7.3	7.5
Total Cyanides	0.015	0.014
Phenol	0.017	0.013
Fats, Oils and Greases	13	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.01
Total Iron	0.60	1.10
Total Lead	0.00	0.00
Total Manganese	0.12	0.13
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	2,200	10

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	8.3	5.8
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	9	6
Total Suspended Solids	46	49
Total Ammonia Nitrogen	0.0	0.4
Nitrite Plus Nitrate Nitrogen	1.92	1.92
Total Phosphorus	0.29	0.36
pH (units)	6.9	7.4
Total Cyanides	0.014	0.014
Phenol	0.014	0.014
Fats, Oils and Greases	11	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.02	0.01
Total Iron	0.60	0.90
Total Lead	0.00	0.00
Total Manganese	0.11	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	2,800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	6.9	6.0
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	9	6
Total Suspended Solids	64	48
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	1.92	1.92
Total Phosphorus	0.32	0.41
pH (units)	7.0	7.0
Total Cyanides	0.013	0.013
Phenol	0.016	0.013
Fats, Oils and Greases	22	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.01
Total Iron	0.90	0.90
Total Lead	0.00	0.00
Total Manganese	0.13	0.12
Total Mercury	0.0002	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	380	350

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	26
Dissolved Oxygen	7.0	5.8
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	8	8
Total Suspended Solids	41	47
Total Ammonia Nitrogen	0.1	0.3
Nitrite Plus Nitrate Nitrogen	1.87	1.94
Total Phosphorus	0.28	0.40
pH (units)	6.9	7.5
Total Cyanides	0.013	0.016
Phenol	0.015	0.014
Fats, Oils and Greases	22	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.01	0.01
Total Iron	0.70	0.80
Total Lead	0.00	0.00
Total Manganese	0.12	0.12
Total Mercury	0.0000	0.0008
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	200	150

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AV-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
AUGUST 1985

Constituents <sup>a</sup>	Sampling Dates	
	8/8	8/13
Water Temperature (°C)	26	27
Dissolved Oxygen	6.9	6.0
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	9	6
Total Suspended Solids	57	50
Total Ammonia Nitrogen	0.1	0.4
Nitrite Plus Nitrate Nitrogen	1.91	1.98
Total Phosphorus	0.39	0.42
pH (units)	6.7	7.1
Total Cyanides	0.010	0.013
Phenol	0.013	0.015
Fats, Oils and Greases	30	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.01
Total Copper	0.02	0.01
Total Iron	0.70	1.00
Total Lead	0.00	0.00
Total Manganese	0.12	0.12
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.01
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	50	110

<sup>a</sup>Expressed in mg/L except where noted.

APPENDIX AVI  
WATER QUALITY AT SAMPLING STATIONS 1-49  
IN THE ILLINOIS WATERWAY, OCTOBER 1985

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-1

WATER QUALITY AT STATION 1 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	17
Dissolved Oxygen	1.9	4.0
Five-Day Biochemical Oxygen Demand	4	1
Total Organic Carbon	6	8
Total Suspended Solids	17	10
Total Ammonia Nitrogen	2.5	1.9
Nitrite Plus Nitrate Nitrogen	2.00	2.36
Total Phosphorus	0.50	0.42
pH (units)	6.4	7.5
Total Cyanides	0.009	0.013
Phenol	0.040	0.015
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.01	0.01
Total Iron	0.70	0.50
Total Lead	0.04	0.01
Total Manganese	0.04	0.01
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	20,000	5,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-2

WATER QUALITY AT STATION 2 IN THE  
CHICAGO SANITARY AND SHIP CANAL  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	17
Dissolved Oxygen	2.5	4.1
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	6	9
Total Suspended Solids	12	12
Total Ammonia Nitrogen	2.7	1.9
Nitrite Plus Nitrate Nitrogen	2.16	2.74
Total Phosphorus	0.44	0.49
pH (units)	6.7	7.4
Total Cyanides	0.009	0.015
Phenol	0.040	0.014
Fats, Oils and Greases	0	0
Total Arsenic	0.30	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.30	0.50
Total Lead	0.08	0.01
Total Manganese	0.02	0.02
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	18,000	3,200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-3

WATER QUALITY AT STATION 3 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	16
Dissolved Oxygen	3.7	4.5
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	6	9
Total Suspended Solids	19	15
Total Ammonia Nitrogen	2.4	1.5
Nitrite Plus Nitrate Nitrogen	2.48	3.23
Total Phosphorus	0.59	0.55
pH (units)	6.9	7.4
Total Cyanides	0.008	0.010
Phenol	0.038	0.018
Fats,Oils and Greases	1	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.01
Total Manganese	0.03	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	27,000	1,600

