

*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***RESEARCH AND DEVELOPMENT  
DEPARTMENT***

*REPORT NO. 02-9*

*2000 ANNUAL SUMMARY REPORT*

*WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF  
THE METROPOLITAN WATER RECLAMATION DISTRICT  
OF GREATER CHICAGO*

*August 2002*

**Metropolitan Water Reclamation District of Greater Chicago**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

2000 ANNUAL SUMMARY REPORT  
WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF  
THE METROPOLITAN WATER RECLAMATION DISTRICT  
OF GREATER CHICAGO

By

Zainul Abedin  
Biostatistician

Richard I. Pietz  
Coordinator of Technical Services

Prakasam Tata  
Assistant Director of Research and Development  
Environmental Monitoring and Research Division

Research and Development Department  
Richard Lanyon, Director

August 2002

## TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	iv
TABLE LOCATOR IN APPENDIX AII - BY PARAMETER	xii
LIST OF FIGURES	xiv
ACKNOWLEDGMENTS	xv
DISCLAIMER	xv
SUMMARY AND CONCLUSIONS	1
Compliance with Water Quality Standards During 2000	1
General Use Waters	1
Secondary Contact and Indigenous Aquatic Life Waters	3
INTRODUCTION	4
WATER QUALITY NETWORK	6
Description of Waterways	6
Water Use Designations	8
Scope of Waterways Data	9
Water Sampling	10
Water Assays and Water Quality Criteria	13
SPECIAL INTERPRETATION OF CERTAIN WATER QUALITY STANDARDS	26
COMPLIANCE WITH WATER QUALITY STANDARDS IN GENERAL USE WATERS	31

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Sampling Locations and Frequencies	31
River System Compliance Data	34
Chicago River System	34
Calumet River System	38
Des Plaines River System	40
COMPLIANCE WITH WATER QUALITY STANDARDS IN SECONDARY CONTACT WATERS	49
Sampling Locations and Frequencies	49
River System Compliance Data	49
Chicago River System	51
Calumet River System	53
RECEIVING WATER QUALITY STANDARDS COMPLIANCE UP-STREAM AND DOWNSTREAM OF DISTRICT OUTFALLS	59
Surface Water Sample Locations and Sample Frequencies	59
Annual Summary Results for Water Quality Upstream and Downstream of District Outfalls	62
North Side WRP	77
Stickney WRP	79
Calumet WRP	80
John E. Egan WRP	82
James C. Kirie WRP	83



TABLE OF CONTENTS (Continued)

	<u>Page</u>
Hanover Park WRP	85
REFERENCES	87
APPENDICES	
I Waterways Data Management System Description	AI-1
II Water Quality Results - Annual Mean, Standard Compliance Violation History, and Mean History	AII-1
III Significance Tests on 2000 Upstream and Down- stream Sample Means - Significance Probabili- ties Associated With Appropriate Test	AIII-1

LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Waterways (Bridge Runs) Total Number of Sam- Samples Collected Monthly During 2000	12
2	Water Sample Assays Performed and Corre- sponding Water Quality Standards	14
3	Illinois Pollution Control Board (IPCB) Water Quality Standards and Corresponding District's Interpretation	27
4	Locations Sampled and Annual Sampling Fre- quencies of General Use Waters in 2002	32
5	Water Quality Parameters Not in Total Com- pliance in General Use Waters of All River Systems in 2000	35
6	Locations Sampled and Annual Sampling Fre- quencies of Secondary Contact Waters in 2000	50
7	Sampling Locations and Sampling Frequencies Upstream and Downstream of District Water Reclamation Plants in 2000	60
8	Comparison of Levels of Water Quality Parame- ters at Upstream (U) and Downstream (D) Locations for North Side Water Reclamation Plant in 2000	64
9	Comparison of Levels of Water Quality Parame- ters at Upstream (U) and Downstream (D) Locations for Stickney Water Reclamation Plant in 2000	66
10	Comparison of Levels of Water Quality Parame- ters at Upstream (U) and Downstream (D) Locations for Calumet Water Reclamation Plant in 2000	68

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
11	Comparison of Levels of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for John E. Egan Water Reclamation Plant in 2000	70
12	Comparison of Levels of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for James C. Kirie Water Reclamation Plant in 2000	72
13	Comparison of Levels of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for Hanover Park Water Reclamation Plant in 2000	74
AI-1	Parameter Directory for Water Quality Network	AI-1
AI-2	Directory of Sampling Stations in Water Quality Network	AI-3
AI-3	Directory of New Sampling Station Names in 2000	AI-6
AII-1	Waterways Sample Means 2000	AII-1
AII-2	Dissolved Oxygen Violation History through 2000	AII-11
AII-3	Temperature Violation History through 2000	AII-12
AII-4	pH Violation History through 2000	AII-13
AII-5	Chloride Violation History through 2000	AII-14
AII-6	Ammonium Nitrogen Violation History through 2000	AII-15

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-7	Un-ionized Ammonia Violation History through 2000	AII-16
AII-8	Total Dissolved Solids Violation History through 2000	AII-17
AII-9	Phenols Violation History through 2000	AII-18
AII-10	Sulfate Violation History through 2000	AII-19
AII-11	Fats, Oils, and Greases Violation History through 2000	AII-20
AII-12	Total Cyanide Violation History through 2000	AII-21
AII-13	Weak Acid Dissociable Cyanide Violation History through 2000	AII-22
AII-14	Fluoride Violation History through 2000	AII-23
AII-15	Fecal Coliform Violation History through 2000	AII-24
AII-16	Gross Beta Radioactivity Violation History through 2000	AII-25
AII-17	Total Silver Violation History through 2000	AII-26
AII-18	Total Arsenic Violation History through 2000	AII-27
AII-19	Total Barium Violation History through 2000	AII-28
AII-20	Total Boron Violation History through 2000	AII-29
AII-21	Total Cadmium Violation History through 2000	AII-30
AII-22	Total Copper Violation History through 2000	AII-31

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-23	Total Chromium Violation History through 2000	AII-32
AII-24	Total Iron Violation History through 2000	AII-33
AII-25	Soluble Iron Violation History through 2000	AII-34
AII-26	Total Lead Violation History through 2000	AII-35
AII-27	Total Nickel Violation History through 2000	AII-36
AII-28	Total Manganese Violation History through 2000	AII-37
AII-29	Total Mercury Violation History through 2000	AII-38
AII-30	Total Zinc Violation History through 2000	AII-39
AII-31	Total Selenium Violation History through 2000	AII-40
AII-32	Biochemical Oxygen Demand Mean History through 2000	AII-41
AII-33	Dissolved Oxygen Mean History through 2000	AII-42
AII-34	Chemical Oxygen Demand Mean History through 2000	AII-43
AII-35	Temperature Mean History through 2000	AII-44
AII-36	pH Mean History through 2000	AII-45
AII-37	Chloride Mean through 2000	AII-46
AII-38	Turbidity Mean History through 2000	AII-47
AII-39	Conductivity Mean History through 2000	AII-48
AII-40	Alkalinity (Total) Mean History through 2000	AII-49

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-41	Total Kjeldahl Nitrogen Mean History through 2000	AII-50
AII-42	Ammonium Nitrogen Mean History through 2000	AII-51
AII-43	Un-ionized Ammonia Mean History through 2000	AII-52
AII-44	Organic Nitrogen Mean History through 2000	AII-53
AII-45	Nitrite Plus Nitrate Nitrogen Mean History through 2000	AII-54
AII-46	Total Solids Mean History through 2000	AII-55
AII-47	Total Volatile Solids Mean History through 2000	AII-56
AII-48	Total Suspended Solids Mean History through 2000	AII-57
AII-49	Volatile Suspended Solids Mean History through 2000	AII-58
AII-50	Total Dissolved Solids Mean History through 2000	AII-59
AII-51	Total Dissolved Volatile Solids Mean History through 2000	AII-60
AII-52	Phenols Mean History through 2000	AII-61
AII-53	Sulfate Mean History through 2000	AII-62
AII-54	Fats, Oils, and Greases Mean History through 2000	AII-63
AII-55	Total Phosphorus Mean History through 2000	AII-64
AII-56	Soluble Phosphorus Mean History through 2000	AII-65

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-57	Total Cyanide Mean History through 2000	AII-66
AII-58	Weak Acid Dissociable Cyanide Mean History through 2000	AII-67
AII-59	Fluoride Mean History through 2000	AII-68
AII-60	Total Organic Carbon Mean History through 2000	AII-69
AII-61	Fecal Coliform Mean History through 2000	AII-70
AII-62	Total Calcium Mean History through 2000	AII-71
AII-63	Total Magnesium Mean History through 2000	AII-72
AII-64	Hardness Mean History through 2000	AII-73
AII-65	Gross Alpha Radioactivity Mean History through 2000	AII-74
AII-66	Gross Beta Radioactivity Mean History through 2000	AII-75
AII-67	Total Silver Mean History through 2000	AII-76
AII-68	Total Arsenic Mean History through 2000	AII-77
AII-69	Total Barium Mean History through 2000	AII-78
AII-70	Total Boron Mean History through 2000	AII-79
AII-71	Total Cadmium Mean History through 2000	AII-80
AII-72	Total Copper Mean History through 2000	AII-81
AII-73	Total Chromium Mean History through 2000	AII-82
AII-74	Total Iron Mean History through 2000	AII-83

LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
AII-75	Soluble Iron Mean History through 2000	AII-84
AII-76	Total Lead Mean History through 2000	AII-85
AII-77	Total Nickel Mean History through 2000	AII-86
AII-78	Total Manganese Mean History through 2000	AII-87
AII-79	Total Mercury Mean History through 2000	AII-88
AII-80	Total Zinc Mean History through 2000	AII-89
AII-81	Total Selenium Mean History through 2000	AII-90
AIII-1	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for North Side Water Reclamation Plant in 2000	AIII-1
AIII-2	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for Stickney Water Reclamation Plant in 2000	AIII-3
AIII-3	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for Calumet Water Reclamation Plant in 2000	AIII-5
AIII-4	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for John E. Egan Water Reclamation Plant in 2000	AIII-7
AIII-5	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for James C. Kirie Water Reclamation Plant in 2000	AIII-9



LIST OF TABLES (Continued)

<u>Table</u> <u>No.</u>		<u>Page</u>
AIII-6	Significance Probabilities of Water Quality Parameters at Upstream (U) and Downstream (D) Locations for Hanover Park Water Reclamation Plant in 2000	AIII-11

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE LOCATOR IN APPENDIX AII - BY PARAMETER

Parameter	Sample Means during 2000	Violation History through 2000	Mean History through 2000
	Page	Page	Page
Biochemical Oxygen Demand	AII-1		AII-41
Dissolved Oxygen	AII-1	AII-11	AII-42
Chemical Oxygen Demand	AII-1		AII-43
Temperature	AII-1	AII-12	AII-44
pH	AII-1	AII-13	AII-45
Chloride	AII-2	AII-14	AII-46
Turbidity	AII-2		AII-47
Conductivity	AII-2		AII-48
Alkalinity (Total)	AII-2		AII-49
Total Kjeldahl Nitrogen	AII-2		AII-50
Ammonium Nitrogen	AII-3	AII-15	AII-51
Un-ionized Ammonia	AII-3	AII-16	AII-52
Organic Nitrogen	AII-3		AII-53
Nitrite Plus Nitrate Nitrogen	AII-3		AII-54
Total Solids	AII-3		AII-55
Total Volatile Solids	AII-4		AII-56
Total Suspended Solids	AII-4		AII-57
Volatile Suspended Solids	AII-4		AII-58
Total Dissolved Solids	AII-4	AII-17	AII-59
Total Dissolved Volatile Solids	AII-4		AII-60
Phenols	AII-5	AII-18	AII-61
Sulfate	AII-5	AII-19	AII-62
Fats, Oils, and Greases	AII-5	AII-20	AII-63
Total Phosphorus	AII-5		AII-64
Soluble Phosphorus	AII-5		AII-65

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE LOCATOR IN APPENDIX AII - BY PARAMETER (Continued)

Parameter	Sample Means during 2000	Violation History through 2000	Mean History through 2000
	Page	Page	Page
Total Cyanide	AII-6	AII-21	AII-66
Weak Acid Dissociable Cyanide	AII-6	AII-22	AII-67
Fluoride	AII-6	AII-23	AII-68
Total Organic Carbon	AII-6		AII-69
Fecal Coliform	AII-6	AII-24	AII-70
Total Calcium	AII-7		AII-71
Total Magnesium	AII-7		AII-72
Hardness	AII-7		AII-73
Gross Alpha Radioactivity	AII-7		AII-74
Gross Beta Radioactivity	AII-7	AII-25	AII-75
Total Silver	AII-8	AII-26	AII-76
Total Arsenic	AII-8	AII-27	AII-77
Total Barium	AII-8	AII-28	AII-78
Total Boron	AII-8	AII-29	AII-79
Total Cadmium	AII-8	AII-30	AII-80
Total Copper	AII-9	AII-31	AII-81
Total Chromium	AII-9	AII-32	AII-82
Total Iron	AII-9	AII-33	AII-83
Soluble Iron	AII-9	AII-34	AII-84
Total Lead	AII-9	AII-35	AII-85
Total Nickel	AII-10	AII-36	AII-86
Total Manganese	AII-10	AII-37	AII-87
Total Mercury	AII-10	AII-38	AII-88
Total Zinc	AII-10	AII-39	AII-89
Total Selenium	AII-10	AII-40	AII-90

## LIST OF FIGURES

<u>Figure No.</u>		<u>Page</u>
1	Map of Waterways Service Area and Sampling Location Points	7
2	Compliance Rates of Water Quality Standards for General Use Waters Section of Chicago River in 1999 and 2000	43
3	Compliance Rates of Water Quality Standards for General Use Waters Section of Calumet River in 1999 and 2000	45
4	Compliance Rates of Water Quality Standards for General Use Waters Section of Des Plaines River in 1999 and 2000	47
5	Compliance Rates of Water Quality Standards for Secondary Contact Waters Section of Chicago River in 1999 and 2000	54
6	Compliance Rates of Water Quality Standards for Secondary Contact Waters Section of Calumet River in 1999 and 2000	56

#### ACKNOWLEDGMENTS

We recognize and appreciate the efforts of the staff of the Analytical Laboratories, Industrial Waste, and Environmental Monitoring and Research Divisions for the collection and analysis of waterways samples.

Thanks are due to Ms. Joan V. Scrima for typing the manuscript.

#### DISCLAIMER

Mention of proprietary equipment and chemicals in this report does not constitute endorsement by the Metropolitan Water Reclamation District of Greater Chicago.

## SUMMARY AND CONCLUSIONS

Surface water quality data gathered by the Metropolitan Water Reclamation District of Greater Chicago (District) for the waterway systems within its jurisdiction have been evaluated for compliance with Illinois Pollution Control Board (IPCB) water quality standards for the year 2000. In addition, the District compared these data with data for 1999.

### Compliance with Water Quality Standards During 2000

#### GENERAL USE WATERS

Twenty-eight water quality parameters assayed had applicable IPCB standards. Water sample points were located throughout the five river systems including the General Use sectors of the Chicago River System, the Calumet River System, the Des Plaines River System, the West Branch of DuPage River System, and the Fox River System (Poplar Creek). Fifteen water quality parameters were in total compliance with the standards in all river systems. They were temperature, ammonium nitrogen, phenols, and 12 metals (total arsenic, total barium, boron, total cadmium, total chromium [trivalent and hexavalent], soluble iron, total lead, total nickel, total manganese, total mercury, total zinc, and total selenium).

Ten of the remaining 13 parameters, viz., dissolved oxygen, pH, chloride, un-ionized ammonia, sulfate, weak acid dissociable cyanide, fluoride, total silver, total copper, and total iron had compliance rates of greater than 85 percent in all river systems. Total dissolved solids had a compliance rate greater than 72.4 percent in all river systems. Fecal coliform had the lowest compliance rate, and it was in the range of 31.8 to 58.3 percent in the Chicago, Calumet, and the Des Plaines River Systems. Gross beta radioactivity was in total compliance in the Chicago and the Des Plaines River Systems. No measurements of gross beta radioactivity were taken for the General Use Waters of the Calumet River System.

A comparison of 2000 data with 1999 data indicated that there was no significant difference between 1999 and 2000 compliance rates except for total dissolved solids, fluoride, un-ionized ammonia, fecal coliform, and total silver, all of which had significantly decreased in 2000. In the Chicago River System, the compliance rate of total dissolved solids has decreased from 94.5 percent in 1999 to 72.4 percent in 2000. In the Calumet River System the compliance rate of fluoride decreased from 94.4 percent in 1999 to 82.8 percent in 2000, and the compliance rate of total silver decreased from total compliance in 1999 to 90.3 percent in 2000. In the

Des Plaines River System, the compliance rate of un-ionized ammonia has decreased from total compliance in 1999 to 98.0 percent in 2000, the compliance rate of fecal coliform has decreased from 47.7 percent in 1999 to 34.8 percent in 2000, and the compliance rate of total dissolved solids has also decreased from 94.2 percent in 1999 to 87.4 percent in 2000.

#### SECONDARY CONTACT AND INDIGENOUS AQUATIC LIFE WATERS

This water use classification is principally applied to the man-made navigable canal system in the Chicago and the Calumet River Systems. Twenty-two water quality parameters measured in the secondary contact waters during 2000 had applicable IPCB standards.

Fifteen parameters were in complete compliance with the IPCB standards for the Chicago and the Calumet River Systems in 2000. They were temperature, phenols, total cyanide, fluoride, and 11 metals (total silver, total arsenic, total barium, total cadmium, total copper, total chromium, total iron, total nickel, total mercury, total zinc, and total selenium).

A comparison of 2000 data with 1999 data indicated that there was no significant difference between the 1999 and 2000 compliance rates in both river systems except for total iron, which improved. The compliance rate of total iron increased from 96.3 in 1999 to total compliance in 2000 in the Chicago River System.



## INTRODUCTION

It is the responsibility of the District to conduct surveillance regarding the water quality of the streams and canals within its jurisdiction. Consequently, annual reports of the District's Research and Development Department have included sections dealing with summary results of these surveillances for certain selected water quality parameters. Detailed annual water quality summaries (similar to this report) of all water quality data collected have been published by the District for the years 1972 through 1999. Complete tabulations of waterway surveillance data collected by the District are available for the years 1970 through 2000.

It should be noted that the Illinois Environmental Protection Agency (IEPA) has also conducted water quality sampling programs within the District's waterways, and has published annual summaries of its water quality network computerized database since 1971. These findings were consistent and supportive of the District's evaluation.

The primary purpose of this report is to establish a repository for the waterways data, and to present them in a variety of formats judged to be most useful to the reader. The tables included in the appendices are self-contained to facilitate reproduction and transmittal of specific data requests.

In addition to the data formats included in Appendices AI, AII, and AIII, custom data presentation formats are available in hardcopy and electronic media.

## WATER QUALITY NETWORK

### Description of Waterways

The District is responsible for monitoring the quality of the waterways within the confines of Cook County. A map depicting the waterways is shown in Figure 1. These include both man-made and natural waterways.

Principal man-made water courses are: the North Shore Channel, connecting Lake Michigan at Wilmette to the North Branch of the Chicago River; the Chicago Sanitary and Ship Canal (Main Channel), extending from Damen Avenue to the Lockport Powerhouse; and the Cal-Sag Channel, connecting the Little Calumet River with the Main Channel.

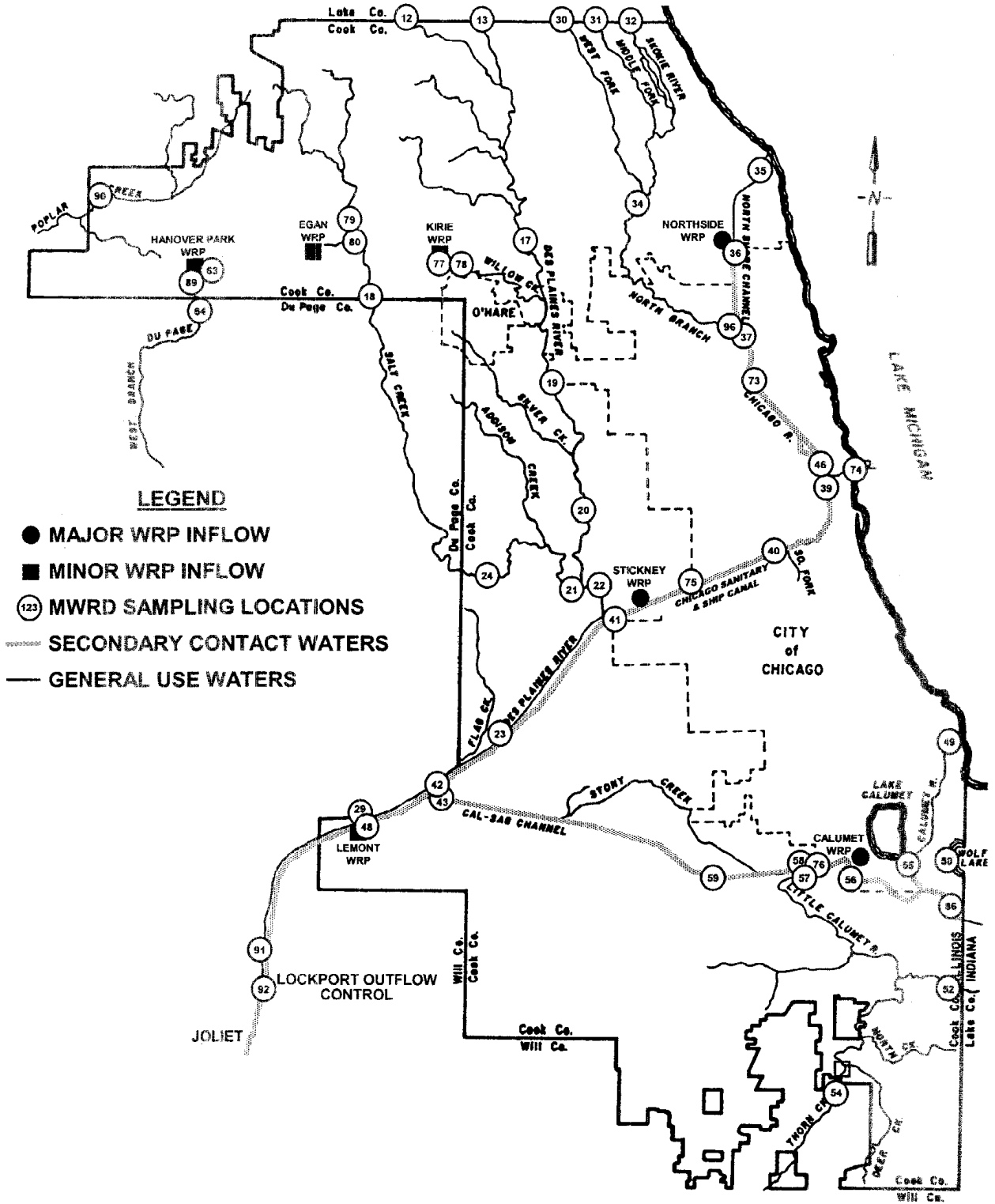
The functions of the canal system are to:

- Provide navigational facilities for boats and barges.
- Serve as receiving waters from the tributary streams and water reclamation plant effluents, combined sewer overflows, and storm water runoffs.
- Convey the flows from the Lake Michigan watershed to the Des Plaines watershed through the terminus at the Lockport Powerhouse.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 1

WATERWAYS SERVICE AREA AND SAMPLING LOCATION POINTS



The principal natural river systems germane to the District's surveillance programs are: the Chicago River System, branches flowing south from Lake County into the North Branch of the Chicago River; the Des Plaines River System, flowing south from Lake County and joining with the discharge from the Main Channel downstream of the powerhouse at Lockport; and the Calumet River System, which flows into the Cal-Sag Channel.