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-4

WATER QUALITY AT STATION 4 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	16
Dissolved Oxygen	3.4	4.1
Five-Day Biochemical Oxygen Demand	4	6
Total Organic Carbon	7	9
Total Suspended Solids	25	54
Total Ammonia Nitrogen	2.2	1.5
Nitrite Plus Nitrate Nitrogen	2.47	3.14
Total Phosphorus	0.53	1.85
pH (units)	6.9	7.5
Total Cyanides	0.008	0.014
Phenol	0.038	0.037
Fats, Oils and Greases	2	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.08
Total Copper	0.00	0.06
Total Iron	0.80	3.50
Total Lead	0.13	0.07
Total Manganese	0.03	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.30
Fecal Coliform (cfu/100mL)	10,000	7,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-5

WATER QUALITY AT STATION 5 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	16	16
Dissolved Oxygen	8.5	5.9
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	6	10
Total Suspended Solids	23	12
Total Ammonia Nitrogen	2.0	1.6
Nitrite Plus Nitrate Nitrogen	2.97	3.23
Total Phosphorus	0.52	0.60
pH (units)	7.0	7.6
Total Cyanides	0.008	0.009
Phenol	0.034	0.022
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.00	0.01
Total Iron	0.50	0.40
Total Lead	0.00	0.00
Total Manganese	0.03	0.03
Total Mercury	0.0008	0.0000
Total Nickel	0.00	0.20
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	13,000	3,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-6

WATER QUALITY AT STATION 6 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	16	18
Dissolved Oxygen	7.5	5.8
Five-Day Biochemical Oxygen Demand	4	4
Total Organic Carbon	6	10
Total Suspended Solids	14	17
Total Ammonia Nitrogen	1.9	1.3
Nitrite Plus Nitrate Nitrogen	2.64	3.41
Total Phosphorus	0.52	0.73
pH (units)	7.0	7.6
Total Cyanides	0.008	0.010
Phenol	0.035	0.020
Fats, Oils and Greases	1	20
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.00
Total Manganese	0.02	0.03
Total Mercury	0.0000	0.0007
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	8,000	2,200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-7

WATER QUALITY AT STATION 7 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	17
Dissolved Oxygen	7.3	5.9
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	5	8
Total Suspended Solids	14	18
Total Ammonia Nitrogen	2.0	1.1
Nitrite Plus Nitrate Nitrogen	2.63	3.82
Total Phosphorus	0.57	0.73
pH (units)	7.1	7.5
Total Cyanides	0.008	0.009
Phenol	0.034	0.019
Fats,Oils and Greases	3	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.30	0.50
Total Lead	0.00	0.01
Total Manganese	0.03	0.03
Total Mercury	0.0005	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	4,000	2,800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-8

WATER QUALITY AT STATION 8 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	17
Dissolved Oxygen	7.3	6.6
Five-Day Biochemical Oxygen Demand	3	3
Total Organic Carbon	7	7
Total Suspended Solids	14	24
Total Ammonia Nitrogen	1.8	0.7
Nitrite Plus Nitrate Nitrogen	2.96	3.96
Total Phosphorus	0.59	0.61
pH (units)	6.0	7.6
Total Cyanides	0.008	0.009
Phenol	0.034	0.018
Fats, Oils and Greases	3	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.00	0.01
Total Iron	0.40	0.50
Total Lead	0.00	0.01
Total Manganese	0.02	0.04
Total Mercury	0.0000	0.0008
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	4,800	800

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-9

WATER QUALITY AT STATION 9 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/7	10/18
Water Temperature (°C)	15	16
Dissolved Oxygen	7.6	5.9
Five-Day Biochemical Oxygen Demand	3	5
Total Organic Carbon	7	18
Total Suspended Solids	19	47
Total Ammonia Nitrogen	1.7	0.6
Nitrite Plus Nitrate Nitrogen	3.25	3.82
Total Phosphorus	0.63	0.74
pH (units)	6.7	7.5
Total Cyanides	0.009	0.009
Phenol	0.031	0.016
Fats, Oils and Greases	7	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.03
Total Copper	0.00	0.03
Total Iron	0.40	1.10
Total Lead	0.00	0.02
Total Manganese	0.02	0.04
Total Mercury	0.0000	0.0008
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	2,300	1,900