#### WATER USE DESIGNATIONS

IPCB Regulations, Section 303.201 specifies that "Except as otherwise specifically provided, all waters of the State must meet the General Use standards for Subpart B of Part 302." Section 303.441 delineates those waters which do not qualify for General Use but "... are designated as Secondary Contact and Indigenous Aquatic Life Waters (Secondary Contact Waters) and must meet the water quality standards of Subpart D, Part 302." The waters within District boundaries classified for use as Secondary Contact Waters are shown in Figure 1. In general, the Secondary Contact Waters coincide with the man-made canals or dredged waterways in the Chicago and Calumet River Systems. A complete listing of the District's waterways sampling station water use designations is shown in Table AI-2, Appendix AI.

### Scope of Waterways Data

The waterways data management system was designed to store and manage data resulting from the assays of water samples taken at locations throughout the District's waterways. In addition to storage, retrieval, and update capabilities, the system includes programs for:

- The generation of reports and graphics.
- The generation of annual summary statistics.
- Comparisons of water quality with state of Illinois stream standards.
- Comparisons of water quality with the results of previous years.

The major computations of data are presented in Appendices AII and AIII, and in tables appearing in the main body of this report.

The water quality parameter directory network is shown in Appendix AI. Water quality parameters and sampling stations are listed in Tables AI-1 and AI-2, respectively. Names of many locations have been changed in 2000. Table AI-3 is thus provided to show the new names against the old names.

Summary water quality results for 2000 are listed in Appendix II. Annual mean values of all water quality parameters

assayed at all stations sampled (grab samples only) are tabulated in Table AII-1. This table presents the numerical values of various water quality parameters, which can be used to determine any relationships that exist among them. The results of the violations of the standards are tabulated in Tables AII-2 through AII-31. Note that Tables AII-2 through AII-31 list the sampling locations where violations occurred during 2000 and their eight-year history.

In comparing data from a historical perspective, it is often desirable to view summary data from past years together with data from the current year. Tables AII-32 through AII-81 (Appendix II) were designed to present the mean values of various parameters for 1990 through 1999, with the 2000 mean values for each parameter and all locations sampled.

Finally, Tables AIII-1 through AIII-6 were prepared to show whether the upstream and downstream means of various water quality parameters for each water reclamation plant (WRP) are significantly different.

#### Water Sampling

Surface water grab samples were taken at 54 locations during 2000 as shown in Figure 1. Two additional sampling stations were added in 2000. These are locations 91 (Material

Service Road on Des Plaines River) and 96 (Albany Avenue on North Branch of Chicago River), as shown in Figure 1. The samples were taken on a nominal monthly frequency, with one of the three principal river systems being sampled on a given day. The total number of samples collected monthly in each river system during 2000 is shown in Table 1. Note that samples taken in the West Branch of the DuPage River (upstream and downstream of the Hanover Park WRP outfall), and in the Fox River System (Poplar Creek) are included with the Des Plaines River data. In addition, weekly grab samples were taken at the Lockport Powerhouse because of an inoperative automatic sampler. Reconstruction of the Lockport Powerhouse during 1998 resulted in the treblar sampler being inactive. Grab sampling at the Lockport Powerhouse was initiated once per week in 1998 as a substitute for the inoperative sampler. This sampling was discontinued in April 2000. Sampling at the Lockport Powerhouse was replaced by collecting weekly grab samples at location 92 (Lockport Forebay) in 2000.

Locations sampled in the respective river systems during 2000 are shown without an asterisk in Table AI-2, Appendix AI. Nineteen sites were sampled in the Chicago River System, 12 in the Calumet, and 23 in the Des Plaines River System (including 4 locations in the DuPage and Fox River Systems). The



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

WATERWAYS (BRIDGE RUNS) TOTAL NUMBER OF SAMPLES  
COLLECTED MONTHLY DURING 2000

Month	Chicago River System	Calumet River System	Des Plaines River System
January	16	20	8
February	16	16	21
March	20	20	23
April	19	20	22
May	19	20	23
June	20	20	24
July	20	20	23
August	21	20	24
September	20	20	23
October	19	20	23
November	20	20	24
December	14	18	9

waterways system sampling location points correspond to the map numbers shown in Figure 1. The complete waterways sampling stations directory of all 104 stations, of which the 54 sampling locations in 2000 are a subset, are listed in Table AI-2, Appendix A-1.

#### Water Assays and Water Quality Criteria

The District's laboratories performed 52 types of analyses on water samples taken in District waterways during 2000. A list of these assays appears in Table 2.

Table 2 shows the acceptable values for each water quality standard as defined by the IPCB in the State of Illinois Rules and Regulations, Title 35 (2). The related IPCB rule numbers with the effective date of each rule are also included.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
<u>Dissolved Oxygen</u>			
General Use Waters <sup>3</sup>	6.0 mg/L <sup>4</sup>	302.206	04/16/72
	5.0 mg/L <sup>4,5</sup>	302.206	04/16/72
Secondary Contact Waters <sup>6</sup>	5.0 mg/L <sup>4,5</sup>	303.441(j)	04/16/72
	4.0 mg/L <sup>4,5</sup>	302.405	01/01/78
	3.0 mg/L <sup>5,7</sup>	302.405	05/19/88
<u>Five-day Biochemical Oxygen Demand</u>			
	No standard		
<u>Chemical Oxygen Demand</u>			
	No standard		
<u>Total Organic Carbon</u>			
	No standard		
<u>Total Kjeldahl Nitrogen</u>			
	No standard		
<u>Ammonium Nitrogen</u>			
General Use Waters <sup>3</sup>	15 mg/L with un-ionized ammonia ≤0.33 mg/L Apr. - Oct. and ≤0.14 mg/L Nov. - Mar.	302.212	12/19/96

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters <sup>6</sup>	2.5 mg/L Apr.- Oct. 4.0 mg/L Nov.-Mar. 0.10 mg/L un- ionized ammonia	302.407	06/21/79   05/19/88
<u>Organic Nitrogen</u>	No standard		
<u>Nitrite plus Nitrate Nitrogen</u>	No standard		
<u>Total Phosphorus</u>	No standard		
<u>Soluble Phosphorus</u>	No standard		
<u>Fecal Coliform Indicator<sup>8</sup></u>			
General Use Waters <sup>3</sup>	200 counts/100 ml <sup>9</sup> 400 counts/100 ml <sup>9</sup> (400 counts/100 ml) <sup>5</sup>	302.209  302.209	04/16/72  04/16/72
Secondary Contact Waters <sup>6</sup>	No standard		
<u>Gross Alpha Radio- activity</u>	No standard		

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
<u>Gross Beta Radioactivity</u>			
General Use Waters <sup>3</sup>	100 picocuries/L	302.207	04/16/72
Secondary Contact Waters <sup>6</sup>	No standard		
<u>pH</u>			
General Use Waters <sup>3</sup>	6.5-9.0	302.204	04/16/72
Secondary Contact Waters <sup>6</sup>	6.0-9.0	302.404	04/16/72
<u>Alkalinity</u>	No standard		
<u>Temperature</u>			
General Use Waters <sup>3</sup>	32°C, Apr. - Nov. <sup>10</sup>	302.211	04/16/72
	16°C, Dec. - Mar. <sup>10</sup>	302.211	04/16/72
Secondary Contact Waters <sup>6</sup>	34°C <sup>11</sup>	302.408	04/16/72
	37.8°C <sup>11</sup> (37.8°C) <sup>5</sup>	302.408	04/16/72
<u>Conductivity</u>	No standard		

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
<u>Total Dissolved Solids</u>			
General Use Waters <sup>3</sup>	1,000 mg/L	302.208	04/16/72
Secondary Contact Waters <sup>6</sup>	1,500 mg/L	302.407	06/21/79
<u>Total Dissolved Volatile Solids</u>	No standard		
<u>Total Solids</u>	No standard		
<u>Total Volatile Solids</u>	No standard		
<u>Total Suspended Solids</u>	No standard		
<u>Volatile Suspended Solids</u>	No standard		
<u>Inorganic Suspended Solids</u>	No standard		
<u>Turbidity</u>	No standard		
<u>Chloride</u>			
General Use Waters <sup>3</sup>	500 mg/L	302.208	04/16/72

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters	No standard		
<u>Sulfate</u>			
General Use Waters <sup>3</sup>	500 mg/L	302.208	04/16/72
Secondary Contact Waters <sup>6</sup>	0.1 mg/L	302.407	09/07/78
<u>Total Cyanide</u>			
General Use Waters <sup>3,5</sup>	0.025 mg/L	302.208	04/16/72
	No standard		02/01/96
Secondary Contact Waters <sup>6</sup>	0.1 mg/L	302.407	09/07/78
<u>WAD Cyanide</u>			
General Use Waters <sup>3,5</sup>	0.022 mg/L (weak acid dissociable)	302.208	02/01/96
Secondary Contact Waters <sup>6</sup>	No standard		
<u>Fluoride</u>			
General Use Waters <sup>3</sup>	1.4 mg/L	302.208	04/16/72

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters <sup>6</sup>	15.0 mg/L	302.407	05/24/79
<u>Methylene Blue Active Substances</u>	No standard		
<u>Phenols</u>			
General Use Waters <sup>3</sup>	0.1 mg/L	302.208	04/16/72
Secondary Contact Waters <sup>6</sup>	0.3 mg/L	302.407	05/24/79
<u>Fats, Oils, and Greases</u>			
General Use Waters <sup>3</sup>	No standard		
Secondary Contact Waters <sup>6</sup>	15.0 mg/L <sup>12</sup>	302.407	05/24/79
<u>Total Arsenic</u>			
General Use Waters <sup>3</sup>	1.0 mg/L 0.36 mg/L	302.208	05/24/79 02/04/90
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	05/24/79



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
<u>Total Barium</u>			
General Use Waters <sup>3</sup>	5.0 mg/L	302.208	04/16/72
Secondary Contact Waters	5.0 mg/L	302.407	05/24/79
<u>Total Cadmium</u>			
General Use Waters <sup>3</sup>	0.05 mg/L note <sup>14</sup>	302.208	04/16/72 02/04/90
Secondary Contact Waters <sup>6</sup>	0.15 mg/L	302.407	05/24/79
<u>Total Calcium</u>	No standard		
<u>Chromium (Total Hexavalent)<sup>13</sup></u>			
General Use Waters <sup>3</sup>	0.05 mg/L 0.016 mg/L	302.208	04/16/72 02/04/90
Secondary Contact Waters <sup>6</sup>	0.3 mg/L	302.407	05/24/79
<u>Chromium (Total Trivalent)<sup>13</sup></u>			
General Use Waters <sup>3</sup>	1.0 mg/L note <sup>16</sup>	302.208	04/16/72 02/04/90

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	05/24/79
<u>Total Chromium (Hexavalent and Trivalent)</u>			
General Use Waters <sup>3</sup>	1.0 mg/L <sup>5</sup> note <sup>16</sup>	302.208	04/16/72 02/04/90
Secondary Contact Waters <sup>6</sup>	1.0 mg/L <sup>5</sup>	302.407	05/24/79
<u>Total Copper</u>			
General Use Waters <sup>3</sup>	0.02 mg/L note <sup>15</sup>	302.208	04/16/72 02/04/90
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	05/24/79
<u>Total Iron</u>			
General Use Waters <sup>3</sup>	1.0 mg/L No standard	302.208	04/16/72 08/01/93
Secondary Contact Waters <sup>6</sup>	2.0 mg/L	302.407	05/24/79

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
<u>Iron (Dissolved)</u>			
General Use Waters <sup>3</sup>	1.0 mg/L	302.208	08/01/93
Secondary Contact Waters <sup>6</sup>	0.5 mg/L	302.407	05/24/79
<u>Total Lead</u>			
General Use Waters <sup>3</sup>	0.1 mg/L note <sup>17</sup> note <sup>18</sup>	302.208	04/16/72 02/04/90 05/16/96
Secondary Contact Waters <sup>6</sup>	0.1 mg/L	302.407	05/24/79
<u>Total Magnesium</u>	No standard		
<u>Total Manganese</u>			
General Use Waters <sup>3</sup>	1.0 mg/L	302.208	04/16/72
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	05/24/79
<u>Total Mercury</u>			
General Use Waters <sup>3</sup>	0.0005 mg/L 0.0026 mg/L	302.208	04/25/71 05/16/96

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters <sup>6</sup>	0.0005 mg/L	302.407	05/24/79
<u>Total Boron</u>			
General Use Waters	1.0 mg/L		
Secondary Contact Waters	No standards		
<u>Total Nickel</u>			
General Use Waters <sup>3</sup>	1.0 mg/L	302.208	4/16/72
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	5/24/79
<u>Total Selenium</u>			
General Use Waters <sup>3</sup>	1.0 mg/L	302.208	4/16/72
Secondary Contact Waters <sup>6</sup>	1.0 mg/L	302.407	5/24/79
<u>Total Silver</u>			
General Use Waters <sup>3</sup>	0.005 mg/L	302.208	4/16/72

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
Secondary Contact Waters <sup>6</sup>	0.1 mg/L	302.407	5/24/79
<u>Total Zinc</u>			
General Use Waters <sup>2</sup>	1.0 mg/L	302.208	4/16/72
Secondary Contact Waters <sup>3</sup>	1.0 mg/L	302.407	5/24/79

<sup>1</sup>Water Quality Standards from "State of Illinois Rules and Regulations," Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, January 14, 2000.

<sup>2</sup>Section number from 1 above.

<sup>3</sup>General Use Waters Designations, defined in Section 303.201 from 1 above. See Figure 1, for delineation.

<sup>4</sup>The upper value is the standard, which must be equaled or exceeded for 16 hours/day, and the lower value must be equaled or exceeded at all times.

<sup>5</sup>Water quality standard as interpreted by the District. Due to such factors as infrequent sampling, type of assay, etc., strict adherence to IPCB requirements was not possible (see text).

<sup>6</sup>Secondary Contact and Indigenous Aquatic Life Waters Use Designation, defined in Section 303.441 from 1 above. See Figure 1, for delineation.

<sup>7</sup>Cal-Sag Channel only.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING  
WATER QUALITY STANDARDS<sup>1</sup>

Assay	State Standard	Section <sup>2</sup>	Effective Date
			<sup>8</sup> Repealed, October 26, 1982, for both General Use and Secondary Contact. However, because of legal difficulties, the indicated standards were in effect for General Use Waters in 1992.
			<sup>9</sup> The geometric mean of at least five samples taken over a period not exceeding 30 days shall not exceed the upper values. Not more than 10 percent of the samples taken during any 30-day period shall exceed the lower value.
			<sup>10</sup> The upper value cannot be exceeded during more than 1 percent of the hours in the preceding 12-month period. The lower value cannot be exceeded at any time.
			<sup>11</sup> The upper value cannot be exceeded more than 5 percent of the time, and the lower value cannot be exceeded at any time.
			<sup>12</sup> Oil may be analytically separated into polar and nonpolar components. If such separation is done, neither of the components may exceed 15 mg/L (i.e., 15 mg/L polar materials and 15 mg/L nonpolar materials). Compliance with this numerical standard shall be determined on the basis of 24-hour composite samples, averaged over any monthly period, provided that no single 24-hour composite shall be greater than twice the numerical standard and no grab sample shall be greater than five times the numerical standard.
			<sup>13</sup> This water quality parameter was not assayed by the District, but is included in order to show the basis for interpreting a standard for: total chromium (hexavalent and trivalent).
			<sup>14</sup> Cadmium = $\min(0.05, \exp(-2.918 + 1.128\ln[H]))$ .
			<sup>15</sup> Copper = $\exp(-1.464 + 0.9422\ln[H])$ .
			<sup>16</sup> Total Chromium = $\exp(3.688 + 0.8190\ln[H])$ .
			<sup>17</sup> Lead = $\min(0.1, \exp(-1.464 + 1.273\ln[H]))$ .
			<sup>18</sup> Lead = $\exp(-1.301 + 1.273\ln[H])$ : Where, Hardness, mg equivalent CaCO <sub>3</sub> /L [H] = 2.497(Ca, mg/L) + 4.118 (Mg, mg/L).

## SPECIAL INTERPRETATION OF CERTAIN WATER QUALITY STANDARDS

In most cases, the standards are unambiguous; that is, a simple numerical limit or range is given which may not be exceeded or must be met. However, there are 5 water quality parameters (dissolved oxygen [DO], fecal coliform, temperature, total chromium, and dissolved iron) with standards which require interpretation in light of excessive cost of sample collection and sample assay techniques at the said frequency. These costs are related to the excessive manpower requirements, and cost of performing continuous DO measurements. The interpretations of IPCB standards are given in Table 3.

In the case of dissolved oxygen, there are two standards, one based on 16 hours/day and the other based on all times. Since the District samples once per month, the District cannot define a 16-hour/day level. The District, therefore, interprets the IPCB standard for dissolved oxygen as the lower of the two numerical limits in each of the two instances shown.

The standard for fecal coliform is complicated by the required minimum of five samples collected over a 30-day period, and the use of a geometric mean. District protocols stipulate sampling once per month and, therefore, a geometric mean is

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

ILLINOIS POLLUTION CONTROL BOARD (IPCB) WATER QUALITY STANDARDS AND CORRESPONDING DISTRICT'S INTERPRETATION

Water Use Designation	IPCB Standard	District Interpreted Standard
1. Dissolved Oxygen		
General Use Waters	$\geq 6.0$ mg/L at least 16 hours/day	$\geq 5.0$ mg/L anytime
	$\geq 5.0$ mg/L anytime	
Secondary Contact Waters	$\geq 4.0$ mg/L anytime	$\geq 4.0$ mg/L anytime
Secondary Contact Waters	$\geq 5.0$ mg/L at least 16 hours/day	
(North Shore Channel)	$\geq 4.0$ mg/L anytime	$\geq 4.0$ mg/L anytime
(Cal-Sag Channel effective 5/19/88)	$\geq 3.0$ mg/L anytime	$\geq 3.0$ mg/L anytime
2. Fecal Coliform		
General Use Waters	Based on a minimum of five samples in a 30-day period: geometric mean $\leq 200$ counts/100ml; $\leq 400$ counts/100 ml in 90% of the samples	$\leq 400$ counts/100 ml anytime



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3 (Continued)

ILLINOIS POLLUTION CONTROL BOARD (IPCB) WATER QUALITY STANDARDS AND CORRESPONDING DISTRICT'S INTERPRETATION

Water Use Designation	IPCB Standard	District Interpreted Standard
3. Temperature		
Secondary Contact Waters	≤34°C, 95% of the time; ≤37.8°C, 100% of the time	≤37.8°C anytime
4. Total Chromium (Hexavalent and Trivalent)		
General Use Waters	Chromium (total hexavalent) ≤0.016 mg/L Chromium (total trivalent), see footnote 16, <u>Table 2</u>	≤1.0 mg/L anytime ≤1.0 mg/L anytime
Secondary Contact Waters	Chromium (total hexavalent) ≤0.3 mg/L	≤1.0 mg/L anytime
	Chromium (total trivalent) ≤1.0 mg/L	≤1.0 mg/L anytime
5. Dissolved Iron		
General Use Waters	≤1.0 mg/L	≤1.0 mg/L of total iron
Secondary Contact Waters	≤0.5 mg/L	≤2.0 mg/L of total iron

not possible. In view of this, the District interprets the IPCB standard limitation of 400 count/100 ml in General Use Waters.

The standard for temperature also requires compliance with two temperatures for Secondary Contact Waters, depending on the number of observations. In this case, because temperatures are recorded by the District only once per month, the District interprets the IPCB standard as the maximum limit, or 37.8°C at any time.

IPCB water quality standards for chromium are specified separately for the trivalent and hexavalent oxidation states of this metal. The District does not differentiate between oxidation states when assaying for chromium because of the highly reactive nature of the hexavalent chromium, but reports the results as total chromium (trivalent and hexavalent), and interprets the IPCB standards such that the numerical limits for trivalent chromium are applied as total chromium numerical limits. For General Use Waters, the limit for total chromium was revised in 1991. For the purpose of this report, the new limit is calculated as the quantity  $\exp(3.688 + 0.8190 \ln[\text{hardness}])$  expressed in mg/L. Before 1990, the limit was 1.0 mg/L, which is also the current applicable limit for Secondary Contact Waters.

The IPCB dropped the water quality standard of 1.0 mg/L for total iron in General Use Waters in 1993, and introduced a standard of 1.0 mg/L for dissolved iron. As for Secondary Contact Waters, both total iron and dissolved iron have pertinent water quality standards of 2.0 mg/L and 0.5 mg/L, respectively. The District does not assay water samples from bridge runs for dissolved iron, but measures total iron in all samples. Therefore, the District does not assess the compliance with the dissolved iron standards in either General Use Waters or Secondary Contact Waters. Instead, the District assesses the compliance of total iron with 1.0 mg/L in General Use Waters and 2.0 mg/L in Secondary Contact Waters.

In addition, it should be noted that in 1996 the General Use standard for cyanide was changed from total cyanide to Weak Acid Dissociable (WAD) cyanide. Thus, beginning with the 1996 report, compliance determinations are made in terms of WAD cyanide.

## COMPLIANCE WITH WATER QUALITY STANDARDS IN GENERAL USE WATERS

### Sampling Locations and Frequencies

By definition, all sampling locations not in waters classified as Secondary Contact Waters are within General Use Waters. The delineation of these two water use classifications is shown in Figure 1. A tabulation of locations sampled in General Use Waters during 2000 is shown in Table 4. Of the five river systems sampled during 2000, three (Des Plaines, DuPage, and Fox) lie entirely within the General Use classification. The General Use Waters in the Chicago and Calumet River Systems comprise the streams which are tributary to the principal man-made channels and dredged river sections.

In the subsequent evaluation, when the Fox River System is referred to in this report, only one station (Station 90) is considered as General Use. Similarly, in the DuPage River System, data from three sampling locations are considered as General Use; 100 feet upstream (Station 63), 1,000 feet downstream (Station 89), and 7,900 feet downstream of the Hanover Park WRP treated effluent discharge into the West Branch of the DuPage River (Station 64).