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-10

WATER QUALITY AT STATION 10 IN THE  
DES PLAINES RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	16
Dissolved Oxygen	6.7	7.5
Five-Day Biochemical Oxygen Demand	12	3
Total Organic Carbon	7	8
Total Suspended Solids	55	11
Total Ammonia Nitrogen	1.6	1.2
Nitrite Plus Nitrate Nitrogen	2.97	2.92
Total Phosphorus	1.70	0.56
pH (units)	6.7	7.1
Total Cyanides	0.010	0.007
Phenol	0.028	0.029
Fats, Oils and Greases	5	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	1.00	1.10
Total Lead	0.01	0.01
Total Manganese	0.05	0.04
Total Mercury	0.0000	0.0006
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	3,600	1,500

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-11

WATER QUALITY AT STATION 11 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	15
Dissolved Oxygen	7.6	8.0
Five-Day Biochemical Oxygen Demand	10	4
Total Organic Carbon	6	9
Total Suspended Solids	40	12
Total Ammonia Nitrogen	1.7	1.2
Nitrite Plus Nitrate Nitrogen	3.16	2.77
Total Phosphorus	0.75	0.53
pH (units)	7.0	7.1
Total Cyanides	0.009	0.006
Phenol	0.039	0.054
Fats, Oils and Greases	1	13
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.00
Total Chromium	0.01	0.02
Total Copper	0.02	0.01
Total Iron	0.80	0.90
Total Lead	0.00	0.01
Total Manganese	0.06	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	1,500	1,000

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-12

WATER QUALITY AT STATION 12 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	15
Dissolved Oxygen	8.9	10.1
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	6	7
Total Suspended Solids	23	20
Total Ammonia Nitrogen	1.3	1.0
Nitrite Plus Nitrate Nitrogen	2.91	2.44
Total Phosphorus	0.57	0.48
pH (units)	7.0	7.2
Total Cyanides	0.008	0.009
Phenol	0.023	0.025
Fats, Oils and Greases	0	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.40	0.70
Total Lead	0.03	0.03
Total Manganese	0.03	0.05
Total Mercury	0.0007	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	510	2,500

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-13

WATER QUALITY AT STATION 13 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	15
Dissolved Oxygen	9.5	9.3
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	5	7
Total Suspended Solids	15	15
Total Ammonia Nitrogen	1.2	1.1
Nitrite Plus Nitrate Nitrogen	2.89	2.57
Total Phosphorus	0.52	0.48
pH (units)	6.9	7.3
Total Cyanides	0.009	0.009
Phenol	0.022	0.032
Fats, Oils and Greases	0	4
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.00	0.01
Total Iron	0.20	0.90
Total Lead	0.00	0.02
Total Manganese	0.03	0.04
Total Mercury	0.0007	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	480	1,400

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-14

WATER QUALITY AT STATION 14 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	15
Dissolved Oxygen	9.3	9.4
Five-Day Biochemical Oxygen Demand	6	4
Total Organic Carbon	5	8
Total Suspended Solids	17	14
Total Ammonia Nitrogen	1.0	1.1
Nitrite Plus Nitrate Nitrogen	2.70	2.48
Total Phosphorus	0.49	0.49
pH (units)	6.9	7.2
Total Cyanides	0.008	0.009
Phenol	0.017	0.023
Fats, Oils and Greases	0	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.00	0.01
Total Iron	0.20	0.60
Total Lead	0.00	0.02
Total Manganese	0.03	0.03
Total Mercury	0.0007	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	350	900

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-15

WATER QUALITY AT STATION 15 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	15	15
Dissolved Oxygen	9.0	9.3
Five-Day Biochemical Oxygen Demand	5	4
Total Organic Carbon	5	8
Total Suspended Solids	18	17
Total Ammonia Nitrogen	0.9	1.0
Nitrite Plus Nitrate Nitrogen	2.76	2.50
Total Phosphorus	0.49	0.49
pH (units)	7.0	7.2
Total Cyanides	0.009	0.008
Phenol	0.018	0.022
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.50	0.80
Total Lead	0.00	0.02
Total Manganese	0.05	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	360	2,000

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-16

WATER QUALITY AT STATION 16 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	15
Dissolved Oxygen	9.0	8.5
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	5	8
Total Suspended Solids	7	30
Total Ammonia Nitrogen	1.0	1.0
Nitrite Plus Nitrate Nitrogen	3.00	2.46
Total Phosphorus	0.53	0.53
pH (units)	7.0	7.3
Total Cyanides	0.006	0.008
Phenol	0.019	0.027
Fats, Oils and Greases	0	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.03
Total Copper	0.00	0.01
Total Iron	0.20	0.80
Total Lead	0.00	0.02
Total Manganese	0.03	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	580	1,500