The frequency of sampling during 2000 was once per month at most locations. Table 4 shows the frequency of sampling at all General Use locations in 2000.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4

LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF  
GENERAL USE WATERS IN 2000

Map No <sup>1</sup>	Station Name	Annual No. of Samples
<u>Chicago River System</u>		
30	Lake-Cook Road, West Fork North Branch	1
31	Lake-Cook Road, Middle Fork North Branch	10
32	Lake-Cook Road, Skokie River	10
34	Dempster Street, North Branch Chicago River	11
96	Albany Avenue, North Branch Chicago River	6
35	Central Street, North Shore Channel	9
74	Lake Shore Drive, Chicago River	<u>12</u>
		59
<u>Calumet River System</u>		
49	Ewing Avenue, Calumet River	24
50	Burnham Avenue, Wolf Lake	12
55	130th Street, Calumet River	23
52	Wentworth Avenue, Little Calumet River	11
54	Joe Orr Road, Thorn Creek	12
57	Ashland Avenue, Little Calumet River	<u>11</u>
		93
<u>Des Plaines River System</u>		
79	Higgins Road, Salt Creek	10
80	Arlington Heights Road, Salt Creek	12
18	Devon Avenue, Salt Creek	12
24	Wolf Road, Salt Creek	10
21	First Avenue, Salt Creek	10
77	Elmhurst Road, Higgins Creek	10
78	Wille Road, Higgins Creek	12
12	Lake-Cook Road, Buffalo Creek	10
13	Lake-Cook Road, Des Plaines River	12
17	Oakton Steet, Des Plaines River	10
19	Belmont Avenue, Des Plaines River	10
20	Roosevelt Road, Des Plaines River	10
22	Ogden Avenue, Des Plaines River	10
23	Willow Springs Road, Des Plaines River	10

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4 (Continued)

LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF  
GENERAL USE WATERS IN 2000

Map No <sup>1</sup>	Station Name	Annual No. of Samples
<u>Des Plaines River System</u>		
29	Stephen Street, Des Plaines River	10
91	Material Service Road, Des Plaines River	<u>50</u>
		208
<u>Du Page River System</u>		
63	Longmeadow Lane, West Branch Du Page River	9
89	Walnut Lane, West Branch Du Page River	12
64	Lake Street, West Branch Du Page River	<u>11</u>
		32
<u>Fox River System</u>		
90	Route 19, Poplar Creek	<u>7</u>
		7

<sup>1</sup>Refer to Figure 1.

### River System Compliance Data

In the General Use Waters sampled during 2000, 28 parameters were covered by the State of Illinois Water Quality Standards. Summary results, including means, number of observations, and number of violations of standards are shown in Appendix AII at each sampling station of each of the three river systems.

The 15 parameters which were in 100 percent compliance in all river systems were: temperature, ammonium nitrogen, phenols, total arsenic, total barium, boron, total cadmium, total chromium (trivalent and hexavalent), soluble iron, total lead, total nickel, total manganese, total mercury, total zinc, and total selenium.

The 13 water quality parameters, which were in less than complete compliance with General Use Water Quality Standards during 2000, are shown in Table 5. The percent compliance of these parameters in each river system is also presented.

#### CHICAGO RIVER SYSTEM

There are seven locations (30, 31, 32, 34, 96, 35, and 74) in the General Use section of the river system. Twenty-one parameters were in 100 percent compliance at each of the

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 5

WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE  
IN GENERAL USE WATERS OF  
ALL RIVER SYSTEMS IN 2000

Parameter	Estimated Percent Compliance*		
	Chicago	Calumet	Des Plaines
Dissolved Oxygen	85.3	89.6	96.1
pH	100.0	91.7	95.1
Chloride	89.3	100.0	95.6
Un-ionized Ammonia	100.0	100.0	98.0
Total Dissolved Solids	72.4	77.8	87.4
Sulfate	100.0	95.8	100.0
Weak Acid Dissociable Cyanide	100.0	98.6	100.0
Fluoride	100.0	82.8	100.0
Fecal Coliform	31.8	58.3	34.8
Gross Beta Radioactivity	100.0	ND	100.0
Total Silver	95.8	90.3	97.9
Total Copper	97.2	95.8	100.0
Total Iron	97.2	83.3	88.6

ND = No Data

\*Based on the total number of samples in compliance divided by the total number of samples collected, multiplied by 100.



locations. In addition to the 15 parameters listed above, pH, un-ionized ammonia, sulfate, weak acid dissociable cyanide, fluoride, and gross beta radioactivity were the other 6 parameters also in total compliance. Many violations of the pertinent standards of the remaining 7 parameters (dissolved oxygen, chloride, total dissolved solids, fecal coliform, total silver, total copper, and total iron) occurred at sampling locations 30, 31, 32, 34, 96, 35, and 74.

The compliance rate for the total dissolved solids standard was 72.4 percent. The compliance rate of fecal coliform for the river system was 31.8 percent. The compliance rates of other parameters (dissolved oxygen, chloride, total silver, total copper, and total iron) ranged from 85.3 percent to 97.2 percent.

The 10 violations of dissolved oxygen occurred in various months of 2000. Location 31 had 4 violations in June, July, August, and September. Location 32 had 3 violations in May, August, and September. Locations 34, 96, and 35 had 1 violation each in September, July, and June, respectively.

Chloride had 4 violations, one each at locations 30 and 34 in December and February, respectively, and 2 at location 32 in January and April.

Total dissolved solids had 13 violations in various months. Location 32 had 4 violations in January, March, April, and May.

Location 34 had also 4 violations, 1 each in every month from January to April. Location 31 had 3 violations in January, March, and April, and location 30 and 96 had 1 violation each in December.

Fecal coliform had 40 violations, which occurred in every month of 2000. Location 34 had 11 violations in every month except December. Location 32 had 8 violations, one each in every month in January, March through July, October, and November. Location 31 had 7 violations, 1 violation each in January, March, April, June, July, August, and November. Location 96 had 6 violations in July, September, October, November, and December. Location 35 had 5 violations in June, July, September, October, and November. Location 74 had 2 violations in May and December. Location 30 had only 1 violation in December.

Total silver had 2 violations, 1 each in November at locations 31 and 32.

Total copper had 1 violation at location 74 in October.

Total iron also had 1 violation at location 30 in December.

Overall, there was no significant difference between 2000 and 1999 compliance rates except for total dissolved solids. The compliance rate of total dissolved solids has decreased from 94.5 percent in 1999 to 72.4 percent in 2000.

## CALUMET RIVER SYSTEM

Six sampling locations i.e., 49, 50, 52, 54, 55, and 57, are in General Use section of the river system. In addition to the 15 parameters previously listed, which were in complete compliance in all river systems, 2 more parameters (chloride, and un-ionized ammonia) were in total compliance for the General Use section of the Calumet River System.

However, the compliance rates for dissolved oxygen, pH, total dissolved solids, sulfate, weak acid dissociable cyanide, fluoride, fecal coliform, total silver, total copper, and total iron were 89.6, 91.7, 77.8, 95.8, 98.6, 82.8, 58.3, 90.3, 95.8, and 83.3 percent, respectively. No measurement for gross beta radioactivity was taken for General Use Waters of the river system.

Dissolved oxygen had 10 violations, 5 at location 52 in June, August, September, October, and November; 4 at location 57 in July, August, September, and October; and 1 at location 55 in December. Four violations of pH occurred, 1 each at locations 49, 50, 54, and 57 in January and February.

Total dissolved solids had 15 violations, 6 each at locations 54 and 57, and 3 at location 52 covering all months of the year.

Sulfate had 2 violations at location 54 in February and December.

WAD cyanide had only 1 violation at location 52 in October.

Fluoride had 12 violations, 7 at location 52 in January, March, April, September, October, November, and December; and 5 at location 57 in April, September, October, November, and December.

Fecal coliform had 29 violations, 10 at location 52, 9 at location 54, 8 at location 57, and 2 at location 55, covering all months of the year.

Total silver had 7 violations, 2 each at locations 49, 52, and 57, and 1 at location 54.

Total copper had 3 violations, 1 each at locations 49, 50, and 52.

Total iron had 12 violations, location 52 had 8 violations, location 54 had 2 violations, and locations 49 and 57 had 1 violation each.

Overall, there was no significant difference between 2000 and 1999 compliance rates except for fluoride and total silver. The compliance rate of fluoride decreased from 94.4 percent in 1999 to 82.8 percent in 2000, and the compliance rate of total

silver decreased from total compliance in 1999 to 90.3 percent in 2000.

#### DES PLAINES RIVER SYSTEM

Sixteen sampling locations on the Des Plaines River, 3 sampling locations on the DuPage River, and 1 sampling location on Poplar Creek are included in the sampling locations.

In addition to the 15 parameters previously listed, which were in total compliance in all river systems, 5 other parameters (sulfate, weak acid dissociable cyanide, fluoride, gross beta radioactivity, and total copper) were also in total compliance. However, the remaining 8 parameters were less than 100 percent compliance.

The compliance rate of fecal coliform was 34.8 percent.

The compliance rates were 96.1, 95.1, 95.6, 98.0, 87.4, 97.9, and 88.6 percent for dissolved oxygen, pH, chloride, un-ionized ammonia, total dissolved solids, total silver, and total iron, respectively.

Dissolved oxygen had 11 violations, 4 at location 79; 2 each at locations 19 and 20; and 1 each at locations 21, 23, and 77. These violations of dissolved oxygen occurred in May, June, July, and August.

Eleven violations of pH occurred, 3 at location 12; 2 violations at location 91; and 1 each at locations 13, 18, 64, 79, 80, and 89.

Chloride had 10 violations, 2 each at locations 77, 79, and 91; and 1 each at locations 18, 21, 24, and 80.

Un-ionized ammonia had 5 violations, 1 each at locations 18, 64, 79, 80, and 89. All 5 violations of un-ionized ammonia had occurred in February.

Total dissolved solids had 27 violations, 7 at location 91; 3 each at locations 77 and 79; 2 each at locations 12, 18, 21, 24, and 78; and 1 each at locations 22, 29, 63, and 80.

Fecal coliform had 153 violations, 19 at location 91; 9 each at locations 18 and 21; 8 each at locations 19, 20, 22, 23, 24, 63, 64, 80, and 89; 7 each at locations 29 and 78; 6 each at locations 13, 17, and 77; 5 at location 79; 4 at location 12; and 3 at location 90.

Total silver had 4 violations, 2 at location 91 and 1 each at locations 21 and 64.

Total iron had 23 violations, 7 at location 91; 4 each at locations 12 and 79; 2 each at locations 13, 17, 63, and 64; and 1 each at locations 18, 20, 21, 23, 29, 77, and 90.

The compliance rates of all parameters in 2000 were not significantly different from those in 1999 except for un-

ionized ammonia, total dissolved solids, and fecal coliform. The compliance rate of un-ionized ammonia has decreased from total compliance in 1999 to 98.0 percent in 2000. The compliance rate of total dissolved solids decreased from 94.2 percent in 1999 to 87.4 percent in 2000. The compliance rate of fecal coliform has also decreased from 47.7 percent in 1999 to 34.8 percent in 2000.

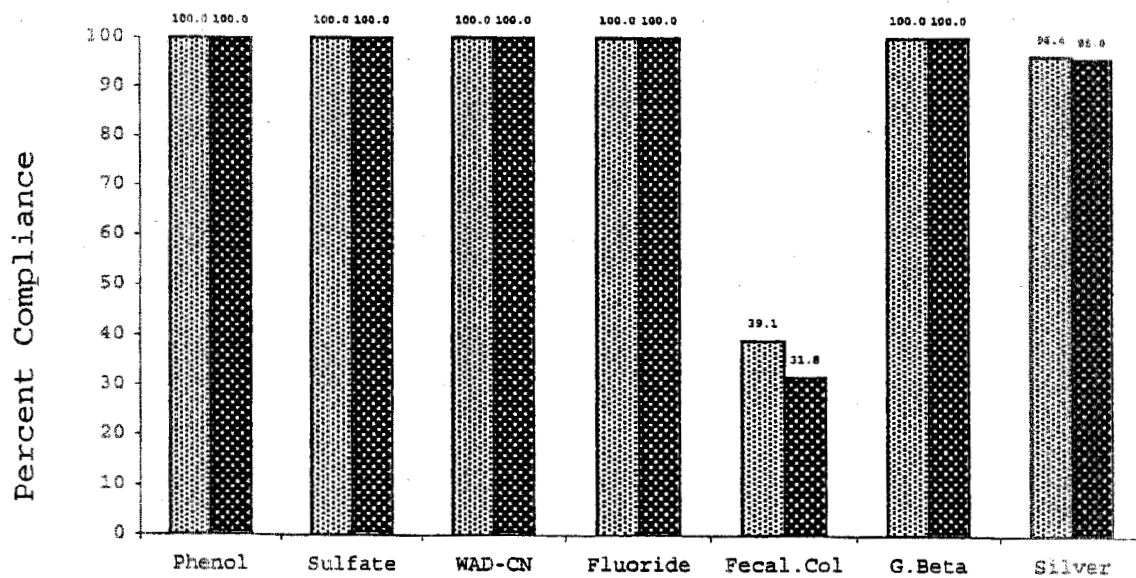
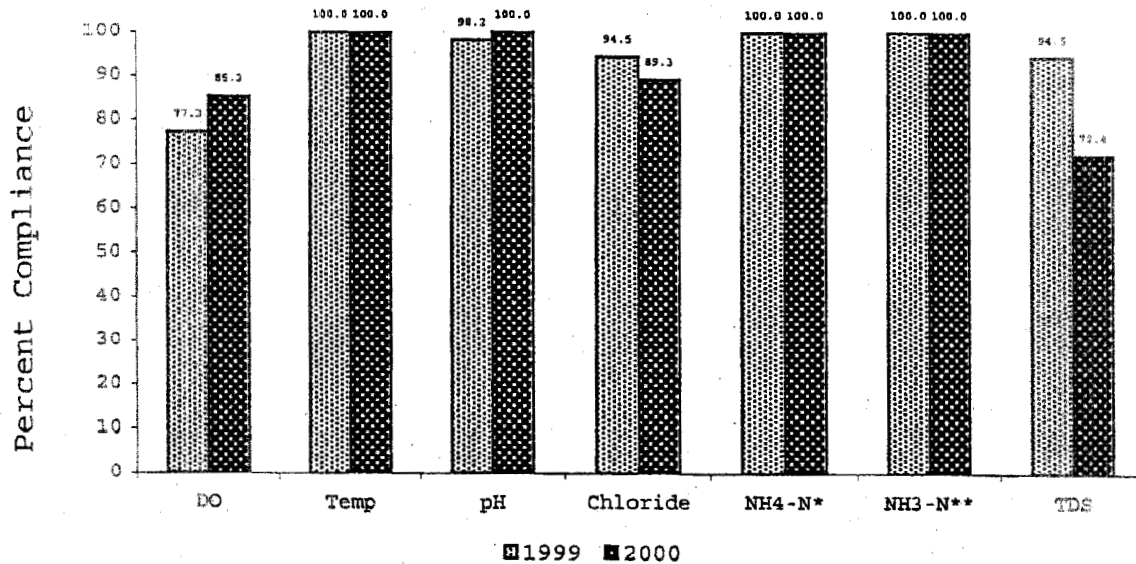
The compliance rates of 28 water quality parameters for the Chicago and the Des Plaines River Systems are presented in Figures 2 and 4, respectively. Since no samples are taken for gross beta radioactivity in the Calumet River System, the compliance rates of 27 water quality parameters are presented in Figure 3.

The ratio of violations (number of violations/total number of observations that occurred at each sampling location on the three river systems for the last eight years, 1993 through 2000) are presented in Appendix II, Tables AII-2 through AII-31.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CHICAGO RIVER IN 1999 AND 2000



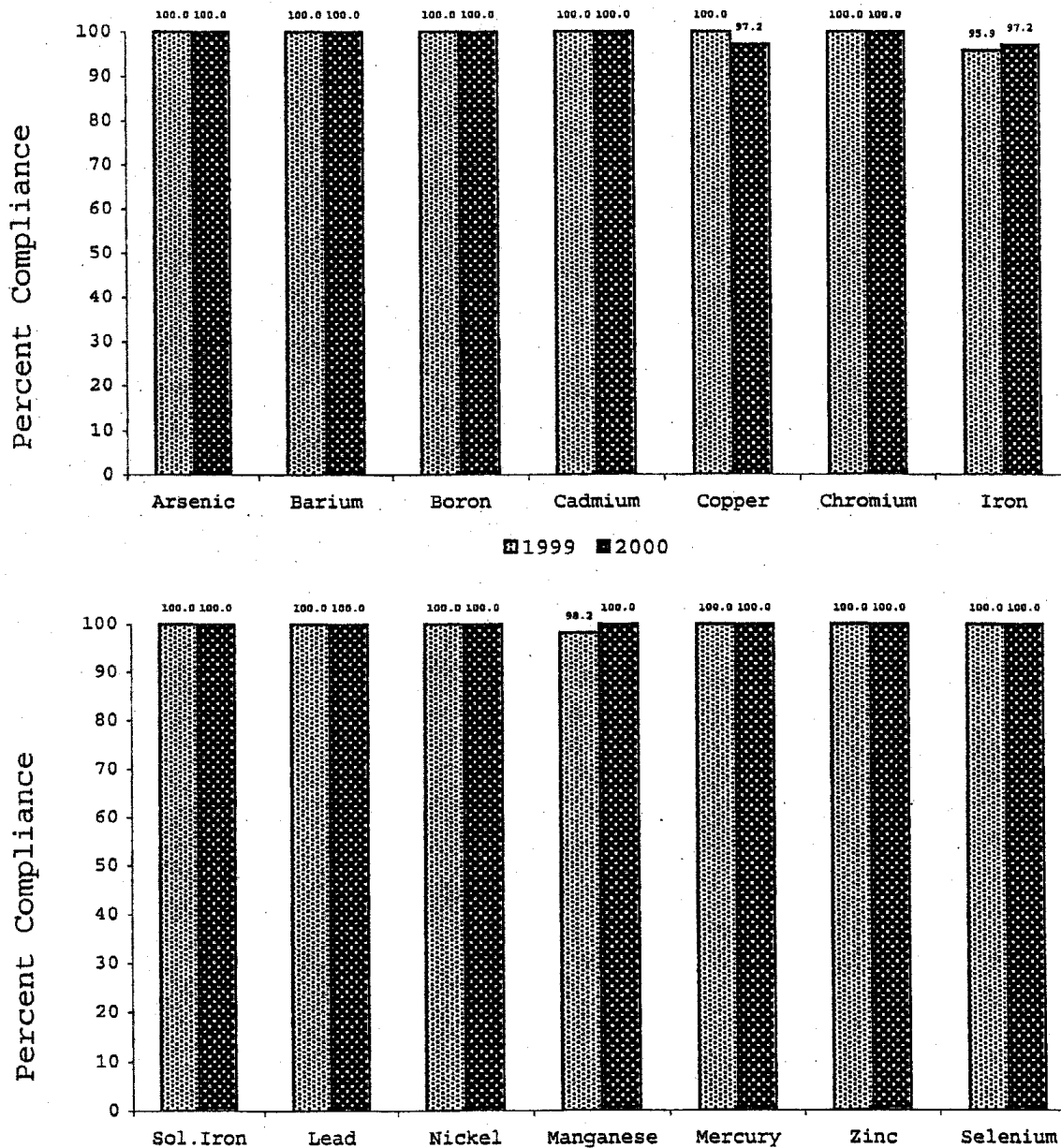
\*NH4-N = Ammonium Nitrogen  
 \*\*NH3-N = Un-ionized Ammonia



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2 (Continued)

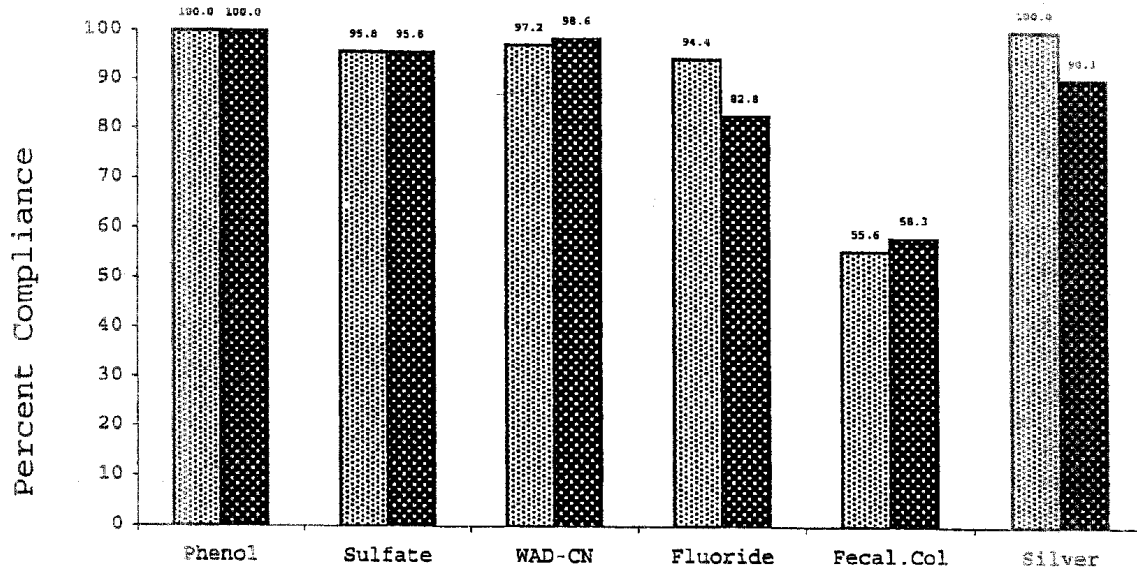
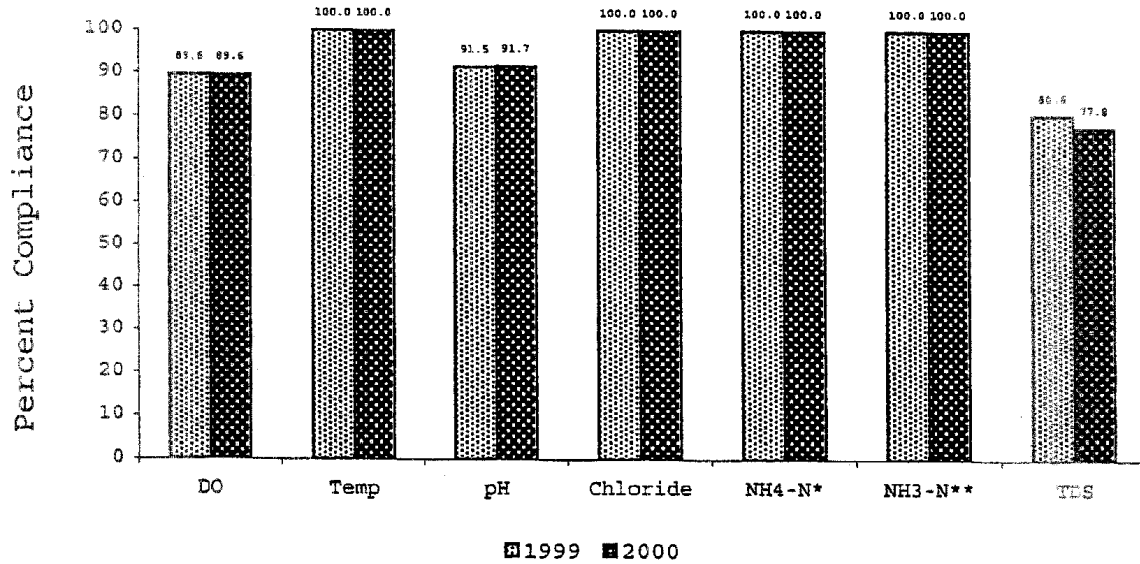
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CHICAGO RIVER IN 1999 AND 2000



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CALUMET RIVER IN 1999 AND 2000

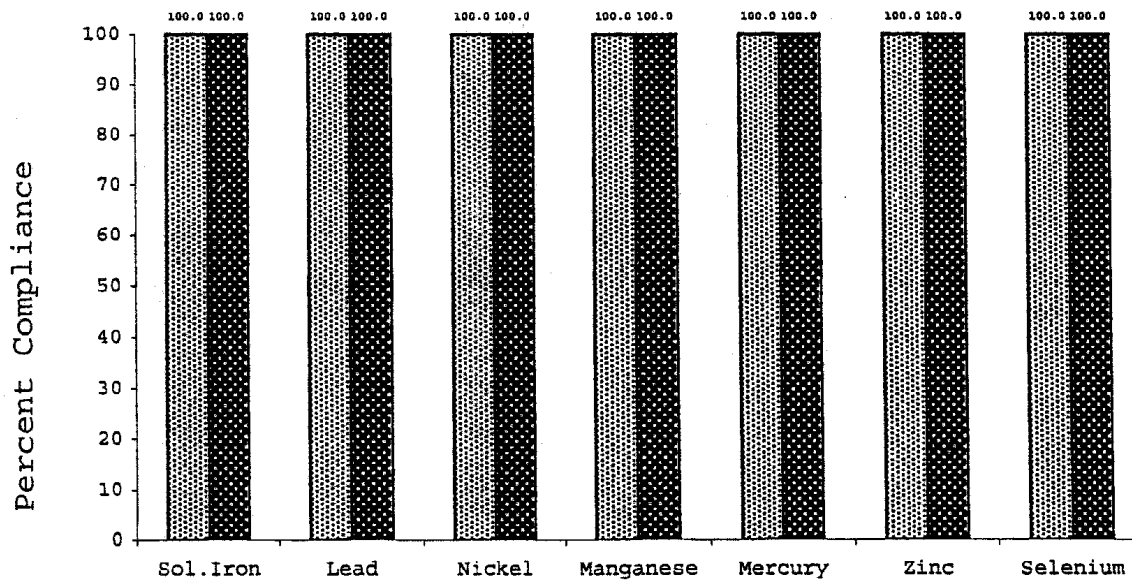
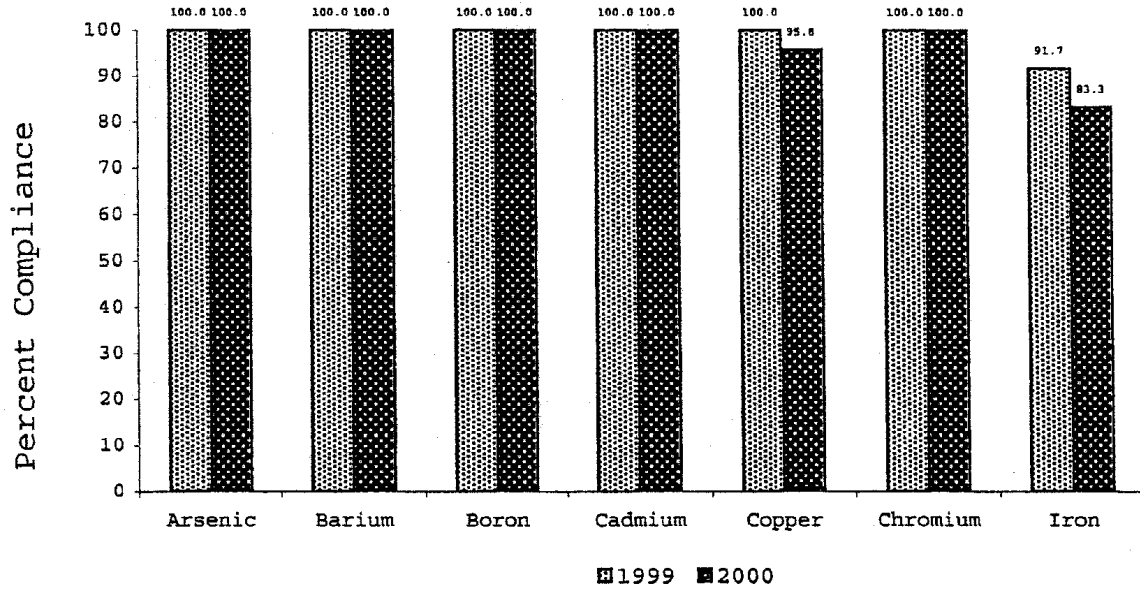


\*NH4-N = Ammonium Nitrogen  
 \*\*NH3-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3 (Continued)

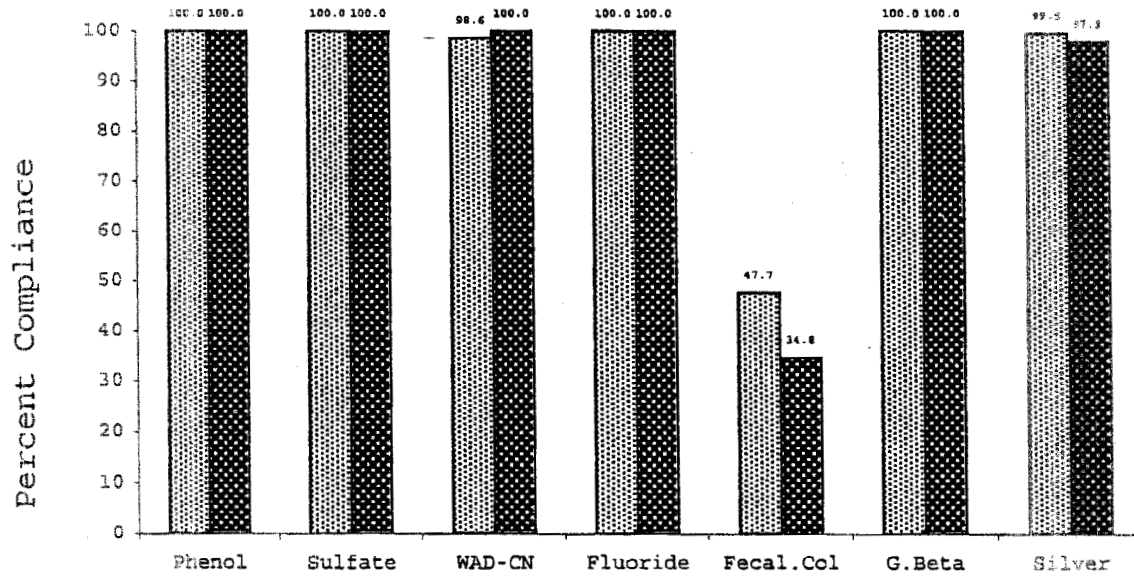
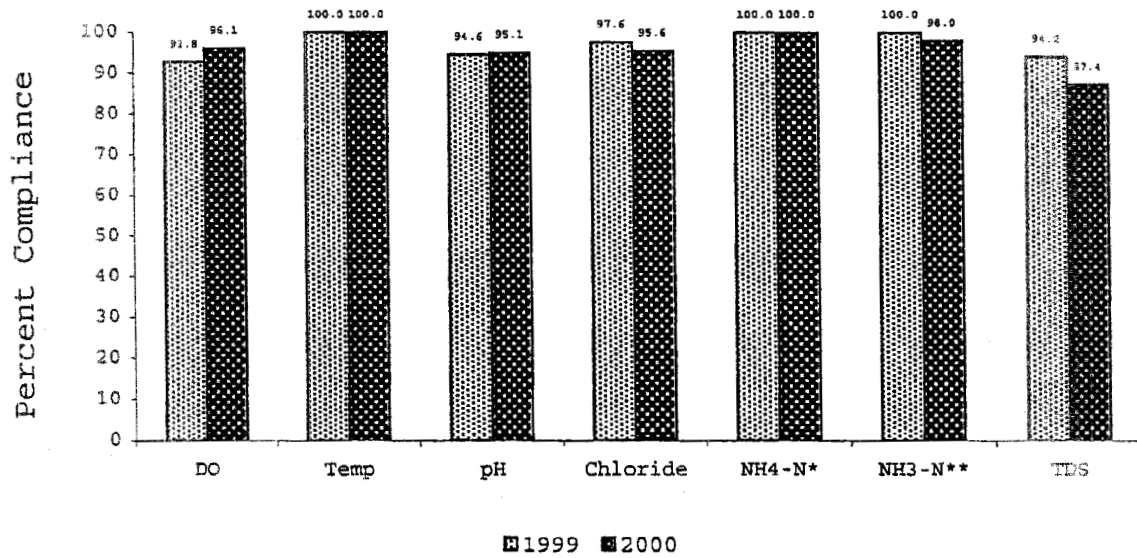
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CALUMET RIVER IN 1999 AND 2000



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 4

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF DES PLAINES RIVER IN 1999 AND 2000

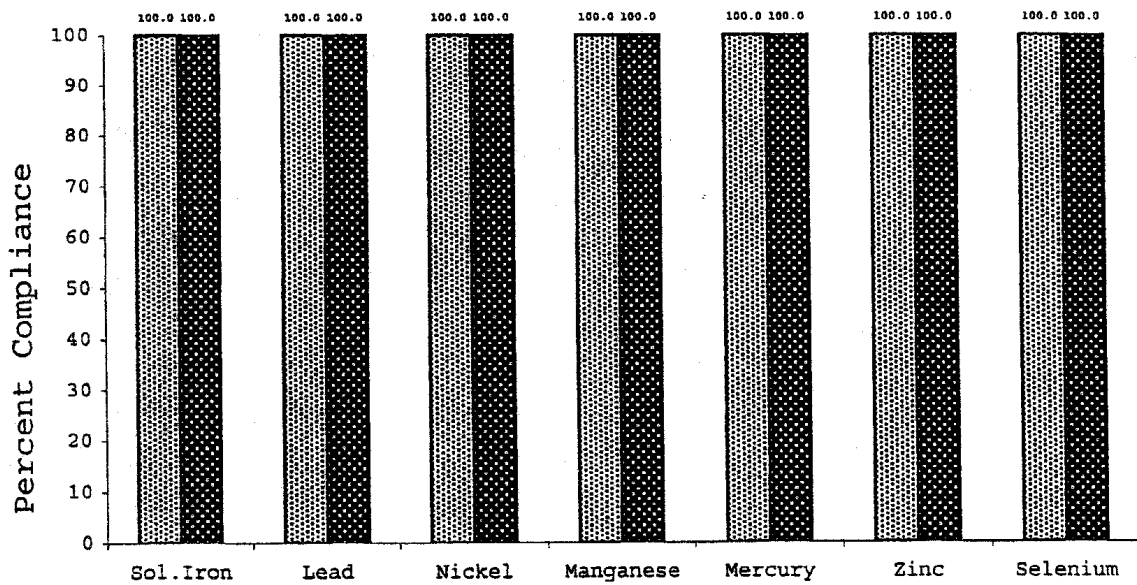
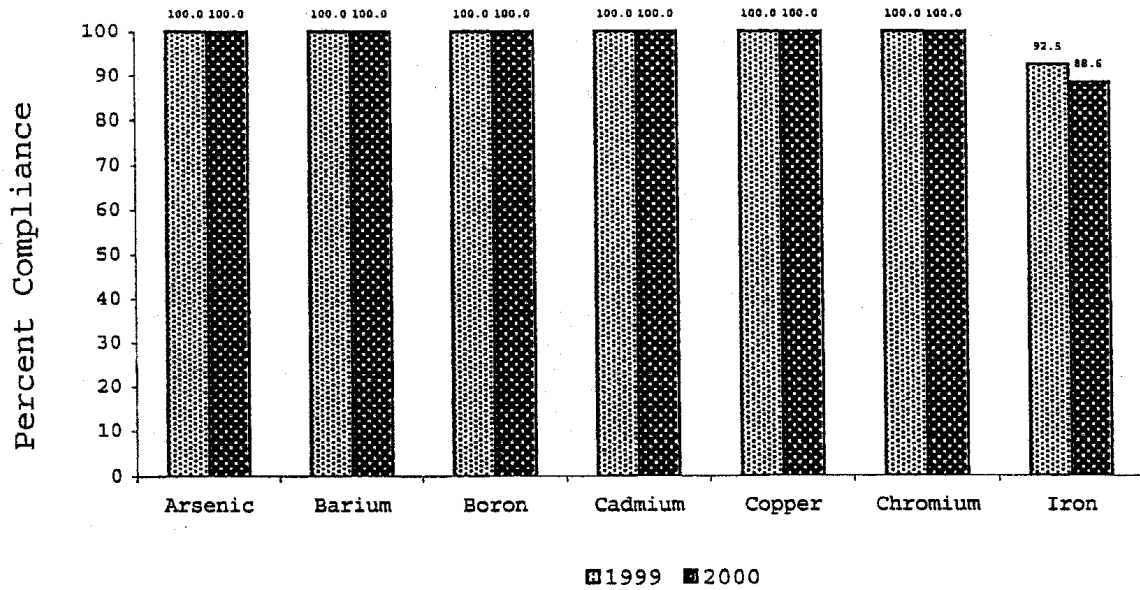


\*NH4-N = Ammonium Nitrogen  
 \*\*NH3-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 4 (Continued)

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF DES PLAINES RIVER IN 1999 AND 2000



## COMPLIANCE WITH WATER QUALITY STANDARDS IN SECONDARY CONTACT WATERS

### Sampling Locations and Frequencies

As shown in Figure 1, the waters designated as Secondary Contact Waters include the principal man-made canals in the Chicago and Calumet River Systems. The sampling locations used during 2000, and the annual frequencies of sampling are shown in Table 6. Also, Tables AII-2 through AII-31 show the number of violations and the annual frequencies of sampling. Ten stations were sampled routinely once a month in the Chicago River System, while six stations were sampled monthly in the Calumet River System. In 2000, grab samples were collected at the Lockport Powerhouse (Chicago River System) once per week, but sampling at this location was discontinued after April 2000. Sampling at the Lockport Powerhouse was replaced by collecting weekly grab samples at location 92 (Lockport Forebay) in 2000, as noted previously.

### River System Compliance Data

In Secondary Contact Waters sampled during 2000, 22 parameters had IPCB Water Quality Standards. Summary results, including means and compliance standards, are shown in Appendix II for the Chicago and Calumet River Systems.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 6

LOCATIONS SAMPLED AND ANNUAL SAMPLING FREQUENCIES OF  
SECONDARY CONTACT WATERS IN 2000

Map No <sup>1</sup>	Station Name.	Annual No. of Samples
<u>Chicago River System</u>		
36	Touhy Avenue, North Shore Channel	12
37	Wilson Avenue, North Branch Chicago River	12
73	Diversey Parkway, North Branch Chicago River	12
46	Grand Avenue, North Branch Chicago River	12
39	Madison Street, South Branch Chicago River	12
40	Damen Avenue, Chicago Sanitary & Ship Canal	9
75	Cicero Avenue, Chicago Sanitary & Ship Canal	12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	12
42	Route 83, Chicago Sanitary & Ship Canal	11
48	Stephen Street, Chicago Sanitary & Ship Canal	11
82	Lockport Trebler, Chicago Sanitary & Ship Canal	15
92	Lockport Forebay, Chicago Sanitary & Ship Canal	<u>50</u>
		180
<u>Calumet River System</u>		
86	Burnham Avenue, Grand Calumet River	11
56	Indiana Avenue, Little Calumet River	23
76	Halsted Street, Little Calumet River	24
58	Ashland Avenue, Cal-Sag Channel	24
59	Cicero Avenue, Cal-Sag Channel	24
43	Route 83, Cal-Sag Channel	<u>23</u>
		129

<sup>1</sup>Refer to Figure 1.

Generally, compliance with IPCB standards was high in 2000 in both the Chicago and Calumet River Systems. Fifteen water quality parameters were in complete compliance in both of these river systems. They were temperature, phenols, total cyanide, fluoride, total silver, total arsenic, total barium, total cadmium, total copper, total chromium, total iron, total nickel, total mercury, total zinc, and total selenium.

Seven water quality parameters, which were not in complete compliance in both of the river systems, are listed below with observed compliance rates.

<u>Parameters</u>	<u>Percent Compliance Rate</u>	
	<u>Chicago</u>	<u>Calumet</u>
Dissolved Oxygen	92.4	95.5
pH	98.0	98.3
Un-ionized Ammonia	97.4	95.6
Total Dissolved Solids	97.7	100.0
Soluble Iron	100.0	98.6
Total Lead	99.2	100.0
Total Manganese	99.5	100.0

#### CHICAGO RIVER SYSTEM

In addition to the 15 parameters previously listed, which were in complete compliance in Chicago and Calumet river systems, soluble iron had complete compliance. The 6 parameters



(dissolved oxygen, pH, un-ionized ammonia, total dissolved solids, total lead, and total manganese), which were not in total compliance, had a compliance rate in the range of 92.4 to 99.5 percent.

Dissolved oxygen had 13 violations, 8 at location 92 in May, July, August, and September; 1 at location 73; and 2 each at locations 40 and 75.

Three pH violations occurred, 2 at location 92 in November and December, and 1 at location 73 in February.

Un-ionized ammonia had 4 violations, 1 each at locations 36, 37, and 73 in February; and 1 at location 92 in December.

Total dissolved solids had 1 violation each in December at locations 37, 73, and 92.

Total lead had 1 violation at location 41 in December, and total manganese had 1 violation at location 92 in April.

The compliance rates of all parameters in 2000 were not significantly different from those in 1999 except for total iron, which improved significantly. The total iron compliance rate increased from 96.3 percent in 1999 to total compliance in 2000.

## CALUMET RIVER SYSTEM

In addition to the 15 parameters previously listed, which were in complete compliance in the Chicago and the Calumet river systems, 3 more parameters (total dissolved solids, total lead, and total manganese) had complete compliance. However, the compliance rates for dissolved oxygen, pH, un-ionized ammonia, and soluble iron were 95.5, 98.3, 95.6, and 98.6, respectively.

Dissolved oxygen had 6 violations, 4 at location 86 in June, July, August, and October; 1 at location 58 in April; and 1 at location 76 in June.

Only one pH violation occurred and that was at location 56 in February.

Un-ionized ammonia had 3 violations, 2 at location 86 in April and October; and 1 at location 56 in February.

Soluble iron had only 1 violation at location 86 in May.

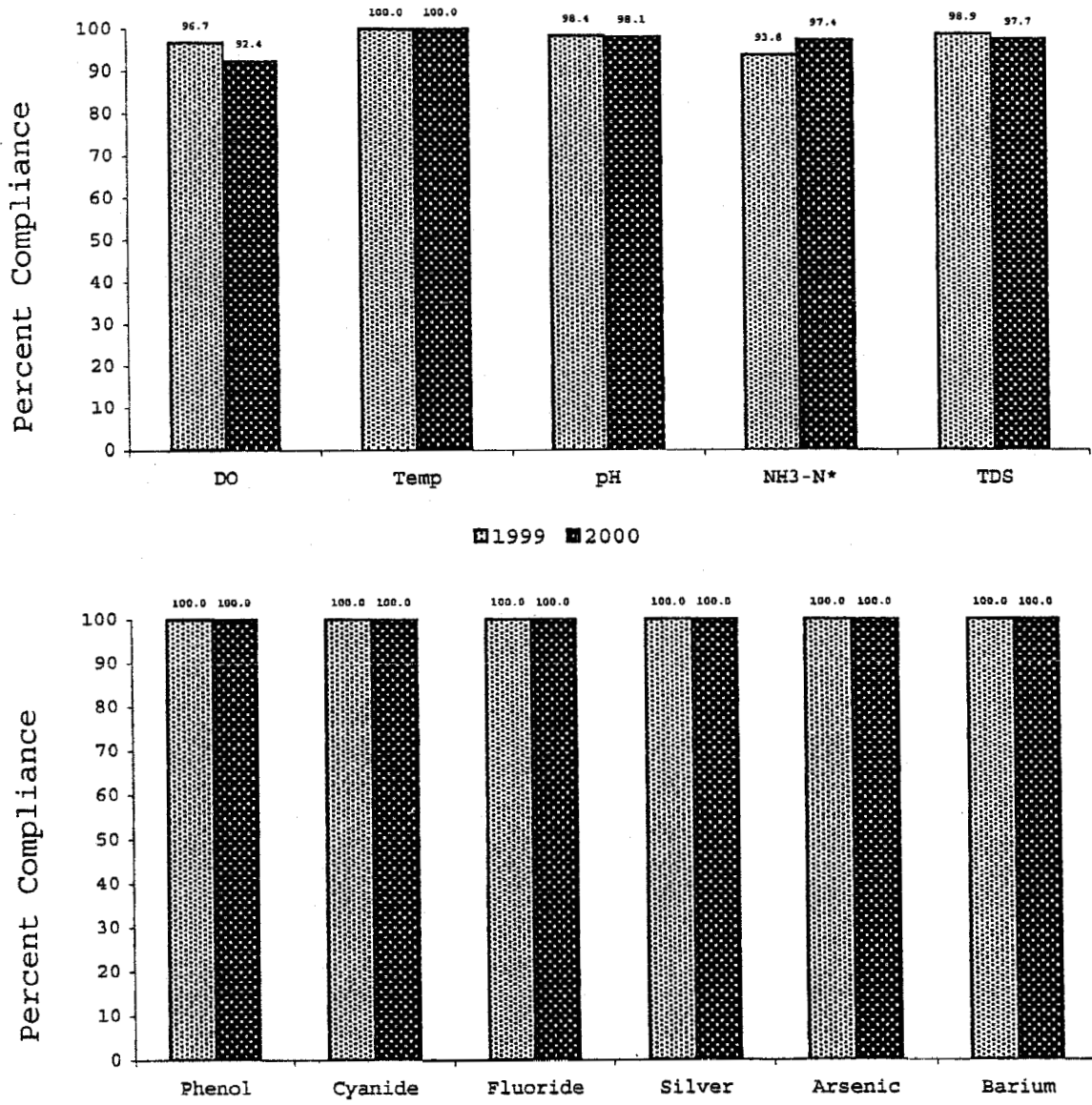
The compliance rates of all parameters in 2000 are not significantly different from those in 1999.