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-17

WATER QUALITY AT STATION 17 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	16
Dissolved Oxygen	9.2	8.6
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	6	9
Total Suspended Solids	22	21
Total Ammonia Nitrogen	0.9	0.9
Nitrite Plus Nitrate Nitrogen	2.78	2.61
Total Phosphorus	0.47	0.47
pH (units)	7.0	7.2
Total Cyanides	0.008	0.008
Phenol	0.019	0.027
Fats, Oils and Greases	1	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.03
Total Copper	0.00	0.01
Total Iron	0.40	1.30
Total Lead	0.00	0.02
Total Manganese	0.04	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	150	600

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-18

WATER QUALITY AT STATION 18 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	16
Dissolved Oxygen	9.7	8.6
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	5	9
Total Suspended Solids	16	7
Total Ammonia Nitrogen	0.8	0.8
Nitrite Plus Nitrate Nitrogen	2.68	2.62
Total Phosphorus	0.42	0.45
pH (units)	6.9	7.0
Total Cyanides	0.006	0.008
Phenol	0.013	0.025
Fats, Oils and Greases	0	5
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.00	0.00
Total Iron	0.20	1.20
Total Lead	0.00	0.00
Total Manganese	0.02	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	100	1,200

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-19

WATER QUALITY AT STATION 19 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	15	16
Dissolved Oxygen	8.5	7.8
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	5	8
Total Suspended Solids	22	29
Total Ammonia Nitrogen	0.8	0.7
Nitrite Plus Nitrate Nitrogen	2.74	2.54
Total Phosphorus	0.46	0.47
pH (units)	6.9	7.1
Total Cyanides	0.007	0.008
Phenol	0.011	0.024
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.00	0.03
Total Iron	0.30	0.90
Total Lead	0.00	0.01
Total Manganese	0.03	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	180	440

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-20

WATER QUALITY AT STATION 20 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	15	16
Dissolved Oxygen	8.2	8.3
Five-Day Biochemical Oxygen Demand	8	6
Total Organic Carbon	5	7
Total Suspended Solids	19	18
Total Ammonia Nitrogen	0.8	0.6
Nitrite Plus Nitrate Nitrogen	2.69	2.54
Total Phosphorus	0.45	0.48
pH (units)	7.0	7.0
Total Cyanides	0.006	0.007
Phenol	0.013	0.024
Fats,Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.10	0.02
Total Iron	0.50	0.60
Total Lead	0.00	0.01
Total Manganese	0.03	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	150	260

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-21

WATER QUALITY AT STATION 21 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	15	16
Dissolved Oxygen	2.5	8.7
Five-Day Biochemical Oxygen Demand	7	4
Total Organic Carbon	5	7
Total Suspended Solids	26	75
Total Ammonia Nitrogen	0.7	0.5
Nitrite Plus Nitrate Nitrogen	2.61	2.63
Total Phosphorus	0.40	0.64
pH (units)	7.0	7.1
Total Cyanides'	0.006	0.007
Phenol	0.018	0.024
Fats, Oils and Greases	0	13
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.02
Total Iron	0.60	1.60
Total Lead	0.00	0.02
Total Manganese	0.03	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	170	280

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-22

WATER QUALITY AT STATION 22 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	16	16
Dissolved Oxygen	9.2	9.0
Five-Day Biochemical Oxygen Demand	7	3
Total Organic Carbon	5	7
Total Suspended Solids	25	14
Total Ammonia Nitrogen	0.7	0.5
Nitrite Plus Nitrate Nitrogen	2.69	2.69
Total Phosphorus	0.40	0.42
pH (units)	7.0	7.2
Total Cyanides	0.006	0.008
Phenol	0.010	0.024
Fats, Oils and Greases	0	1
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.02	0.01
Total Iron	0.60	0.50
Total Lead	0.00	0.02
Total Manganese	0.03	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	210	220

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-23

WATER QUALITY AT STATION 23 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	16	15
Dissolved Oxygen	9.1	8.8
Five-Day Biochemical Oxygen Demand	8	3
Total Organic Carbon	5	8
Total Suspended Solids	29	54
Total Ammonia Nitrogen	0.6	0.5
Nitrite Plus Nitrate Nitrogen	2.63	2.71
Total Phosphorus	0.43	0.58
pH (units)	7.0	7.2
Total Cyanides	0.006	0.008
Phenol	0.018	0.018
Fats, Oils and Greases	2	3
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.02	0.02
Total Iron	0.60	1.50
Total Lead	0.01	0.02
Total Manganese	0.03	0.07
Total Mercury	0.0009	0.0005
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	240	170