The compliance rates of 22 water quality parameters for secondary contact waters of the two river systems during 1999 and 2000 are presented in Figures 5 and 6. The number of violations, which occurred in each sampling location of the

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 5

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CHICAGO RIVER IN 1999 AND 2000

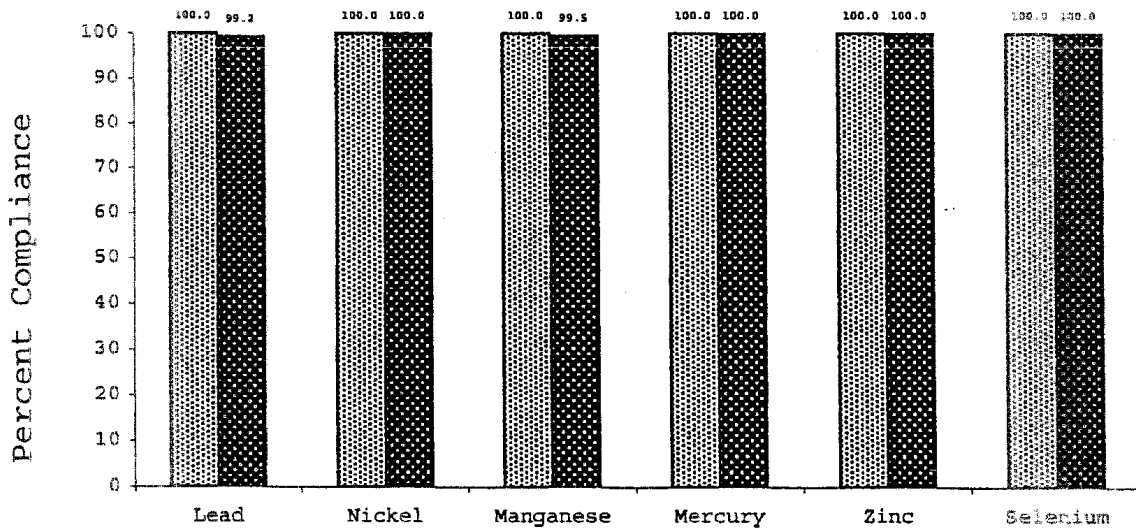
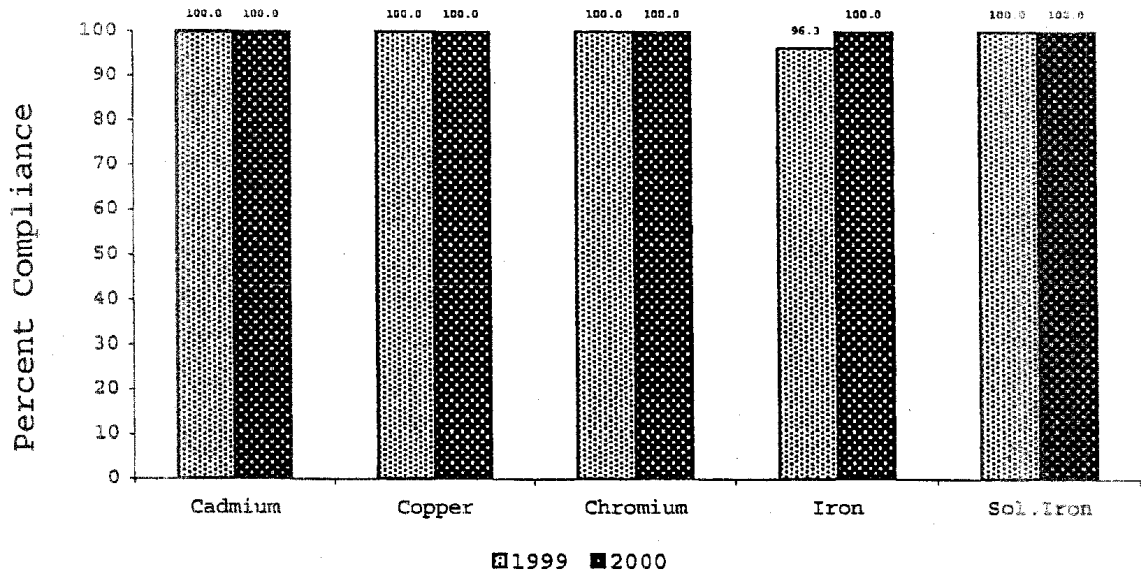


\*NH3-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 5 (Continued)

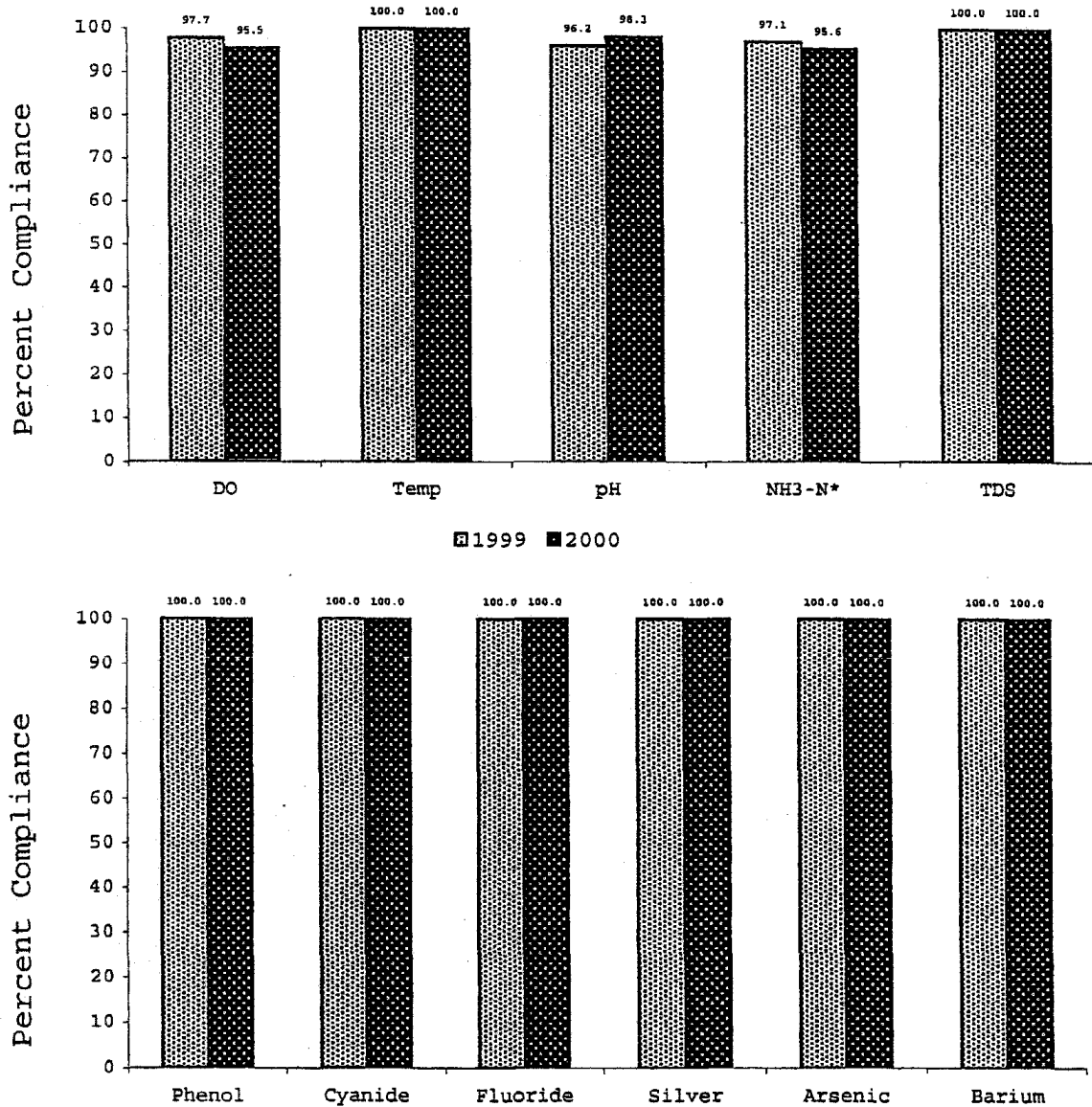
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CHICAGO RIVER IN 1999 AND 2000



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 6

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CALUMET RIVER IN 1999 AND 2000

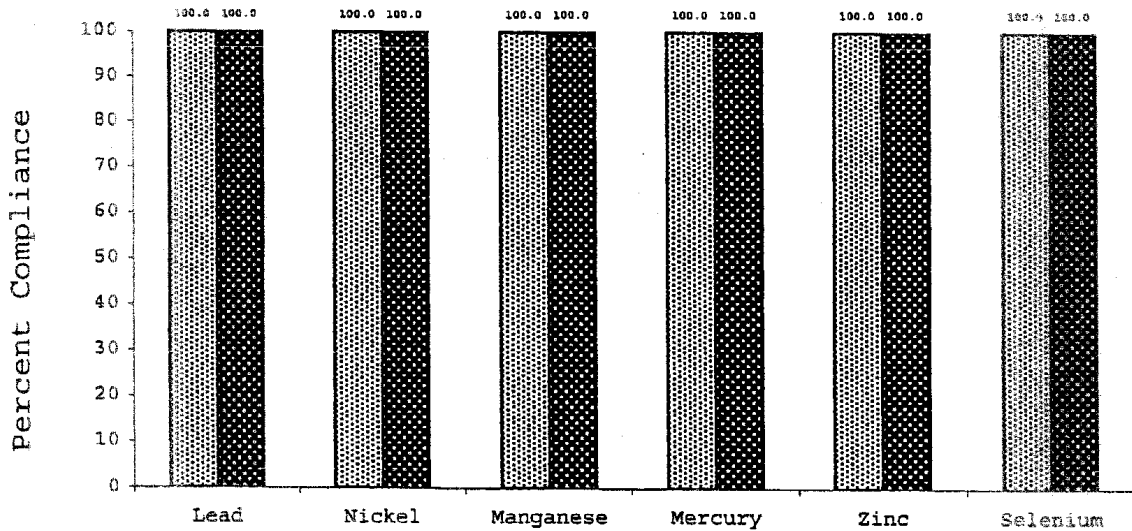
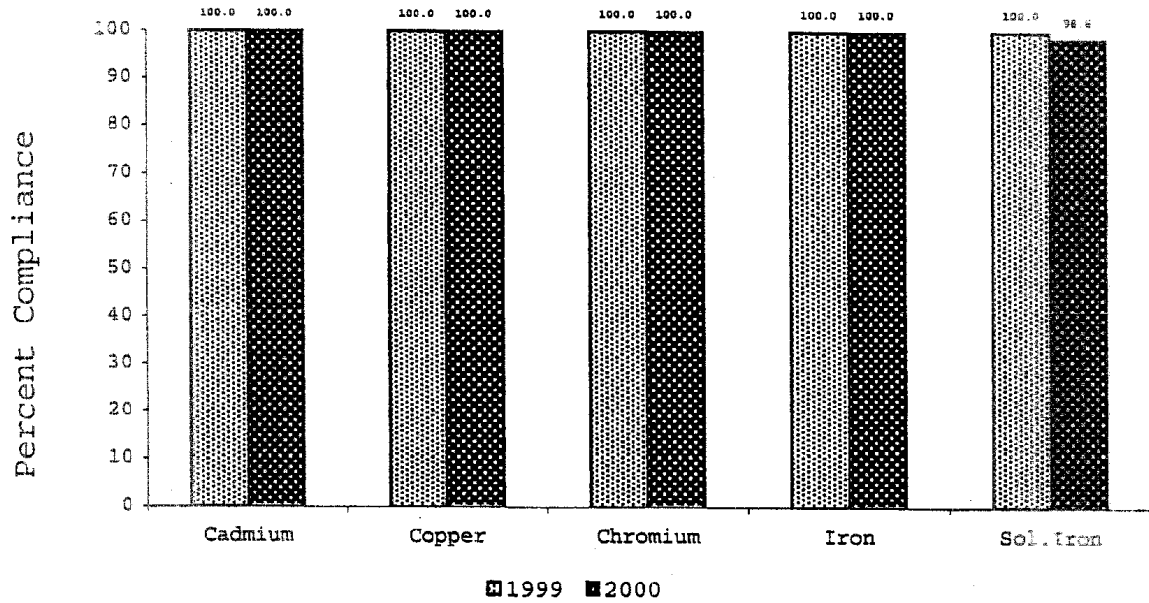


\*NH3-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 6 (Continued)

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CALUMET RIVER IN 1999 AND 2000



three river systems for the last eight years, are presented in Appendix II, Tables AII-2 through AII-31.

RECEIVING WATER QUALITY STANDARDS COMPLIANCE UPSTREAM AND  
DOWNSTREAM OF DISTRICT OUTFALLS

Surface Water Sample Locations and Sample Frequencies

The District currently operates seven WRPs. The receiving waters upstream and downstream of the outfalls, the discharge points of the effluent from WRPs, for six of these WRPs were sampled during 2000. Three of these WRPs (Hanover Park, John E. Egan, and James C. Kirie) discharge their treated effluents into General Use Waters. The North Side, Stickney, and Calumet WRPs discharge into waters classified as Secondary Contact Water. During 2000, the lack of an upstream sampling location for the Lemont WRP, which was downstream of the Cal-Sag junction, precluded an evaluation. Upstream and downstream sampling locations, as well as annual sampling frequencies for the respective WRPs, are shown in Table 7.

The outfalls for Hanover Park, John E. Egan, and James C. Kirie WRPs are located in the West Branch of the DuPage River, Salt Creek, and Higgins Creek, respectively. These streams fall within the General Use Waters classification with the respective sampling locations upstream and downstream as shown in Table 7. More specifically, the General Use outfalls are located as follows:



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 7

SAMPLING LOCATIONS AND SAMPLING FREQUENCIES  
UPSTREAM AND DOWNSTREAM OF DISTRICT  
WATER RECLAMATION PLANTS IN 2000

WRP	Upstream Sample			Downstream Sample		
	Location	No <sup>1</sup>	Annual Freq.	Location	No <sup>1</sup>	Annual Freq.
North Side	Central Road North Shore Channel	35	9	Touhy Ave. North Shore Channel	36	12
Stickney	Cicero Avenue Sanitary and Ship Canal	75	12	Harlem Avenue Sanitary and Ship Canal	41	12
Calumet	Indiana Avenue Calumet River	56	23	Halsted Street Calumet River	76	24
Egan	Higgins Road Salt Creek	79	10	Arlington Hts. Rd. Salt Creek	80	12
Kirie	Visitor's Road "A" Bridge Higgins Creek	77	10	Wille Road Higgins Creek	78	12
Hanover Park	Long Meadow Lane - West Branch DuPage River	63	9	Walnut Lane West Branch DuPage River	89	12

<sup>1</sup> Location No. of stations are shown in Figure 1.

1. The upstream station for the Hanover Park WRP is located at Long Meadow Lane, 100 feet above the outfall, and the downstream station is located at Walnut Lane, at 1,000 feet below the outfall.
2. The upstream station for the John E. Egan WRP is located at Higgins Road, 7,500 feet above the outfall, and the downstream station is located at Arlington Heights Road, 1,300 feet below the outfall.
3. The upstream sampling point for the James C. Kirie WRP is located at the Visitor's Road "A" Bridge, about 1,000 feet upstream of the outfall, while the downstream station is at the Wille Road Bridge, about 300 feet downstream of the outfall.

Specific locations of WRPs having outfalls located within the Secondary Contact Waters of the District's canal system are:

1. The North Side WRP discharges its treated effluent into the North Shore Channel. The upstream and downstream sample points are located at Central Road and Touhy Avenue, respectively. Central Road is 17,000 feet above the outfall,

and Touhy Avenue is 3,600 feet below.

2. The upstream and downstream sample points for Stickney WRP are Cicero Avenue and Harlem Avenue, respectively, both on the Chicago Sanitary and Ship Canal. Cicero Avenue is 7,900 feet above the outfall and Harlem Avenue is 9,200 feet below.
3. The upstream sample point for the Calumet WRP is located at Indiana Avenue on the Little Calumet River. Downstream samples of the outfall are taken at Halsted Street on the Little Calumet River. Indiana Avenue is 5,500 feet above the outfall, and Halsted Street is 6,600 feet below.

Annual Summary Results for Water Quality Upstream and  
Downstream of District Outfalls

Several statistical analyses were performed to evaluate the effect of the outfalls of each of the WRPs on the corresponding receiving streams. The sample values of each parameter at the upstream and downstream locations were first tested to see if they exhibited a normal distribution and then tested for equality of variances. If the sample data of upstream and downstream locations came from a normally distributed population with equal variances, an exact t-test is used for testing

the equality of upstream and downstream means. Otherwise, an approximate t-test is used if the data came from two different normally distributed populations. If the upstream and downstream data did not come from normally distributed populations, a Wilcoxon rank-sum test is used to test for the equality of upstream and downstream means.

The mean levels of each parameter measured at the upstream and downstream locations of each WRP, and the corresponding significance probability associated with the exact t-test/approximate t-test or Wilcoxon rank-sum test are tabulated in Tables 8 through 13. Tables AIII-1 through AIII-6 in Appendix AIII show in detail the significance probability due to a normality test and an equal variance test on the upstream and downstream data, and the significance probability for the equality of upstream and downstream means due to Wilcoxon rank-sum test and exact t-test/approximate t-test.

Comparison of the upstream and downstream mean concentrations of all the 44 parameters (including the 28 parameters which have IPCB standards and the remaining 16 parameters which do not have standards) show that the downstream mean concentrations are statistically different from the upstream concentrations for some parameters, and about the same for the other parameters. This is indicated by the value of

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 8

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR NORTH SIDE WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	7.47		7.24	0.77
Temperature	Temp (°C)	18.0		15.8	0.76
pH	pH	8.31		7.63	0.03
Chloride	Cl (mg/L)	60		150	0.01
Turbidity	Turb (NTU)	11.8		8.1	0.04
Alkalinity (Total)	Alk (mg/L)	126		137	0.02
Total Kjeldahl Nitrogen	TKN (mg/L)	1.05		2.65	0.01
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.301		1.273	0.01
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.020		0.051	0.37
Organic Nitrogen	ORG-N (mg/L)	0.75		1.37	0.03
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.29		5.59	0.00
Total Solids	TS (mg/L)	363		574	0.05
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	13.6		10.8	0.35
Total Dissolved Solids	TDS (mg/L)	350		563	0.05
Phenols	Phenol (µg/L)	13.3		22.2	0.02
Sulfate	SO <sub>4</sub> (mg/L)	32.5		53.8	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.183		1.214	0.00
Soluble Phosphorus	Sol.P (mg/L)	0.044		0.989	0.00
Total Cyanide	CN (mg/L)	0.002		0.006	0.00
WAD Cyanide	WAD-CN (mg/L)	0.000		0.001	0.13
Fluoride	F (mg/L)	0.187		0.812	0.00
Total Organic Carbon	TOC (mg/L)	5.67		10.58	0.01

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 8 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR NORTH SIDE WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	270		9424	0.00
Total Calcium	Ca (mg/L)	43.4		52.9	0.09
Total Magnesium	Mg (mg/L)	15.7		19.3	0.02
Hardness	Hard (mg/L)	173		211	0.12
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.23		4.21	0.93
Gross Beta Radioactivity	G.Beta (pCi/L)	6.67		11.30	0.00
Total Silver	Ag (mg/L)	0.000		0.001	0.44
Total Arsenic	As (mg/L)	0.000		0.006	0.44
Total Barium	Ba (mg/L)	0.023		0.017	0.06
Total Boron	B (mg/L)	0.050		0.233	0.00
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.007		0.012	0.18
Total Chromium	Cr (mg/L)	0.000		0.002	0.24
Total Iron	Fe (mg/L)	0.268		0.177	0.09
Total Lead	Pb (mg/L)	0.000		0.003	0.44
Total Nickel	Ni (mg/L)	0.000		0.004	0.13
Total Manganese	Mn (mg/L)	0.021		0.029	0.09
Total Mercury	Hg (µg/L)	0.000		0.017	0.44
Total Zinc	Zn (mg/L)	0.015		0.047	0.00
Total Selenium	Se (mg/L)	0.000		0.000	1.00

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 9

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR STICKNEY WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	4.97		6.52	0.01
Temperature	Temp (°C)	18.7		17.0	0.45
pH	pH	7.27		7.42	0.46
Chloride	Cl (mg/L)	124		166	0.33
Turbidity	Turb (NTU)	12.8		9.3	0.01
Alkalinity (Total)	Alk (mg/L)	135		121	0.02
Total Kjeldahl Nitrogen	TKN (mg/L)	1.99		1.72	0.46
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.843		0.438	0.01
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.007		0.006	0.34
Organic Nitrogen	ORG-N (mg/L)	1.14		1.28	0.58
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	4.30		7.00	0.01
Total Solids	TS (mg/L)	517		619	0.31
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	16.5		11.5	0.02
Total Dissolved Solids	TDS (mg/L)	501		607	0.29
Phenols	Phenol (µg/L)	17.5		18.5	0.88
Sulfate	SO <sub>4</sub> (mg/L)	51.6		72.3	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.965		1.120	0.46
Soluble Phosphorus	Sol.P (mg/L)	0.672		0.834	0.30
Total Cyanide	CN (mg/L)	0.004		0.007	0.00
WAD Cyanide	WAD-CN (mg/L)	0.001		0.001	0.39
Fluoride	F (mg/L)	0.617		0.781	0.06
Total Organic Carbon	TOC (mg/L)	8.58		9.75	0.46

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 9 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR STICKNEY WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	154		5043	0.00
Total Calcium	Ca (mg/L)	53.3		54.3	0.78
Total Magnesium	Mg (mg/L)	19.7		20.1	0.83
Hardness	Hard (mg/L)	214		218	0.80
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.22		4.26	0.80
Gross Beta Radioactivity	G.Beta (pCi/L)	9.05		9.33	0.44
Total Silver	Ag (mg/L)	0.001		0.001	0.58
Total Arsenic	As (mg/L)	0.000		0.000	1.00
Total Barium	Ba (mg/L)	0.023		0.018	0.01
Total Boron	B (mg/L)	0.174		0.200	0.24
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.012		0.012	0.93
Total Chromium	Cr (mg/L)	0.005		0.006	1.00
Total Iron	Fe (mg/L)	0.379		0.262	0.05
Total Lead	Pb (mg/L)	0.006		0.254	0.65
Total Nickel	Ni (mg/L)	0.005		0.003	0.65
Total Manganese	Mn (mg/L)	0.047		0.046	0.26
Total Mercury	Hg (µg/L)	0.028		0.026	1.00
Total Zinc	Zn (mg/L)	0.046		0.047	0.60
Total Selenium	Se (mg/L)	0.000		0.000	1.00

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 10

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR CALUMET WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	8.20		6.60	0.01
Temperature	Temp (°C)	15.2		16.2	0.75
pH	pH	7.73		7.47	0.36
Chloride	Cl (mg/L)	103		150	0.07
Turbidity	Turb (NTU)	15.8		10.3	0.00
Alkalinity (Total)	Alk (mg/L)	127		154	0.00
Total Kjeldahl Nitrogen	TKN (mg/L)	1.01		1.50	0.05
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.307		0.332	0.68
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.024		0.005	0.75
Organic Nitrogen	ORG-N (mg/L)	0.70		1.17	0.02
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	1.86		4.32	0.00
Total Solids	TS (mg/L)	489		697	0.01
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	22.2		11.6	0.00
Total Dissolved Solids	TDS (mg/L)	466		685	0.00
Phenols	Phenol (µg/L)	13.1		24.1	0.00
Sulfate	SO <sub>4</sub> (mg/L)	77.8		143.1	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.373		3.193	0.00
Soluble Phosphorus	Sol.P (mg/L)	0.277		2.923	0.00
Total Cyanide	CN (mg/L)	0.003		0.010	0.00
WAD Cyanide	WAD-CN (mg/L)	0.001		0.002	0.00
Fluoride	F (mg/L)	0.382		0.891	0.00
Total Organic Carbon	TOC (mg/L)	7.67		10.92	0.05

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 10 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR CALUMET WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	124		4774	0.00
Total Calcium	Ca (mg/L)	49.7		63.6	0.00
Total Magnesium	Mg (mg/L)	22.3		23.4	0.69
Hardness	Hard (mg/L)	216		255	0.07
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.30		4.39	0.78
Gross Beta Radioactivity	G.Beta (pCi/L)	7.59		10.27	0.00
Total Silver	Ag (mg/L)	0.001		0.001	1.00
Total Arsenic	As (mg/L)	0.018		0.000	0.08
Total Barium	Ba (mg/L)	0.029		0.015	0.00
Total Boron	B (mg/L)	0.159		0.286	0.00
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.010		0.010	0.88
Total Chromium	Cr (mg/L)	0.003		0.003	0.80
Total Iron	Fe (mg/L)	0.470		0.329	0.04
Total Lead	Pb (mg/L)	0.002		0.000	0.36
Total Nickel	Ni (mg/L)	0.002		0.004	0.62
Total Manganese	Mn (mg/L)	0.040		0.058	0.03
Total Mercury	Hg ( $\mu$ g/L)	0.008		0.005	1.00
Total Zinc	Zn (mg/L)	0.040		0.047	0.08
Total Selenium	Se (mg/L)	0.000		0.017	0.36