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-24

WATER QUALITY AT STATION 24 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	16	15
Dissolved Oxygen	8.7	8.7
Five-Day Biochemical Oxygen Demand	8	3
Total Organic Carbon	5	8
Total Suspended Solids	40	21
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	2.50	2.52
Total Phosphorus	0.40	0.42
pH (units)	6.9	7.1
Total Cyanides	0.006	0.007
Phenol	0.024	0.024
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.60	0.50
Total Lead	0.06	0.02
Total Manganese	0.04	0.03
Total Mercury	0.0000	0.0000
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	270	120

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-25

WATER QUALITY AT STATION 25 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	14
Dissolved Oxygen	8.6	8.8
Five-Day Biochemical Oxygen Demand	6	3
Total Organic Carbon	6	9
Total Suspended Solids	20	20
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	2.61	2.35
Total Phosphorus	0.37	0.44
pH (units)	6.9	7.2
Total Cyanides	0.005	0.007
Phenol	0.019	0.020
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.02
Total Copper	0.00	0.01
Total Iron	0.20	1.40
Total Lead	0.00	0.02
Total Manganese	0.02	0.05
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	110	280

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-26

WATER QUALITY AT STATION 26 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/8	10/17
Water Temperature (°C)	14	14
Dissolved Oxygen	9.3	9.3
Five-Day Biochemical Oxygen Demand	7	5
Total Organic Carbon	4	9
Total Suspended Solids	20	22
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.58	2.45
Total Phosphorus	0.36	0.45
pH (units)	7.0	7.3
Total Cyanides	0.005	0.007
Phenol	0.021	0.021
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.03	0.01
Total Iron	0.40	0.90
Total Lead	0.00	0.01
Total Manganese	0.03	0.04
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.10	0.10
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	200	140

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-27

WATER QUALITY AT STATION 27 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	14
Dissolved Oxygen	8.6	9.0
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	5	8
Total Suspended Solids	12	21
Total Ammonia Nitrogen	0.5	0.4
Nitrite Plus Nitrate Nitrogen	2.85	2.53
Total Phosphorus	0.35	0.40
pH (units)	6.9	7.0
Total Cyanides	0.005	0.007
Phenol	0.014	0.018
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.02	0.00
Total Iron	0.30	0.60
Total Lead	0.00	0.00
Total Manganese	0.04	0.06
Total Mercury	0.0000	0.0006
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	140	150

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-28

WATER QUALITY AT STATION 28 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	9.8	8.8
Five-Day Biochemical Oxygen Demand	3	2
Total Organic Carbon	5	10
Total Suspended Solids	17	25
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.77	2.48
Total Phosphorus	0.32	0.42
pH (units)	6.8	7.0
Total Cyanides	0.005	0.006
Phenol	0.013	0.017
Fats, Oils and Greases	8	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	0.30	0.60
Total Lead	0.02	0.01
Total Manganese	0.02	0.06
Total Mercury	0.0000	0.0006
Total Nickel	0.00	0.00
Total Silver	0.01	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	60	170

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-29

WATER QUALITY AT STATION 29 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	0.3	9.8
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	5	9
Total Suspended Solids	17	24
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.77	2.54
Total Phosphorus	0.31	0.44
pH (units)	6.8	7.0
Total Cyanides	0.004	0.005
Phenol	0.015	0.020
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.00	0.02
Total Iron	0.10	0.80
Total Lead	0.00	0.01
Total Manganese	0.01	0.06
Total Mercury	0.0000	0.0005
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	140	210

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-30

WATER QUALITY AT STATION 30 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	9.7	10.4
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	5	8
Total Suspended Solids	18	26
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.81	2.57
Total Phosphorus	0.31	0.44
pH (units)	6.9	7.1
Total Cyanides	0.004	0.008
Phenol	0.014	0.025
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.10
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.01	0.01
Total Iron	0.50	0.60
Total Lead	0.00	0.00
Total Manganese	0.05	0.05
Total Mercury	0.0000	0.0009
Total Nickel	0.10	0.00
Total Silver	0.00	0.01
Total Zinc	0.20	0.10
Fecal Coliform (cfu/100mL)	140	170