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 11

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR JOHN E. EGAN WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	7.09		7.79	0.51
Temperature	Temp (°C)	15.9		14.2	0.63
pH	pH	8.16		8.16	0.97
Chloride	Cl (mg/L)	278		219	0.67
Turbidity	Turb (NTU)	29.4		10.8	0.00
Alkalinity (Total)	Alk (mg/L)	161		136	0.01
Total Kjeldahl Nitrogen	TKN (mg/L)	1.82		1.74	0.34
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.172		0.145	0.36
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.024		0.024	0.77
Organic Nitrogen	ORG-N (mg/L)	1.65		1.60	0.31
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.47		6.27	0.00
Total Solids	TS (mg/L)	895		749	0.79
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	41.2		11.7	0.00
Total Dissolved Solids	TDS (mg/L)	854		738	0.82
Phenols	Phenol (µg/L)	17.1		18.2	0.68
Sulfate	SO <sub>4</sub> (mg/L)	79.5		73.9	0.51
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.249		1.688	0.00
Soluble Phosphorus	Sol.P (mg/L)	0.039		1.488	0.00
Total Cyanide	CN (mg/L)	0.002		0.007	0.00
WAD Cyanide	WAD-CN (mg/L)	0.000		0.001	0.01
Fluoride	F (mg/L)	0.294		0.642	0.00
Total Organic Carbon	TOC (mg/L)	11.40		10.67	0.56

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 11 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR JOHN E. EGAN WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	305		623	0.43
Total Calcium	Ca (mg/L)	65.9		59.4	0.36
Total Magnesium	Mg (mg/L)	28.9		24.1	0.14
Hardness	Hard (mg/L)	284		248	0.25
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.37		4.19	0.37
Gross Beta Radioactivity	G.Beta (pCi/L)	7.01		9.75	0.10
Total Silver	Ag (mg/L)	0.000		0.000	1.00
Total Arsenic	As (mg/L)	0.000		0.000	1.00
Total Barium	Ba (mg/L)	0.040		0.026	0.04
Total Boron	B (mg/L)	0.086		0.206	0.00
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.007		0.011	0.34
Total Chromium	Cr (mg/L)	0.001		0.001	0.66
Total Iron	Fe (mg/L)	0.858		0.350	0.00
Total Lead	Pb (mg/L)	0.004		0.007	1.00
Total Nickel	Ni (mg/L)	0.000		0.000	1.00
Total Manganese	Mn (mg/L)	0.092		0.061	0.14
Total Mercury	Hg (µg/L)	0.018		0.000	0.13
Total Zinc	Zn (mg/L)	0.018		0.034	0.05
Total Selenium	Se (mg/L)	0.000		0.000	1.00

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 12

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR JAMES C. KIRIE WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	7.71		8.43	0.29
Temperature	Temp (°C)	15.2		16.3	0.69
pH	pH	7.81		7.60	0.12
Chloride	Cl (mg/L)	336		191	0.06
Turbidity	Turb (NTU)	27.7		7.2	0.00
Alkalinity (Total)	Alk (mg/L)	140		171	0.03
Total Kjeldahl Nitrogen	TKN (mg/L)	1.41		2.35	0.00
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.134		0.396	0.00
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.004		0.006	0.25
Organic Nitrogen	ORG-N (mg/L)	1.28		1.95	0.02
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.46		4.25	0.00
Total Solids	TS (mg/L)	879		733	0.53
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	39.3		12.4	0.00
Total Dissolved Solids	TDS (mg/L)	840		721	0.77
Phenols	Phenol (µg/L)	28.4		26.6	0.64
Sulfate	SO <sub>4</sub> (mg/L)	47.0		94.5	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.184		0.578	0.01
Soluble Phosphorus	Sol.P (mg/L)	0.044		0.385	0.00
Total Cyanide	CN (mg/L)	0.004		0.006	0.01
WAD Cyanide	WAD-CN (mg/L)	0.001		0.001	0.19
Fluoride	F (mg/L)	0.317		0.746	0.00
Total Organic Carbon	TOC (mg/L)	11.80		12.08	0.46

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 12 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR JAMES C. KIRIE WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	636		536	0.86
Total Calcium	Ca (mg/L)	62.4		67.6	0.49
Total Magnesium	Mg (mg/L)	22.9		25.8	0.37
Hardness	Hard (mg/L)	250		275	0.43
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.42		4.24	0.46
Gross Beta Radioactivity	G.Beta (pCi/L)	7.37		16.49	0.00
Total Silver	Ag (mg/L)	0.000		0.000	0.95
Total Arsenic	As (mg/L)	0.000		0.007	0.41
Total Barium	Ba (mg/L)	0.047		0.023	0.01
Total Boron	B (mg/L)	0.083		0.366	0.00
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.009		0.011	0.52
Total Chromium	Cr (mg/L)	0.002		0.003	0.58
Total Iron	Fe (mg/L)	0.733		0.214	0.00
Total Lead	Pb (mg/L)	0.000		0.000	1.00
Total Nickel	Ni (mg/L)	0.000		0.003	0.21
Total Manganese	Mn (mg/L)	0.132		0.064	0.03
Total Mercury	Hg (µg/L)	0.000		0.008	0.41
Total Zinc	Zn (mg/L)	0.032		0.067	0.02
Total Selenium	Se (mg/L)	0.000		0.000	1.00

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 13

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR HANOVER PARK WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Dissolved Oxygen	DO (mg/L)	7.50		7.01	0.55
Temperature	Temp (°C)	16.2		15.2	0.73
pH	pH	7.95		8.13	0.72
Chloride	Cl (mg/L)	189		153	0.39
Turbidity	Turb (NTU)	21.8		13.5	0.10
Alkalinity (Total)	Alk (mg/L)	156		155	0.92
Total Kjeldahl Nitrogen	TKN (mg/L)	1.66		2.37	0.08
Ammonium Nitrogen	NH <sub>4</sub> -N (mg/L)	0.154		0.341	0.19
Un-ionized Ammonia	NH <sub>3</sub> -N (mg/L)	0.011		0.038	0.50
Organic Nitrogen	ORG-N (mg/L)	1.50		2.03	0.10
Nitrite + Nitrate Nitrogen	NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.63		6.98	0.00
Total Solids	TS (mg/L)	698		651	0.65
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	40.0		23.5	0.07
Total Dissolved Solids	TDS (mg/L)	658		628	0.77
Phenols	Phenol (µg/L)	20.1		19.7	0.91
Sulfate	SO <sub>4</sub> (mg/L)	71.7		69.3	0.81
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Total Phosphorus	T.P (mg/L)	0.184		2.109	0.00
Soluble Phosphorus	Sol.P (mg/L)	0.060		1.910	0.00
Total Cyanide	CN (mg/L)	0.002		0.008	0.00
WAD Cyanide	WAD-CN (mg/L)	0.001		0.001	0.20
Fluoride	F (mg/L)	0.303		0.723	0.00
Total Organic Carbon	TOC (mg/L)	13.78		12.75	0.43

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 13 (Continued)

COMPARISON OF LEVELS OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR HANOVER PARK WATER RECLAMATION PLANT IN 2000

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob <sup>1</sup>
Fecal Coliform	FC (#/100ml)	2538		1943	0.72
Total Calcium	Ca (mg/L)	63.8		59.3	0.21
Total Magnesium	Mg (mg/L)	24.1		23.7	0.59
Hardness	Hard (mg/L)	258		246	0.34
Gross Alpha Radioactivity	G.Alpha (pCi/L)	4.21		4.13	0.79
Gross Beta Radioactivity	G.Beta (pCi/L)	7.30		9.61	0.05
Total Silver	Ag (mg/L)	0.000		0.000	1.00
Total Arsenic	As (mg/L)	0.010		0.000	0.29
Total Barium	Ba (mg/L)	0.044		0.025	0.00
Total Boron	B (mg/L)	0.069		0.285	0.00
Total Cadmium	Cd (mg/L)	0.000		0.000	1.00
Total Copper	Cu (mg/L)	0.007		0.011	0.28
Total Chromium	Cr (mg/L)	0.001		0.001	0.94
Total Iron	Fe (mg/L)	0.844		0.417	0.01
Total Lead	Pb (mg/L)	0.003		0.002	0.89
Total Nickel	Ni (mg/L)	0.000		0.000	1.00
Total Manganese	Mn (mg/L)	0.118		0.105	0.32
Total Mercury	Hg (µg/L)	0.000		0.017	0.44
Total Zinc	Zn (mg/L)	0.022		0.047	0.00
Total Selenium	Se (mg/L)	0.000		0.000	1.00

<sup>1</sup>Significance Probability  $\leq 0.05$  indicates that up and down population means are not equal.

- = No Statistics.



significance probability given in Tables 8 through 13. A value of 0.05 or smaller indicates that the two means are significantly different, and a value greater than 0.05 indicates no difference between means.

Steps involved in the evaluation of the results of this type of comparison are:

1. Identify the type of parameters which exhibit a difference in the mean concentration levels observed at the upstream and downstream locations.
2. Determine if the mean concentration levels at the upstream and downstream locations for a parameter are different, and if the difference in the levels is attributable to wastewater treatment processing.
3. Determine if the fluctuations in the concentration levels of the parameter adversely affect the quality of the receiving stream as assessed by compliance with the water quality standard pertinent to that parameter.

A study of the concentrations of various water quality parameters presented in Tables 8 through 13, and the Appendix II tables reveal that the quality of effluents from the District's WRPs is high in most cases. This conclusion is based on the interpretation of the statistical inferences.

In general, statistically significant differences exist between upstream and downstream locations for those parameters that are affected by the wastewater treatment technology. For some of the parameters water quality standards exist, whereas for others there are no such standards. A discussion of the results from each WRP follows. Parameters, which are significantly different in the downstream location from the upstream location, and which have a water quality limit to comply with, are identified for each WRP.

#### NORTH SIDE WRP

Location 35 of the North Side WRP is classified as General Use Waters, and location 36 is classified as Secondary Contact Waters sections of the Chicago River System. The following 20 water quality parameters mean concentrations are significantly different between upstream and downstream locations:

- pH, chloride, turbidity, alkalinity, total Kjeldahl nitrogen, ammonium nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, phenols, sulfate, total phosphorus, soluble phosphorus, total cyanide, fluoride, total organic carbon,

fecal coliform, total manganese, gross beta radioactivity, boron, and total zinc.

The downstream average concentrations of all parameters were significantly higher than the upstream averages except for pH and turbidity, which have a significantly lower average concentration downstream than upstream.

Among the 20 parameters listed above, 11 parameters have either IPCB General Use or Secondary Contact Water quality limits. These parameters are:

- pH, chloride, ammonium nitrogen, phenols, sulfate, total cyanide, fluoride, fecal coliform, gross beta radioactivity, boron, and total zinc.

At location 35, 9 parameters were in total compliance:

- pH, chloride, ammonium nitrogen, phenols, sulfate, fluoride, gross beta radioactivity, boron, and total zinc.

The percent compliance for fecal coliform was 44.4 percent. General Use waters do not have an IPCB cyanide quality limit.

At location 36, 5 parameters have Secondary Contact Water quality limits. These parameters are:

- pH, phenols, total cyanide, fluoride, and total zinc.

All 5 parameters were in total compliance with IPCB standards.

#### STICKNEY WRP

Both locations of Stickney (75 and 41) are classified as Secondary Contact Waters sections of the Chicago River Systems. Eleven water quality parameters had significantly different mean concentrations between the upstream and the downstream locations. These parameters were:

- Dissolved oxygen, turbidity, alkalinity, ammonium nitrogen, nitrite plus nitrate nitrogen, total suspended solids, sulfate, total cyanide, fecal coliform, total barium, and total iron.

The downstream averages of 5 parameters were significantly higher than the upstream averages. These parameters were:

- Dissolved oxygen, nitrite plus nitrate nitrogen, sulfate, total cyanide, and fecal coliform.

Six parameters had a significantly lower average downstream than upstream. These parameters were:

- Turbidity, alkalinity, ammonium nitrogen, total suspended solids, total barium, and total iron.

Among the 11 parameters listed above, dissolved oxygen, total cyanide, total barium, and total iron have Secondary Contact Water quality limits. Dissolved oxygen had 83.3 percent compliance at the upstream location and total compliance at the downstream location. Total cyanide, total barium, and total iron were in complete compliance at both locations.

#### CALUMET WRP

Locations 56 and 76 are classified as Secondary Contact Waters of Calumet River System. Twenty-four water quality parameters had significantly different mean concentrations between upstream and downstream locations. These parameters were:

- Dissolved oxygen, turbidity, alkalinity, total Kjeldahl nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, total solids, total suspended solids, total dissolved solids, phenols, sulfate, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, total organic carbon, fecal coliform, calcium, gross beta radioactivity, total barium, boron, total iron, and total manganese.

Nineteen parameters had significantly higher mean concentrations downstream than upstream. These parameters were:

- Alkalinity, total Kjeldahl nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, total solids, total dissolved solids, phenols, sulfate, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, total organic carbon, fecal coliform, calcium, gross beta radioactivity, boron, and manganese.

Five parameters had significantly higher mean concentrations upstream than downstream. These parameters were:

- Dissolved oxygen, turbidity, total suspended solids, total barium, and total iron.

Among the 24 parameters listed above, 8 parameters have Secondary Contact Water quality limits. These parameters were:

- Dissolved oxygen, total dissolved solids, phenols, total cyanide, fluoride, total barium, total iron, and total manganese.

All 8 parameters were in total compliance at upstream and downstream locations except dissolved oxygen. Dissolved oxygen

had 95.8 percent compliance at the downstream location, and complete compliance at the upstream location.

#### JOHN E. EGAN WRP

Both locations (79 and 80) of John E. Egan WRP are classified as General Use Waters of the Des Plaines River System. Thirteen water quality parameters had significantly different mean concentrations between the upstream and the downstream locations. These parameters were:

- Turbidity, alkalinity, nitrite plus nitrate nitrogen, total suspended solids, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, total barium, boron, total iron, and total zinc.

Eight parameters had significantly higher mean concentrations downstream than upstream. These parameters were:

- Nitrite plus nitrate nitrogen, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, boron, and total zinc.

Five parameters had significantly lower mean concentrations at the downstream location than the upstream location. These parameters were:

- Turbidity, alkalinity, total suspended solids, total barium, and total iron.

Among the 13 parameters listed above which had significantly different mean concentrations between the upstream and the downstream locations, 6 parameters have applicable General Use Water quality limits. These parameters are:

- Weak acid dissociable cyanide, fluoride, total barium, boron, total iron, and total zinc.

All six parameters were in complete compliance at both locations except total iron. Total iron had 60.0 percent compliance at the upstream location, and complete compliance at the downstream location.

#### JAMES C. KIRIE WRP

Locations 77 and 78 of the James C. Kirie WRP are classified as General Use Waters of the Des Plaines River System.

Eighteen parameters had significantly different mean concentrations between the upstream and the downstream locations. These parameters were:

- Turbidity, alkalinity, total Kjeldahl nitrogen, ammonium nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, total suspended solids, sulfate, total phosphorus, soluble phosphorus, total



cyanide, fluoride, gross beta radioactivity, total barium, boron, total iron, total manganese, and total zinc.

Thirteen parameters had significantly higher mean concentrations at the downstream location than the upstream location. These parameters were:

- Alkalinity, total Kjeldahl nitrogen, ammonium nitrogen, organic nitrogen, nitrite plus nitrate nitrogen, sulfate, total phosphorus, soluble phosphorus, total cyanide, fluoride, gross beta radioactivity, boron, and total zinc.

Five parameters had significantly higher mean concentrations upstream than downstream. These parameters were:

- Turbidity, total suspended solids, total barium, total iron, and total manganese.

Among the 18 parameters listed above, 9 parameters have General Use Water quality limits. These parameters were:

- Ammonium nitrogen, sulfate, fluoride, gross beta radioactivity, total barium, boron, total iron, total manganese, and total zinc.

Total iron had 90.0 percent compliance at the upstream location, and complete compliance at the downstream location.

All remaining 8 parameters had complete compliance at both locations.

#### HANOVER PARK WRP

Both locations (63 and 89) of the Hanover Park WRP are classified as General Use Waters of the Des Plaines River System. Nine parameters had significantly different mean concentrations between the upstream and the downstream locations. These parameters were:

- Nitrite plus nitrate nitrogen, total phosphorus, soluble phosphorus, total cyanide, fluoride, total barium, boron, total iron, and total zinc.

Seven parameters had significantly higher mean concentrations downstream than upstream. These parameters were:

- Nitrite plus nitrate nitrogen, total phosphorus, soluble phosphorus, total cyanide, fluoride, boron, and total zinc.

Two parameters, total barium and total iron, had significantly higher mean concentrations at the upstream location than the downstream location.

Of the 9 parameters listed above which had significantly different mean concentrations, 5 parameters have General Use Waters quality limits. These parameters are:

- Fluoride, total barium, boron, total iron, and total zinc.

Total iron had 77.8 percent compliance at the upstream location and total compliance at the downstream location. All other parameters were in complete compliance at both locations.

## REFERENCES

- Deshpande, J. V., A. P. Gore, and A. Shanubhogue, Statistical Analysis of Nonnormal Data, Wiley Eastern Limited, John Wiley & Sons, New Delhi, 1995.
- Gibbons, J. D. and S. Chakraborti, Nonparametric Statistical Inference, 3<sup>rd</sup> Edition, Marcel Dekker Inc., New York, 1992.
- Illinois Pollution Control Board - Amendments to Title 35, Subtitle C (Toxic Control) R88-21, District A, January 25, 1990.
- Illinois Pollution Control Board - Amendments to Water Quality and Effluent Standards Applicable to the Chicago River System and Calumet River System, R87-27, May 19, 1988.
- Metropolitan Sanitary District of Greater Chicago Facilities Planning Study, Update Supplement and Summary, May 1986.
- Metropolitan Sanitary District of Greater Chicago, Facilities Planning Study, Update Supplement and Summary; May 1984.
- Metropolitan Water Reclamation District of Greater Chicago, Research and Development Department, Annual Reports 1983 - 1993.
- Sedita, S. J., D. R. Zenz, C. Lue-Hing, and P. O'Brien, "Fecal Coliform Levels in the Man-Made Waterways of the Metropolitan Sanitary District of Greater Chicago, Before and After Cessation of Chlorination at the West-Southwest, Calumet and North Side Sewage Treatment Works," Report No. 87-22, Research and Development Department, Metropolitan Sanitary District of Greater Chicago, December 1987.
- State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C Water Pollution, Chapter I: Pollution Control Board, December 1, 1982.
- State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, February 1, 1986.

REFERENCES (Continued)

State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, January 14, 2000.

Walpole, R. E. and R. H. Myers, Probability and Statistics for Engineers and Scientists, Fourth Edition, Macmillan Publishing Company, New York, 1989

APPENDIX I

WATERWAYS DATA MANAGEMENT SYSTEM DESCRIPTION

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-1

PARAMETER DIRECTORY FOR WATER QUALITY NETWORK

Symbol	Parameter	Unit	Water Quality Standard*	
			General Use	Secondary Contact
BOD <sub>5</sub>	Biochemical Oxygen Demand	mg/L	None	None
DO	Dissolved Oxygen	mg/L	5.00	4.00
COD	Chemical Oxygen Demand	mg/L	None	None
ORP	Oxidation-Reduction Potential	mv	None	None
Temp	Temperature	°C	16.0 (32.0 Apr-Nov)	37.8
pH	pH		6.5-9.0	6.0-9.0
Cl	Chloride	mg/L	500	None
Turb	Turbidity	NTU	None	None
Cond	Conductivity	µmhos	None	None
SRI	Solar Radiation Intensity	cal/cm <sup>2</sup> /min	None	None
Alk	Alkalinity (Total)	mg/L	None	None
TKN	Total Kjeldahl Nitrogen	mg/L	None	None
NH <sub>4</sub> -N	Ammonium Nitrogen	mg/L	15.000	None
NH <sub>3</sub> -N	Un-ionized Ammonia	mg/L	0.14 (0.33 Apr-Oct)	0.100
ORG-N	Organic Nitrogen	mg/L	None	None
NO <sub>2</sub>	Nitrite Nitrogen	mg/L	None	None
NO <sub>3</sub>	Nitrate Nitrogen	mg/L	None	None
NO <sub>2</sub> +NO <sub>3</sub>	Nitrite Plus Nitrate Nitrogen	mg/L	None	None
TS	Total Solids	mg/L	None	None
TVS	Total Volatile Solids	mg/L	None	None
TSS	Total Suspended Solids	mg/L	None	None
VSS	Volatile Suspended Solids	mg/L	None	None
ISS	Inorganic Suspended Solids	mg/L	None	None
TDS	Total Dissolved Solids	mg/L	1000	1500
TDVS	Total Dissolved Volatile Solids	mg/L	None	None
TFS	Total Fixed Solids	mg/L	None	None
Phenol	Phenols	µg/L	100.0	300.0
SO <sub>4</sub>	Sulfate	mg/L	500.0	None
FOG	Fats, Oils, and Greases	mg/L	None	15.00
T.P	Total Phosphorus	mg/L	None	None
Sol.P	Soluble Phosphorus	mg/L	None	None
CN	Total Cyanide	mg/L	None	0.100
WAD-CN	Weak Acid Dissociable Cyanide	mg/L	0.020	None
MBAS	Methylene Blue Active Substances	mg/L	None	None
F	Fluoride	mg/L	1.400	15.000

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-1 (Continued)

PARAMETER DIRECTORY FOR WATER QUALITY NETWORK

Symbol	Parameter	Unit	Water Quality Standard*	
			General Use	Secondary Contact
TOC	Total Organic Carbon	mg/L	None	None
TC	Total Coliform	#/100ml	None	None
FC	Fecal Coliform	#/100ml	400	None
FS	Fecal Streptococcus	#/100ml	None	None
Ca	Total Calcium	mg/L	None	None
Mg	Total Magnesium	mg/L	None	None
K	Potassium	mg/L	None	None
Na	Sodium	mg/L	None	None
Hard	Hardness	mg/L	None	None
G.Alpha	Gross Alpha Radioactivity	pCi/L	None	None
G.Beta	Gross Beta Radioactivity	pCi/L	100.00	None
Rain	Precipitation	inches	None	None
Al	Total Aluminum	mg/L	None	None
Ag	Total Silver	mg/L	0.005	1.100
As	Total Arsenic	mg/L	0.360	1.000
Ba	Total Barium	mg/L	5.000	5.000
B	Total Boron	mg/L	1.000	None
Cd	Total Cadmium	mg/L	$\min(e^{-2.918+1.128 \cdot \ln(\text{Hard})}/1000, 0.05)$	0.150
Cu	Total Copper	mg/L	$e^{-1.464+0.942 \cdot \ln(\text{Hard})}/1000$	1.000
Cr	Total Chromium	mg/L	$e^{3.688+0.819 \cdot \ln(\text{Hard})}/1000$	1.000
Cr <sup>+6</sup>	Total Hexavalent Chromium	µg/L	None	None
Fe	Total Iron	mg/L	1.000	2.000
Sol.Fe	Soluble Iron	mg/L	1.000	0.500
Pb	Total Lead	mg/L	$e^{-1.301+1.273 \cdot \ln(\text{Hard})}/1000$	0.100
Ni	Total Nickel	mg/L	1.000	1.000
Mn	Total Manganese	mg/L	1.000	1.000
Hg	Total Mercury	µg/L	2.600	0.500
Zn	Total Zinc	mg/L	1.000	1.000
Se	Total Selenium	mg/L	1.000	1.000
Sb	Total Antimony	mg/L	None	None
Be	Total Beryllium	mg/L	None	None
Tl	Total Thallium	mg/L	None	None

\*As per Illinois Pollution Control Board, except as modified (see text).