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-31

WATER QUALITY AT STATION 31 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	11.2	9.8
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	5	9
Total Suspended Solids	17	28
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.80	2.59
Total Phosphorus	0.30	0.45
pH (units)	7.0	7.1
Total Cyanides	0.005	0.005
Phenol	0.012	0.023
Fats, Oils and Greases	10	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.00	0.02
Total Iron	0.50	0.50
Total Lead	0.00	0.00
Total Manganese	0.10	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.10	0.00
Fecal Coliform (cfu/100mL)	220	180

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-32

WATER QUALITY AT STATION 32 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	9.6	9.8
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	6	10
Total Suspended Solids	21	27
Total Ammonia Nitrogen	0.4	0.5
Nitrite Plus Nitrate Nitrogen	2.72	2.71
Total Phosphorus	0.29	0.46
pH (units)	7.0	7.2
Total Cyanides	0.005	0.005
Phenol	0.013	0.020
Fats, Oils and Greases	7	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	0.40	0.60
Total Lead	0.00	0.00
Total Manganese	0.03	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	120	130

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-33

WATER QUALITY AT STATION 33 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	10.0	9.6
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	6	9
Total Suspended Solids	19	37
Total Ammonia Nitrogen	0.3	0.5
Nitrite Plus Nitrate Nitrogen	2.75	2.76
Total Phosphorus	0.30	0.48
pH (units)	7.0	7.2
Total Cyanides	0.005	0.005
Phenol	0.009	0.021
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.01
Total Copper	0.00	0.00
Total Iron	0.40	0.70
Total Lead	0.00	0.00
Total Manganese	0.02	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	170	70

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-34

WATER QUALITY AT STATION 34 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	10.1	8.4
Five-Day Biochemical Oxygen Demand	5	2
Total Organic Carbon	4	8
Total Suspended Solids	18	36
Total Ammonia Nitrogen	0.4	0.4
Nitrite Plus Nitrate Nitrogen	2.86	2.77
Total Phosphorus	0.31	0.47
pH (units)	7.1	7.2
Total Cyanides	0.005	0.005
Phenol	0.012	0.023
Fats, Oils and Greases	0	7
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.20	0.01
Total Iron	0.40	0.90
Total Lead	0.03	0.01
Total Manganese	0.02	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	150	170

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-35

WATER QUALITY AT STATION 35 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	14	15
Dissolved Oxygen	10.0	7.8
Five-Day Biochemical Oxygen Demand	4	3
Total Organic Carbon	5	8
Total Suspended Solids	21	74
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.90	2.80
Total Phosphorus	0.30	0.49
pH (units)	6.6	7.3
Total Cyanides	0.005	0.005
Phenol	0.016	0.016
Fats, Oils and Greases	2	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	0.40	2.70
Total Lead	0.00	0.00
Total Manganese	0.04	0.09
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	120	110

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-36

WATER QUALITY AT STATION 36 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	14	15
Dissolved Oxygen	10.0	7.2
Five-Day Biochemical Oxygen Demand	5	0
Total Organic Carbon	5	9
Total Suspended Solids	29	33
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.82	2.79
Total Phosphorus	0.31	0.41
pH (units)	7.0	7.0
Total Cyanides	0.005	0.005
Phenol	0.012	0.017
Fats, Oils and Greases	0	0
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.01
Total Copper	0.00	0.04
Total Iron	0.60	0.80
Total Lead	0.00	0.02
Total Manganese	0.04	0.07
Total Mercury	0.0000	0.0006
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	170	110

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-37

WATER QUALITY AT STATION 37 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	14	15
Dissolved Oxygen	11.2	7.4
Five-Day Biochemical Oxygen Demand	5	0
Total Organic Carbon	5	8
Total Suspended Solids	25	58
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.73	2.76
Total Phosphorus	0.35	0.44
pH (units)	7.0	7.0
Total Cyanides	0.006	0.005
Phenol	0.015	0.020
Fats, Oils and Greases	0	22
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.02	0.02
Total Iron	0.50	2.10
Total Lead	0.00	0.01
Total Manganese	0.04	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-38

WATER QUALITY AT STATION 38 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	14	15
Dissolved Oxygen	11.7	9.4
Five-Day Biochemical Oxygen Demand	6	1
Total Organic Carbon	5	7
Total Suspended Solids	31	44
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.49	2.80
Total Phosphorus	0.29	0.39
pH (units)	7.1	7.1
Total Cyanides	0.005	0.008
Phenol	0.017	0.018
Fats, Oils and Greases	5	8
Total Arsenic	0.30	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.01	0.01
Total Iron	0.70	1.00
Total Lead	0.00	0.00
Total Manganese	0.04	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	<10	<10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-39

WATER QUALITY AT STATION 39 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	14	15
Dissolved Oxygen	10.0	9.6
Five-Day Biochemical Oxygen Demand	4	0
Total Organic Carbon	5	8
Total Suspended Solids	46	57
Total Ammonia Nitrogen	0.4	0.3
Nitrite Plus Nitrate Nitrogen	2.49	2.83
Total Phosphorus	0.29	0.45
pH (units)	7.1	7.1
Total Cyanides	0.005	0.005
Phenol	0.014	0.019
Fats, Oils and Greases	4	0
Total Arsenic	0.30	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.00	0.00
Total Copper	0.00	0.01
Total Iron	0.90	1.40
Total Lead	0.00	0.01
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-40

WATER QUALITY AT STATION 40 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	9.9	6.5
Five-Day Biochemical Oxygen Demand	4	0
Total Organic Carbon	6	8
Total Suspended Solids	49	39
Total Ammonia Nitrogen	0.4	0.5
Nitrite Plus Nitrate Nitrogen	2.44	2.87
Total Phosphorus	0.25	0.38
pH (units)	6.5	7.0
Total Cyanides	0.004	0.005
Phenol	0.016	0.018
Fats, Oils and Greases	5	2
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.01	0.00
Total Copper	0.00	0.01
Total Iron	0.90	1.10
Total Lead	0.01	0.00
Total Manganese	0.04	0.06
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	20	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-41

WATER QUALITY AT STATION 41 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	10.3	6.7
Five-Day Biochemical Oxygen Demand	4	0
Total Organic Carbon	13	8
Total Suspended Solids	51	38
Total Ammonia Nitrogen	0.5	0.5
Nitrite Plus Nitrate Nitrogen	2.66	2.86
Total Phosphorus	0.26	0.36
pH (units)	6.5	6.9
Total Cyanides	0.004	0.005
Phenol	0.016	0.018
Fats, Oils and Greases	1	14
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.00
Total Chromium	0.02	0.00
Total Copper	0.00	0.01
Total Iron	0.90	2.10
Total Lead	0.07	0.01
Total Manganese	0.04	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	<10	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-42

WATER QUALITY AT STATION 42 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/9	10/16
Water Temperature (°C)	13	15
Dissolved Oxygen	9.5	5.0
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	11	7
Total Suspended Solids	39	47
Total Ammonia Nitrogen	0.5	0.5
Nitrite Plus Nitrate Nitrogen	2.69	2.94
Total Phosphorus	0.27	0.35
pH (units)	6.9	6.9
Total Cyanides	0.005	0.005
Phenol	0.018	0.018
Fats, Oils and Greases	5	11
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.00	0.00
Total Iron	0.80	1.00
Total Lead	0.03	0.01
Total Manganese	0.02	0.07
Total Mercury	0.0000	0.0006
Total Nickel	0.00	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	30	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-43

WATER QUALITY AT STATION 43 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	12	15
Dissolved Oxygen	8.8	8.9
Five-Day Biochemical Oxygen Demand	5	3
Total Organic Carbon	5	8
Total Suspended Solids	39	53
Total Ammonia Nitrogen	0.5	0.2
Nitrite Plus Nitrate Nitrogen	1.67	2.79
Total Phosphorus	0.32	0.34
pH (units)	7.4	6.8
Total Cyanides	0.005	0.004
Phenol	0.018	0.020
Fats, Oils and Greases	15	24
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.00	0.00
Total Copper	0.04	0.01
Total Iron	0.70	1.20
Total Lead	0.03	0.02
Total Manganese	0.03	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	10	30

<sup>a</sup>Expressed in mg/L except where noted.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-44

WATER QUALITY AT STATION 44 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	8.6	8.7
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	5	6
Total Suspended Solids	35	45
Total Ammonia Nitrogen	0.4	0.1
Nitrite Plus Nitrate Nitrogen	1.66	2.76
Total Phosphorus	0.29	0.30
pH (units)	7.5	6.8
Total Cyanides	0.004	0.005
Phenol	0.018	0.020
Fats, Oils and Greases	12	34
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.02	0.00
Total Copper	0.00	0.01
Total Iron	0.70	1.10
Total Lead	0.03	0.01
Total Manganese	0.04	0.08
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	<10	30