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-2

DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

Sampling Station		Type	Water	River
No.	Name	Sample	Use	System
1	Wilmette Harbor*	Auto	GEN	Chicago
2	Outer Drive Bridge*	Auto	GEN	Chicago
3	South District Water Filtration Plant*	Auto	GEN	Chicago
4	O'Brien Locks*	Auto	SEC	Chicago
5	Ohio Street*	Auto	SEC	Chicago
6	Willow Springs Road*	Auto	SEC	Chicago
7	Highway 83 and Archer*	Auto	SEC	Chicago
9	North Side WRP, Outfall*	Auto	EFF	Chicago
10	Southwest WRP, Outfall*	Auto	EFF	Chicago
11	Calumet WRP, Outfall*	Auto	EFF	Calumet
12	Lake-Cook Road, Buffalo Creek	Grab	GEN	Des Plaines
13	Lake-Cook Road, Des Plaines River	Grab	GEN	Des Plaines
14	Hintz Road, Wheeling Drain Ditch*	Grab	GEN	Des Plaines
15	Palatine Road, Des Plaines River*	Grab	GEN	Des Plaines
16	Central Road, Des Plaines River*	Grab	GEN	Des Plaines
17	Oakton Steet, Des Plaines River	Grab	GEN	Des Plaines
18	Devon Avenue, Salt Creek	Grab	GEN	Des Plaines
19	Belmont Avenue, Des Plaines River	Grab	GEN	Des Plaines
20	Roosevelt Road, Des Plaines River	Grab	GEN	Des Plaines
21	First Avenue, Salt Creek	Grab	GEN	Des Plaines
22	Ogden Avenue, Des Plaines River	Grab	GEN	Des Plaines
23	Willow Springs Road, Des Plaines River	Grab	GEN	Des Plaines
24	Wolf Road, Salt Creek	Grab	GEN	Des Plaines
25	Grand Avenue, Des Plaines River*	Grab	GEN	Des Plaines
26	Lawrence Avenue, Des Plaines River*	Grab	GEN	Des Plaines
27	York Road, Salt Creek*	Grab	GEN	Des Plaines
28	Highway 83 and Des Plaines River*	Grab	GEN	Des Plaines
29	Stephen Street, Des Plaines River	Grab	GEN	Des Plaines
30	Lake-Cook Road, West Fork North Branch	Grab	GEN	Chicago
31	Lake-Cook Road, Middle Fork North Branch	Grab	GEN	Chicago
32	Lake-Cook Road, Skokie River	Grab	GEN	Chicago
33	East Lake Avenue, Middle Fork North Branch*	Grab	GEN	Chicago
34	Dempster Street, North Branch Chicago River	Grab	GEN	Chicago
35	Central Street, North Shore Channel	Grab	GEN	Chicago
36	Touhy Avenue, North Shore Channel	Grab	SEC	Chicago
37	Wilson Avenue, North Branch Chicago River	Grab	SEC	Chicago
38	Ohio Street, North Branch Chicago River*	Grab	SEC	Chicago

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-2 (Continued)

DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

<u>Sampling Station</u>		Type	Water	River
No.	Name	Sample	Use	System
39	Madison Street, South Branch Chicago River	Grab	SEC	Chicago
40	Damen Avenue, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
41	Harlem Avenue, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
42	Route 83, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
43	Route 83, Cal-Sag Channel	Grab	SEC	Calumet
44	Howard Street, North Shore Channel*	Grab	SEC	Chicago
45	Lawrence Avenue, North Branch Chicago River*	Grab	SEC	Chicago
46	Grand Avenue, North Branch Chicago River	Grab	SEC	Chicago
47	Randolph Street, South Branch Chicago River*	Grab	SEC	Chicago
48	Stephen Street, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
49	Ewing Avenue, Calumet River	Grab	GEN	Calumet
50	Burnham Avenue, Wolf Lake	Grab	GEN	Calumet
51	51.0 IHB Rail Road Bridge, Grand Calumet River*	Grab	SEC	Calumet
52	Wentworth Avenue, Little Calumet River	Grab	GEN	Calumet
53	Wentworth Avenue, North Creek*	Grab	GEN	Calumet
54	Joe Orr Road, Thorn Creek	Grab	GEN	Calumet
55	130th Street, Calumet River	Grab	GEN	Calumet
56	Indiana Avenue, Little Calumet River	Grab	SEC	Calumet
57	Ashland Avenue, Little Calumet River	Grab	GEN	Calumet
58	Ashland Avenue, Cal-Sag Channel	Grab	SEC	Calumet
59	Cicero Avenue, Cal-Sag Channel	Grab	SEC	Calumet
60	Crawford Avenue, Cal-Sag Channel*	Grab	SEC	Calumet
61	Ashland Avenue, South Branch Chicago River*	Grab	SEC	Chicago
62	Stephen Street, Chicago Sanitary and Ship Canal*	Grab	SEC	Chicago
63	Longmeadow Lane, West Branch Du Page River	Grab	GEN	Des Plaines
64	Lake Street, West Branch Du Page River	Grab	GEN	Des Plaines
65	Oltendorf Road, Poplar Creek*	Grab	GEN	Des Plaines
66	Bartlett Road, Poplar Creek*	Grab	GEN	Des Plaines
67	171st Street, Union Drainage Ditch*	Grab	GEN	Calumet
68	Park Street, Union Drainage Ditch*	Grab	GEN	Calumet
69	Lincoln Highway, Deer Creek*	Grab	GEN	Calumet
70	Joe Orr Road, Deer Creek*	Grab	GEN	Calumet
71	Route 83, Chicago Sanitary and Ship Canal*	Grab	SEC	Chicago
72	Stephen Street, Chicago Sanitary and Ship Canal*	Grab	SEC	Chicago
73	Diversey Parkway, North Branch Chicago River	Grab	SEC	Chicago
74	Lake Shore Drive, Chicago River	Grab	GEN	Chicago
75	Cicero Avenue, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-2 (Continued)

DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

<u>Sampling Station</u>		Type	Water	River
No.	Name	Sample	Use	System
76	Kalsted Street, Little Calumet River	Grab	SEC	Calumet
77	Elmhurst Road, Higgins Creek	Grab	GEN	Des Plaines
78	Wille Road, Higgins Creek	Grab	GEN	Des Plaines
79	Higgins Road, Salt Creek	Grab	GEN	Des Plaines
80	Arlington Heights Road, Salt Creek	Grab	GEN	Des Plaines
81	Lockport Forebay*	Auto	SEC	Chicago
82	Lockport Trebler, Chicago Sanitary and Ship Canal	Auto	SEC	Chicago
83	Lockport Solenoid*	Auto	SEC	Chicago
84	Lockport 16th Street Bridge*	Grab	SEC	Chicago
85	Demptser Street, North Shore Channel*	Grab	SEC	Chicago
86	Burnham Avenue, Grand Calumet River	Grab	SEC	Calumet
89	Walnut Lane, West Branch Du Page River	Grab	GEN	Des Plaines
90	Route 18, Poplar Creek	Grab	GEN	Des Plaines
91	Material Service Road, Des Plaines River	Grab	GEN	Des Plaines
92	Lockport Forebay, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
93	Jefferson Street, Joliet, Des Plaines River <sup>1</sup>	Grab	SEC	Des Plaines
94	Empress Casino, Des Plaines River <sup>1</sup>	Grab	SEC	Des Plaines
95	I-55, Des Plaines River <sup>1</sup>	Grab	SEC	Des Plaines
96	Albany Avenue, North Branch Chicago River	Grab	GEN	Chicago

GEN: General Use; SEC: Secondary Contact; EFF: Effluent.

\*Excluded in 2000 Sampling.

<sup>1</sup>Kept for Special Studies Separately.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-3

DIRECTORY OF NEW SAMPLING STATION NAMES IN 2000

New Station Name	Station No.	Old Station Name
<u>Chicago River System</u>		
Lake-Cook Road, West Fork North Branch	30	County Line Rd., W. Fork N. Branch
Lake-Cook Road, Middle Fork North Branch	31	County Line Rd., Md. Fork N. Branch
Lake-Cook Road, Skokie River	32	County Line Rd., Skokie River
Dempster Street, North Branch Chicago River	34	Dempster St., N.B. Chicago River
Central Street, North Shore Channel	35	Central Ave., N. Shore Channel
Touhy Avenue, North Shore Channel	36	Touhy Ave., N. Shore Channel
Wilson Avenue, North Branch Chicago River	37	Wilson Ave., N.B. Chicago River
Madison Street, South Branch Chicago River	39	Madison St., S.B. Chicago River
Damen Avenue, Chicago Sanitary & Ship Canal	40	Damen Ave., S.B. Chicago River
Harlem Avenue, Chicago Sanitary & Ship Canal	41	Harlem Ave., Chgo. San. and Ship Canal
Route 83, Chicago Sanitary & Ship Canal	42	Hwy. 83 and Chgo. San. and Ship Canal
Grand Avenue, North Branch Chicago River	46	Grand Ave., N.B. Chicago River
Stephen Street, Chicago Sanitary & Ship Canal	48	Lemont Bridge Stephen Street (Comp)
Diversey Parkway, North Branch Chicago River	73	Diversey Ave., N.B. Chicago River
Lake Shore Drive, Chicago River	74	Outer Dr. Bridge, Chicago River
Cicero Avenue, Chicago Sanitary & Ship Canal	75	Cicero Ave., Chgo. San. and Ship Canal
Lockport Trebler, Chicago Sanitary & Ship Canal	82	Lockport Trebler
Lockport Forebay, Chicago Sanitary & Ship Canal	92	Did not Exist
Albany Avenue, North Branch Chicago River	96	Did not Exist
<u>Calumet River System</u>		
Route 83, Cal-Sag Channel	43	Hwy. 83 and Cal-Sag Channel
Ewing Avenue, Calumet River	49	92nd and Ewing Ave., Calumet River
Burnham Avenue, Wolf Lake	50	Wolf Lake Burnham Ave.
IHB Rail Road Bridge, Grand Calumet River	51	IHB R.R. Bridge, Grand Calumet River
Wentworth Avenue, Little Calumet River	52	Wentworth Ave., Little Calumet River
Joe Orr Road, Thorn Creek	54	Joe Orr Road, Thorn Creek
130th Street, Calumet River	55	130th Street, Calumet River
Indiana Avenue, Little Calumet River	56	Indiana Ave., Calumet River
Ashland Avenue, Little Calumet River	57	135th and Ashland, Little Calumet River
Ashland Avenue, Cal-Sag Channel	58	Ashland Ave., Cal-Sag Channel
Cicero Avenue, Cal-Sag Channel	59	Cicero Ave., Cal-Sag Channel
Halsted Street, Little Calumet River	76	Halsted Street, Little Cal. River
Burnham Avenue, Grand Calumet River	86	Burnham Avenue, Grand Calumet River
<u>Des Plaines River System</u>		
Lake-Cook Road, Buffalo Creek	12	County Line Rd., Buffalo Creek
Lake-Cook Road, Des Plaines River	13	County Line Road, Des Plaines River
Oakton Street, Des Plaines River	17	Oakton St., Des Plaines River
Devon Avenue, Salt Creek	18	Davon Ave., Salt Creek
Belmont Avenue, Des Plaines River	19	Belmont Ave., Des Plaines River
Roosevelt Road, Des Plaines River	20	Roosevelt Road, Des Plaines River
First Avenue, Salt Creek	21	First Ave., Salt Creek
Ogden Avenue, Des Plaines River	22	Ogden Ave., Des Plaines River
Willow Springs Road, Des Plaines River	23	Willow Springs Rd., Des Plaines River
Wolf Road, Salt Creek	24	Wolf Road, Salt Creek
Stephen Street, Des Plaines River	29	Lemont Stephen St., Des Plaines River
Longmeadow Lane, West Branch Du Page River	63	Longmeadow Lane, Du Page River
Lake Street, West Branch Du Page River	64	Lake St., Du Page River
Elmhurst Road, Higgins Creek	77	Elmhurst Rd., Higgins Creek
Wille Road, Higgins Creek	78	Wille Rd., Higgins Creek
Higgins Road, Salt Creek	79	Higgins Rd., Salt Creek
Arlington Heights Road, Salt Creek	80	Arlington Hts. Rd., Salt Creek
Walnut Lane, West Branch Du Page River	89	Walnut Lane, West Branch Du Page River
Route 19, Poplar Creek	90	Chicago-Elgin Rd., Poplar Creek
Material Service Road, Des Plaines River	91	Did not Exist
Jefferson Street, Joliet, Des Plaines River	93	Did not Exist
Empress Casino, Des Plaines River	94	Did not Exist
I-55, Des Plaines River	95	Did not Exist

APPENDIX II

WATER QUALITY RESULTS

ANNUAL MEAN, STANDARD COMPLIANCE VIOLATION HISTORY, AND  
MEAN HISTORY

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1

WATERWAYS SAMPLE MEANS 2000

<u>Sampling Station</u>		BOD <sub>5</sub>	DO	COD	Temp	pH
No.	Name	mg/L	mg/L	mg/L	°C	mg/L
<u>Chicago River System</u>						
30	Lake-Cook Road, West Fork North Branch	ND	10.50	ND	15.1	8.00
31	Lake-Cook Road, Middle Fork North Branch	ND	6.99	ND	15.5	7.79
32	Lake-Cook Road, Skokie River	ND	7.25	ND	15.5	7.95
34	Dempster Street, North Branch Chicago River	ND	7.50	ND	15.3	7.78
96	Albany Avenue, North Branch Chicago River	ND	6.80	ND	15.9	7.65
35	Central Street, North Shore Channel	ND	7.47	ND	18.0	8.31
36	Touhy Avenue, North Shore Channel	ND	7.24	ND	15.8	7.63
37	Wilson Avenue, North Branch Chicago River	ND	6.68	ND	14.9	7.57
73	Diversey Parkway, North Branch Chicago River	ND	5.84	ND	15.4	7.59
46	Grand Avenue, North Branch Chicago River	ND	6.13	ND	14.4	7.60
74	Lake Shore Drive, Chicago River	ND	8.04	ND	15.8	7.70
39	Madison Street, South Branch Chicago River	ND	6.67	ND	14.6	7.54
40	Damen Avenue, Chicago Sanitary & Ship Canal	ND	5.43	ND	18.3	7.45
75	Cicero Avenue, Chicago Sanitary & Ship Canal	ND	4.97	ND	18.7	7.27
41	Harlem Avenue, Chicago Sanitary & Ship Canal	ND	6.52	ND	17.9	7.42
42	Route 83, Chicago Sanitary & Ship Canal	ND	5.46	ND	19.1	7.32
48	Stephen Street, Chicago Sanitary & Ship Canal	ND	5.40	ND	18.3	7.48
82	Lockport Trebler, Chicago Sanitary & Ship Canal	6.60	ND	ND	ND	7.75
92	Lockport Forebay, Chicago Sanitary & Ship Canal	ND	5.65	ND	19.1	7.28
<u>Calumet River System</u>						
49	Ewing Avenue, Calumet River	ND	9.44	ND	13.4	7.96
50	Burnham Avenue, Wolf Lake	ND	9.33	ND	13.5	8.06
55	130th Street, Calumet River	ND	8.43	ND	14.8	7.72
51	IEB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	ND	4.43	ND	15.1	7.74
56	Indiana Avenue, Little Calumet River	ND	8.20	ND	15.2	7.73
76	Halsted Street, Little Calumet River	ND	6.60	ND	16.2	7.47
52	Wentworth Avenue, Little Calumet River	ND	6.52	ND	14.6	7.84
54	Joe Orr Road, Thorn Creek	ND	8.27	ND	17.3	7.51
57	Ashland Avenue, Little Calumet River	ND	6.28	ND	15.6	7.41
58	Ashland Avenue, Cal-Sag Channel	ND	6.37	ND	15.9	7.31
59	Cicero Avenue, Cal-Sag Channel	ND	6.35	ND	15.5	7.17
43	Route 83, Cal-Sag Channel	ND	6.17	ND	15.5	7.17
<u>Des Plaines River System</u>						
90	Route 19, Poplar Creek	ND	7.91	ND	17.7	8.08
63	Longmeadow Lane, West Branch Du Page River	ND	7.50	ND	16.2	7.95
89	Walnut Lane, West Branch Du Page River	ND	7.01	ND	15.2	8.13
64	Lake Street, West Branch Du Page River	ND	7.79	ND	15.5	8.30
79	Higgins Road, Salt Creek	ND	7.09	ND	15.9	8.16
80	Arlington Heights Road, Salt Creek	ND	7.79	ND	14.2	8.16
18	Devon Avenue, Salt Creek	ND	7.78	ND	14.5	8.03
24	Wolf Road, Salt Creek	ND	7.74	ND	16.3	7.78
21	First Avenue, Salt Creek	ND	6.72	ND	13.3	7.40
77	Elmhurst Road, Higgins Creek	ND	7.71	ND	15.2	7.81
78	Wille Road, Higgins Creek	ND	8.43	ND	16.3	7.60
12	Lake-Cook Road, Buffalo Creek	ND	7.97	ND	15.4	7.85
13	Lake-Cook Road, Des Plaines River	ND	8.04	ND	13.3	7.92
17	Oakton Steet, Des Plaines River	ND	7.66	ND	15.1	7.75
19	Belmont Avenue, Des Plaines River	ND	6.41	ND	15.1	7.64
20	Roosevelt Road, Des Plaines River	ND	6.44	ND	15.0	7.68
22	Ogden Avenue, Des Plaines River	ND	7.72	ND	15.5	7.11
23	Willow Springs Road, Des Plaines River	ND	7.65	ND	16.1	7.83
29	Stephen Street, Des Plaines River	ND	7.81	ND	16.6	7.82
91	Material Service Road, Des Plaines River	ND	8.42	ND	15.1	7.65

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

<u>Sampling Station</u>	Cl	Turb	Cond	Alk	TKN
No. Name	mg/L	NTU	µmhos	mg/L	mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	847	81.0	ND	170	2.18
31 Lake-Cook Road, Middle Fork North Branch	217	16.8	ND	189	1.67
32 Lake-Cook Road, Skokie River	242	13.0	ND	200	1.09
34 Dempster Street, North Branch Chicago River	269	18.5	ND	163	1.45
96 Albany Avenue, North Branch Chicago River	163	11.0	ND	161	1.60
35 Central Street, North Shore Channel	60	11.8	ND	126	1.05
36 Touhy Avenue, North Shore Channel	150	8.1	ND	137	2.65
37 Wilson Avenue, North Branch Chicago River	202	9.7	ND	141	3.10
73 Diversey Parkway, North Branch Chicago River	190	10.1	ND	138	2.52
46 Grand Avenue, North Branch Chicago River	148	12.6	ND	143	2.40
74 Lake Shore Drive, Chicago River	81	8.3	ND	123	1.10
39 Madison Street, South Branch Chicago River	126	10.5	ND	137	2.36
40 Damen Avenue, Chicago Sanitary & Ship Canal	134	12.7	ND	136	2.31
75 Cicero Avenue, Chicago Sanitary & Ship Canal	124	12.8	ND	135	1.99
41 Harlem Avenue, Chicago Sanitary & Ship Canal	166	9.3	ND	121	1.72
42 Route 83, Chicago Sanitary & Ship Canal	139	8.2	ND	126	1.65
48 Stephen Street, Chicago Sanitary & Ship Canal	126	11.1	ND	158	1.93
82 Lockport Trebler, Chicago Sanitary & Ship Canal	225	ND	1235	143	1.96
92 Lockport Forebay, Chicago Sanitary & Ship Canal	179	11.5	ND	137	1.83
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	51	10.6	ND	115	0.51
50 Burnham Avenue, Wolf Lake	32	6.4	ND	101	0.73
55 130th Street, Calumet River	74	13.5	ND	116	0.66
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	177	12.5	ND	168	4.32
56 Indiana Avenue, Little Calumet River	103	15.8	ND	127	1.01
76 Halsted Street, Little Calumet River	150	10.3	ND	154	1.50
52 Wentworth Avenue, Little Calumet River	155	33.0	ND	195	2.03
54 Joe Orr Road, Thorn Creek	162	22.0	ND	172	1.92
57 Ashland Avenue, Little Calumet River	190	21.3	ND	190	1.46
58 Ashland Avenue, Cal-Sag Channel	164	13.3	ND	159	1.50
59 Cicero Avenue, Cal-Sag Channel	168	13.3	ND	161	2.22
43 Route 83, Cal-Sag Channel	168	18.5	ND	162	1.45
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	143	18.6	ND	196	1.31
63 Longmeadow Lane, West Branch Du Page River	189	21.8	ND	156	1.66
89 Walnut Lane, West Branch Du Page River	153	13.5	ND	155	2.37
64 Lake Street, West Branch Du Page River	160	27.6	ND	146	2.70
79 Higgins Road, Salt Creek	278	29.4	ND	161	1.82
80 Arlington Heights Road, Salt Creek	219	10.8	ND	136	1.74
18 Devon Avenue, Salt Creek	223	15.6	ND	132	1.73
24 Wolf Road, Salt Creek	220	22.6	ND	144	1.61
21 First Avenue, Salt Creek	213	23.0	ND	150	1.62
77 Elmhurst Road, Higgins Creek	336	27.7	ND	140	1.41
78 Wille Road, Higgins Creek	191	7.2	ND	171	2.35
12 Lake-Cook Road, Buffalo Creek	194	45.9	ND	174	1.49
13 Lake-Cook Road, Des Plaines River	152	23.9	ND	191	1.82
17 Oakton Steet, Des Plaines River	141	27.5	ND	175	1.58
19 Belmont Avenue, Des Plaines River	153	20.4	ND	172	2.27
20 Roosevelt Road, Des Plaines River	157	22.3	ND	171	1.57
22 Ogden Avenue, Des Plaines River	170	23.6	ND	160	1.49
23 Willow Springs Road, Des Plaines River	177	26.0	ND	157	1.66
29 Stephen Street, Des Plaines River	175	26.6	ND	165	1.35
91 Material Service Road, Des Plaines River	202	24.5	ND	172	1.63