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-45

WATER QUALITY AT STATION 45 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	8.6	8.6
Five-Day Biochemical Oxygen Demand	3	1
Total Organic Carbon	6	6
Total Suspended Solids	44	45
Total Ammonia Nitrogen	0.3	0.1
Nitrite Plus Nitrate Nitrogen	1.58	2.76
Total Phosphorus	0.29	0.30
pH (units)	7.3	6.8
Total Cyanides	0.005	0.004
Phenol	0.021	0.017
Fats, Oils and Greases	12	32
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.01
Total Chromium	0.02	0.01
Total Copper	0.01	0.01
Total Iron	0.80	1.10
Total Lead	0.03	0.02
Total Manganese	0.04	0.07
Total Mercury	0.0000	0.0000
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	10	20

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-46

WATER QUALITY AT STATION 46 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	8.9	8.7
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	6	7
Total Suspended Solids	33	48
Total Ammonia Nitrogen	0.3	0.1
Nitrite Plus Nitrate Nitrogen	1.65	2.73
Total Phosphorus	0.27	0.27
pH (units)	7.3	6.8
Total Cyanides	0.006	0.004
Phenol	0.016	0.013
Fats, Oils and Greases	0	35
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.02	0.00
Total Copper	0.02	0.00
Total Iron	0.80	1.00
Total Lead	0.03	0.01
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0010
Total Nickel	0.10	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	<10	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-47

WATER QUALITY AT STATION 47 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	8.5	8.7
Five-Day Biochemical Oxygen Demand	4	2
Total Organic Carbon	8	8
Total Suspended Solids	36	45
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.75	2.69
Total Phosphorus	0.28	0.26
pH (units)	7.4	6.8
Total Cyanides	0.005	0.006
Phenol	0.015	0.013
Fats, Oils and Greases	0	19
Total Arsenic	0.00	0.00
Total Cadmium	0.02	0.01
Total Chromium	0.03	0.00
Total Copper	0.03	0.01
Total Iron	0.80	1.10
Total Lead	0.01	0.01
Total Manganese	0.05	0.07
Total Mercury	0.0000	0.0007
Total Nickel	0.20	0.10
Total Silver	0.00	0.00
Total Zinc	0.10	0.10
Fecal Coliform (cfu/100mL)	180	9

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-48

WATER QUALITY AT STATION 48 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	9.0	8.9
Five-Day Biochemical Oxygen Demand	5	1
Total Organic Carbon	6	7
Total Suspended Solids	51	45
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.64	2.71
Total Phosphorus	0.31	0.26
pH (units)	7.3	6.8
Total Cyanides	0.004	0.005
Phenol	0.021	0.020
Fats, Oils and Greases	11	39
Total Arsenic	0.00	0.00
Total Cadmium	0.01	0.01
Total Chromium	0.02	0.00
Total Copper	0.01	0.01
Total Iron	1.00	1.00
Total Lead	0.07	0.01
Total Manganese	0.06	0.07
Total Mercury	0.0000	0.0008
Total Nickel	0.10	0.10
Total Silver	0.00	0.00
Total Zinc	0.00	0.10
Fecal Coliform (cfu/100mL)	280	10

<sup>a</sup>Expressed in mg/L except where noted.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AVI-49

WATER QUALITY AT STATION 49 IN THE  
ILLINOIS RIVER  
OCTOBER 1985

Constituents <sup>a</sup>	Sampling Dates	
	10/10	10/15
Water Temperature (°C)	13	15
Dissolved Oxygen	8.6	8.8
Five-Day Biochemical Oxygen Demand	4	1
Total Organic Carbon	7	7
Total Suspended Solids	40	38
Total Ammonia Nitrogen	0.2	0.1
Nitrite Plus Nitrate Nitrogen	1.65	2.74
Total Phosphorus	0.32	0.25
pH (units)	7.4	6.8
Total Cyanides	0.005	0.005
Phenol	0.019	0.018
Fats, Oils and Greases	0	23
Total Arsenic	0.00	0.00
Total Cadmium	0.00	0.01
Total Chromium	0.00	0.00
Total Copper	0.02	0.01
Total Iron	0.80	1.80
Total Lead	0.07	0.01
Total Manganese	0.07	0.08
Total Mercury	0.0000	0.0006
Total Nickel	0.20	0.00
Total Silver	0.00	0.00
Total Zinc	0.00	0.00
Fecal Coliform (cfu/100mL)	1,300	20

<sup>a</sup>Expressed in mg/L except where noted.