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

		Un-ionized				
Sampling Station		NH <sub>4</sub> -N	NH <sub>3</sub> -N	ORG-N	NO <sub>2</sub> +NO <sub>3</sub>	TS
No.	Name	mg/L	mg/L	mg/L	mg/L	mg/L
<u>Chicago River System</u>						
30	Lake-Cook Road, West Fork North Branch	0.470	0.004	1.71	7.57	1948
31	Lake-Cook Road, Middle Fork North Branch	0.169	0.006	1.50	3.35	770
32	Lake-Cook Road, Skokie River	0.187	0.007	0.91	3.52	828
34	Dempster Street, North Branch Chicago River	0.158	0.005	1.29	4.51	863
96	Albany Avenue, North Branch Chicago River	0.413	0.004	1.19	5.37	616
35	Central Street, North Shore Channel	0.301	0.020	0.75	0.29	363
36	Touhy Avenue, North Shore Channel	1.273	0.051	1.37	5.59	574
37	Wilson Avenue, North Branch Chicago River	1.653	0.058	1.45	6.17	654
73	Diversey Parkway, North Branch Chicago River	1.227	0.037	1.30	5.49	654
46	Grand Avenue, North Branch Chicago River	1.201	0.017	1.20	5.63	587
74	Lake Shore Drive, Chicago River	0.372	0.005	0.73	1.84	402
39	Madison Street, South Branch Chicago River	0.906	0.011	1.46	4.28	517
40	Damen Avenue, Chicago Sanitary & Ship Canal	1.116	0.012	1.20	4.42	552
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.843	0.007	1.14	4.33	517
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.438	0.006	1.28	7.00	619
42	Route 83, Chicago Sanitary & Ship Canal	0.630	0.006	1.02	3.84	566
48	Stephen Street, Chicago Sanitary & Ship Canal	0.692	0.008	1.24	5.15	633
82	Lockport Trebler, Chicago Sanitary & Ship Canal	0.619	ND	1.35	5.13	812
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.595	0.008	1.24	5.52	680
<u>Calumet River System</u>						
49	Ewing Avenue, Calumet River	0.112	0.005	0.40	0.38	282
50	Burnham Avenue, Wolf Lake	0.092	0.005	0.64	0.09	255
55	130th Street, Calumet River	0.195	0.004	0.46	0.56	364
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	1.586	0.048	2.73	8.48	934
56	Indiana Avenue, Little Calumet River	0.307	0.024	0.70	1.86	489
76	Halsted Street, Little Calumet River	0.332	0.005	1.17	4.32	697
52	Wentworth Avenue, Little Calumet River	0.278	0.011	1.75	4.18	835
54	Joe Orr Road, Thorn Creek	0.380	0.006	1.54	7.92	1140
57	Ashland Avenue, Little Calumet River	0.295	0.003	1.16	4.31	965
58	Ashland Avenue, Cal-Sag Channel	0.374	0.004	1.12	4.22	753
59	Cicero Avenue, Cal-Sag Channel	0.490	0.003	1.73	4.26	775
43	Route 83, Cal-Sag Channel	0.336	0.003	1.12	4.20	760
<u>Des Plaines River System</u>						
90	Route 19, Poplar Creek	0.106	0.007	1.20	0.39	657
63	Longmeadow Lane, West Branch Du Page River	0.154	0.011	1.50	0.63	698
89	Walnut Lane, West Branch Du Page River	0.341	0.038	2.03	6.98	651
64	Lake Street, West Branch Du Page River	0.645	0.148	2.06	5.78	658
79	Higgins Road, Salt Creek	0.172	0.024	1.65	0.47	895
80	Arlington Heights Road, Salt Creek	0.145	0.024	1.60	6.27	749
18	Devon Avenue, Salt Creek	0.161	0.029	1.57	6.40	771
24	Wolf Road, Salt Creek	0.196	0.004	1.41	5.27	821
21	First Avenue, Salt Creek	0.192	0.002	1.43	4.90	806
77	Elmhurst Road, Higgins Creek	0.134	0.004	1.28	0.46	879
78	Wille Road, Higgins Creek	0.396	0.006	1.95	4.25	733
12	Lake-Cook Road, Buffalo Creek	0.134	0.012	1.36	0.51	810
13	Lake-Cook Road, Des Plaines River	0.143	0.014	1.67	5.24	709
17	Oakton Steet, Des Plaines River	0.107	0.002	1.48	3.80	679
19	Belmont Avenue, Des Plaines River	0.177	0.002	2.09	3.54	675
20	Roosevelt Road, Des Plaines River	0.145	0.004	1.43	3.42	681
22	Ogden Avenue, Des Plaines River	0.150	0.001	1.34	3.78	713
23	Willow Springs Road, Des Plaines River	0.160	0.004	1.50	3.89	732
29	Stephen Street, Des Plaines River	0.146	0.005	1.20	3.91	734
91	Material Service Road, Des Plaines River	0.140	0.003	1.49	4.52	798

ND = No Data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

<u>Sampling Station</u>	TVS	TSS	VSS	TDS	TDVS
No. Name	mg/L	mg/L	mg/L	mg/L	mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	ND	120.0	19.00	1828	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	22.6	4.60	747	ND
32 Lake-Cook Road, Skokie River	ND	14.3	3.50	814	ND
34 Dempster Street, North Branch Chicago River	ND	28.6	6.45	835	ND
96 Albany Avenue, North Branch Chicago River	ND	15.0	4.50	601	ND
35 Central Street, North Shore Channel	ND	13.6	3.56	350	ND
36 Touhy Avenue, North Shore Channel	ND	10.8	4.50	563	ND
37 Wilson Avenue, North Branch Chicago River	ND	15.0	4.83	639	ND
73 Diversey Parkway, North Branch Chicago River	ND	15.3	3.75	639	ND
46 Grand Avenue, North Branch Chicago River	ND	15.2	3.75	572	ND
74 Lake Shore Drive, Chicago River	ND	12.8	4.67	389	ND
39 Madison Street, South Branch Chicago River	ND	15.2	3.75	502	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	19.1	4.11	533	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	16.5	3.67	501	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	11.5	3.58	607	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	8.8	2.36	558	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	16.8	3.82	616	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	138.9	19.2	4.71	792	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	15.6	3.68	665	ND
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	ND	12.6	2.00	269	ND
50 Burnham Avenue, Wolf Lake	ND	4.7	2.08	250	ND
55 130th Street, Calumet River	ND	14.0	2.73	350	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	23.5	10.00	911	ND
56 Indiana Avenue, Little Calumet River	ND	22.2	3.92	466	ND
76 Halsted Street, Little Calumet River	ND	11.6	2.75	685	ND
52 Wentworth Avenue, Little Calumet River	ND	55.4	9.91	780	ND
54 Joe Orr Road, Thorn Creek	ND	24.1	4.83	1116	ND
57 Ashland Avenue, Little Calumet River	ND	28.5	4.91	937	ND
58 Ashland Avenue, Cal-Sag Channel	ND	17.9	3.50	735	ND
59 Cicero Avenue, Cal-Sag Channel	ND	19.8	3.25	756	ND
43 Route 83, Cal-Sag Channel	ND	28.2	5.00	732	ND
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	ND	36.4	6.29	620	ND
63 Longmeadow Lane, West Branch Du Page River	ND	40.0	9.00	658	ND
89 Walnut Lane, West Branch Du Page River	ND	23.5	6.42	628	ND
64 Lake Street, West Branch Du Page River	ND	45.9	10.55	612	ND
79 Higgins Road, Salt Creek	ND	41.2	10.10	854	ND
80 Arlington Heights Road, Salt Creek	ND	11.7	3.67	738	ND
18 Devon Avenue, Salt Creek	ND	27.4	5.33	743	ND
24 Wolf Road, Salt Creek	ND	37.6	6.60	784	ND
21 First Avenue, Salt Creek	ND	40.6	6.80	765	ND
77 Elmhurst Road, Higgins Creek	ND	39.3	8.60	840	ND
78 Wille Road, Higgins Creek	ND	12.4	4.00	721	ND
12 Lake-Cook Road, Buffalo Creek	ND	74.6	11.40	735	ND
13 Lake-Cook Road, Des Plaines River	ND	33.8	6.50	675	ND
17 Oakton Steet, Des Plaines River	ND	45.9	8.80	633	ND
19 Belmont Avenue, Des Plaines River	ND	32.2	5.60	643	ND
20 Roosevelt Road, Des Plaines River	ND	31.0	5.70	650	ND
22 Ogden Avenue, Des Plaines River	ND	34.3	6.10	679	ND
23 Willow Springs Road, Des Plaines River	ND	43.9	7.80	688	ND
29 Stephen Street, Des Plaines River	ND	42.5	7.30	692	ND
91 Material Service Road, Des Plaines River	ND	38.7	8.06	759	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

Sampling Station No. Name	Phenol µg/L	SO <sub>4</sub> mg/L	FOG mg/L	T.P mg/L	Sol.P mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	10.0	77.0	ND	2.200	1.610
31 Lake-Cook Road, Middle Fork North Branch	24.5	72.0	ND	0.185	0.082
32 Lake-Cook Road, Skokie River	19.6	74.4	ND	0.224	0.111
34 Dempster Street, North Branch Chicago River	18.0	76.1	ND	1.147	0.889
96 Albany Avenue, North Branch Chicago River	14.5	59.1	ND	1.312	1.103
35 Central Street, North Shore Channel	13.3	32.5	ND	0.183	0.044
36 Touhy Avenue, North Shore Channel	22.2	53.8	ND	1.214	0.989
37 Wilson Avenue, North Branch Chicago River	20.6	53.8	ND	1.301	0.904
73 Diversey Parkway, North Branch Chicago River	20.8	55.8	ND	1.182	0.814
46 Grand Avenue, North Branch Chicago River	21.4	55.4	ND	1.130	0.865
74 Lake Shore Drive, Chicago River	15.6	39.3	ND	0.373	0.270
39 Madison Street, South Branch Chicago River	23.0	50.4	ND	1.130	0.730
40 Damen Avenue, Chicago Sanitary & Ship Canal	23.0	51.9	ND	1.048	0.703
75 Cicero Avenue, Chicago Sanitary & Ship Canal	17.5	51.6	ND	0.965	0.672
41 Harlem Avenue, Chicago Sanitary & Ship Canal	18.5	72.3	ND	1.120	0.834
42 Route 83, Chicago Sanitary & Ship Canal	19.1	70.8	ND	0.755	0.571
48 Stephen Street, Chicago Sanitary & Ship Canal	21.8	92.3	ND	1.355	1.071
82 Lockport Trebler, Chicago Sanitary & Ship Canal	15.3	ND	ND	1.485	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	18.5	96.2	ND	1.414	1.156
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	7.3	29.8	ND	0.111	0.053
50 Burnham Avenue, Wolf Lake	11.6	38.6	ND	0.075	0.040
55 130th Street, Calumet River	10.5	49.8	ND	0.088	0.045
51 IHE Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	22.8	177.2	ND	0.537	0.121
56 Indiana Avenue, Little Calumet River	13.1	77.8	ND	0.373	0.277
76 Halsted Street, Little Calumet River	24.1	143.1	ND	3.193	2.923
52 Wentworth Avenue, Little Calumet River	21.5	145.1	ND	0.752	0.384
54 Joe Orr Road, Thorn Creek	19.7	342.4	ND	5.207	4.875
57 Ashland Avenue, Little Calumet River	19.9	190.1	ND	2.170	1.882
58 Ashland Avenue, Cal-Sag Channel	21.1	163.6	ND	3.038	2.720
59 Cicero Avenue, Cal-Sag Channel	20.6	151.8	ND	3.119	2.793
43 Route 83, Cal-Sag Channel	19.1	144.1	ND	2.642	2.306
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	17.3	60.4	ND	0.181	0.064
63 Longmeadow Lane, West Branch Du Page River	20.1	71.7	ND	0.184	0.060
89 Walnut Lane, West Branch Du Page River	19.7	69.3	ND	2.109	1.910
64 Lake Street, West Branch Du Page River	22.5	68.5	ND	1.649	1.383
79 Higgins Road, Salt Creek	17.1	79.5	ND	0.249	0.039
80 Arlington Heights Road, Salt Creek	18.2	73.9	ND	1.688	1.488
18 Devon Avenue, Salt Creek	17.6	74.0	ND	1.710	1.447
24 Wolf Road, Salt Creek	17.1	89.4	ND	1.407	1.094
21 First Avenue, Salt Creek	20.1	86.2	ND	1.239	0.945
77 Elmhurst Road, Higgins Creek	28.4	47.0	ND	0.184	0.044
78 Willie Road, Higgins Creek	26.6	94.5	ND	0.578	0.385
12 Lake-Cook Road, Buffalo Creek	21.7	106.5	ND	0.222	0.037
13 Lake-Cook Road, Des Plaines River	18.3	81.0	ND	0.964	0.716
17 Oakton Street, Des Plaines River	19.6	75.5	ND	0.705	0.479
19 Belmont Avenue, Des Plaines River	20.3	78.1	ND	0.914	0.420
20 Roosevelt Road, Des Plaines River	19.7	78.5	ND	0.583	0.415
22 Ogden Avenue, Des Plaines River	19.6	79.2	ND	0.732	0.557
23 Willow Springs Road, Des Plaines River	16.9	85.5	ND	0.762	0.544
29 Stephen Street, Des Plaines River	16.3	83.4	ND	0.742	0.575
91 Material Service Road, Des Plaines River	18.2	89.1	ND	0.914	0.711

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

<u>Sampling Station</u>		Tot-CN	WAD-CN	F	TOC	FC
No. Name		mg/L	mg/L	mg/L	mg/L	mg/L
<u>Chicago River System</u>						
30	Lake-Cook Road, West Fork North Branch	0.009	0.001	0.710	7.00	4000
31	Lake-Cook Road, Middle Fork North Branch	0.002	0.000	0.310	12.40	1050
32	Lake-Cook Road, Skokie River	0.003	0.000	0.315	12.30	1131
34	Dempster Street, North Branch Chicago River	0.006	0.000	0.577	10.73	1484
96	Albany Avenue, North Branch Chicago River	0.005	0.001	0.642	8.33	4238
35	Central Street, North Shore Channel	0.002	0.000	0.187	5.67	270
36	Touhy Avenue, North Shore Channel	0.006	0.001	0.812	10.58	9424
37	Wilson Avenue, North Branch Chicago River	0.006	0.001	0.779	10.17	7677
73	Diversey Parkway, North Branch Chicago River	0.012	0.003	0.765	10.33	5539
46	Grand Avenue, North Branch Chicago River	0.006	0.001	0.783	9.92	1715
74	Lake Shore Drive, Chicago River	0.003	0.000	0.357	6.58	91
39	Madison Street, South Branch Chicago River	0.005	0.001	0.645	9.08	1090
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.667	12.78	160
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.004	0.001	0.617	6.58	154
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.007	0.001	0.781	9.75	5043
42	Route 83, Chicago Sanitary & Ship Canal	0.007	0.001	0.806	12.55	1046
48	Stephen Street, Chicago Sanitary & Ship Canal	0.007	0.001	0.799	10.09	537
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	0.914	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.007	0.001	0.810	9.62	256
<u>Calumet River System</u>						
49	Ewing Avenue, Calumet River	0.001	0.001	0.148	6.67	18
50	Burnham Avenue, Wolf Lake	0.001	0.000	0.200	6.92	24
55	130th Street, Calumet River	0.001	0.000	0.230	6.27	53
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0.009	0.001	0.823	14.18	3323
56	Indiana Avenue, Little Calumet River	0.003	0.001	0.382	7.67	124
76	Halsted Street, Little Calumet River	0.010	0.002	0.891	10.92	4774
52	Wentworth Avenue, Little Calumet River	0.061	0.009	4.255	12.82	3501
54	Joe Orr Road, Thorn Creek	0.008	0.001	0.737	12.75	2617
57	Ashland Avenue, Little Calumet River	0.008	0.002	1.609	12.73	3088
58	Ashland Avenue, Cal-Sag Channel	0.009	0.001	0.935	11.58	3170
59	Cicero Avenue, Cal-Sag Channel	0.008	0.002	0.916	11.50	656
43	Route 83, Cal-Sag Channel	0.007	0.002	0.827	17.25	79
<u>Des Plaines River System</u>						
90	Route 19, Poplar Creek	0.002	0.000	0.171	12.29	948
63	Longmeadow Lane, West Branch Du Page River	0.002	0.001	0.303	13.78	2538
89	Walnut Lane, West Branch Du Page River	0.008	0.001	0.723	12.75	1943
64	Lake Street, West Branch Du Page River	0.007	0.001	0.587	12.64	1889
79	Higgins Road, Salt Creek	0.002	0.000	0.294	11.40	305
80	Arlington Heights Road, Salt Creek	0.007	0.001	0.642	10.67	623
18	Devon Avenue, Salt Creek	0.006	0.001	0.608	10.58	807
24	Wolf Road, Salt Creek	0.004	0.001	0.542	10.80	1109
21	First Avenue, Salt Creek	0.004	0.001	0.486	10.10	1459
77	Elmhurst Road, Higgins Creek	0.004	0.001	0.317	11.80	636
78	Wille Road, Higgins Creek	0.006	0.001	0.746	12.08	536
12	Lake-Cook Road, Buffalo Creek	0.002	0.000	0.259	11.90	279
13	Lake-Cook Road, Des Plaines River	0.005	0.000	0.402	11.17	440
17	Oakton Street, Des Plaines River	0.004	0.000	0.400	11.40	915
19	Belmont Avenue, Des Plaines River	0.004	0.001	0.459	11.10	734
20	Roosevelt Road, Des Plaines River	0.004	0.001	0.526	11.20	790
22	Ogden Avenue, Des Plaines River	0.003	0.001	0.410	10.80	1121
23	Willow Springs Road, Des Plaines River	0.004	0.001	0.488	10.40	835
29	Stephen Street, Des Plaines River	0.004	0.001	0.486	9.60	528
91	Material Service Road, Des Plaines River	0.005	0.001	0.490	11.46	295

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

<u>Sampling Station</u>	Ca	Mg	Hard	Alpha	Beta
No. Name	mg/L	mg/L	mg/L	mg/L	mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	80.3	32.8	335	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	66.0	30.0	288	ND	ND
32 Lake-Cook Road, Skokie River	73.1	32.8	318	ND	ND
34 Dempster Street, North Branch Chicago River	63.8	27.9	274	ND	ND
96 Albany Avenue, North Branch Chicago River	56.6	23.2	237	ND	ND
35 Central Street, North Shore Channel	43.4	15.7	173	4.23	6.67
36 Touhy Avenue, North Shore Channel	52.9	19.3	211	4.25	11.30
37 Wilson Avenue, North Branch Chicago River	55.6	21.0	225	ND	ND
73 Diversey Parkway, North Branch Chicago River	54.9	20.8	223	ND	ND
46 Grand Avenue, North Branch Chicago River	55.4	20.9	224	ND	ND
74 Lake Shore Drive, Chicago River	44.2	15.7	175	ND	ND
39 Madison Street, South Branch Chicago River	53.3	19.4	213	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	53.0	20.0	214	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	53.3	19.7	214	4.22	9.05
41 Harlem Avenue, Chicago Sanitary & Ship Canal	54.3	20.1	218	4.26	9.33
42 Route 83, Chicago Sanitary & Ship Canal	53.6	19.8	215	4.36	9.04
48 Stephen Street, Chicago Sanitary & Ship Canal	58.5	21.9	236	4.25	9.65
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	57.3	21.8	233	4.44	9.11
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	39.7	13.1	153	ND	ND
50 Burnham Avenue, Wolf Lake	34.3	13.0	139	ND	ND
55 130th Street, Calumet River	44.9	15.5	176	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	73.3	57.7	421	ND	ND
56 Indiana Avenue, Little Calumet River	49.7	22.3	216	4.30	7.59
76 Halsted Street, Little Calumet River	63.6	23.4	255	4.39	10.27
52 Wentworth Avenue, Little Calumet River	85.9	35.3	360	ND	ND
54 Joe Orr Road, Thorn Creek	72.8	34.2	323	ND	ND
57 Ashland Avenue, Little Calumet River	84.5	38.8	371	ND	ND
58 Ashland Avenue, Cal-Sag Channel	67.1	26.0	275	ND	ND
59 Cicero Avenue, Cal-Sag Channel	68.1	26.4	279	ND	ND
43 Route 83, Cal-Sag Channel	70.4	26.9	286	4.41	9.40
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	64.8	31.3	291	ND	ND
63 Longmeadow Lane, West Branch Du Page River	63.8	24.1	258	4.21	7.30
89 Walnut Lane, West Branch Du Page River	59.3	23.7	246	4.13	9.61
64 Lake Street, West Branch Du Page River	59.9	23.6	247	ND	ND
79 Higgins Road, Salt Creek	65.9	28.9	284	4.37	7.01
80 Arlington Heights Road, Salt Creek	59.4	24.1	248	4.19	9.75
18 Devon Avenue, Salt Creek	58.8	23.6	244	ND	ND
24 Wolf Road, Salt Creek	67.7	28.3	286	ND	ND
21 First Avenue, Salt Creek	65.5	27.7	277	ND	ND
77 Elmhurst Road, Higgins Creek	62.4	22.9	250	4.42	7.37
78 Wills Road, Higgins Creek	67.6	25.8	275	4.24	16.49
12 Lake-Cook Road, Buffalo Creek	71.3	33.2	315	ND	ND
13 Lake-Cook Road, Des Plaines River	67.3	31.6	298	ND	ND
17 Oakton Steet, Des Plaines River	67.1	30.7	294	ND	ND
19 Belmont Avenue, Des Plaines River	65.5	29.7	286	ND	ND
20 Roosevelt Road, Des Plaines River	64.2	29.3	281	ND	ND
22 Ogden Avenue, Des Plaines River	65.2	29.1	282	ND	ND
23 Willow Springs Road, Des Plaines River	66.0	29.7	287	ND	ND
29 Stephen Street, Des Plaines River	67.2	30.0	291	ND	ND
91 Material Service Road, Des Plaines River	69.3	31.0	301	4.54	9.21

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

Sampling Station No. Name	Ag mg/L	As mg/L	Ba mg/L	B mg/L	Cd mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	0.000	0.000	0.083	0.208	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.000	0.041	0.134	0.000
32 Lake-Cook Road, Skokie River	0.001	0.008	0.042	0.161	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.007	0.033	0.194	0.000
96 Albany Avenue, North Branch Chicago River	0.001	0.000	0.029	0.243	0.000
35 Central Street, North Shore Channel	0.000	0.000	0.023	0.050	0.000
36 Touhy Avenue, North Shore Channel	0.001	0.006	0.017	0.233	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	0.013	0.021	0.201	0.000
73 Diversey Parkway, North Branch Chicago River	0.000	0.011	0.020	0.205	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.021	0.214	0.000
74 Lake Shore Drive, Chicago River	0.000	0.000	0.023	0.091	0.000
39 Madison Street, South Branch Chicago River	0.000	0.000	0.022	0.178	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.019	0.162	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.000	0.023	0.174	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.000	0.018	0.200	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.017	0.219	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.000	0.020	0.247	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.000	0.027	ND	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	0.001	0.019	0.224	0.000
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	0.001	0.005	0.022	0.033	0.001
50 Burnham Avenue, Wolf Lake	0.001	0.000	0.024	0.068	0.001
55 130th Street, Calumet River	0.000	0.005	0.028	0.084	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.002	0.005	0.025	0.371	0.000
56 Indiana Avenue, Little Calumet River	0.001	0.018	0.029	0.159	0.000
76 Halsted Street, Little Calumet River	0.001	0.000	0.015	0.286	0.000
52 Wentworth Avenue, Little Calumet River	0.001	0.000	0.040	0.276	0.000
54 Joe Orr Road, Thorn Creek	0.001	0.007	0.019	0.410	0.000
57 Ashland Avenue, Little Calumet River	0.002	0.005	0.034	0.321	0.000
58 Ashland Avenue, Cal-Sag Channel	0.000	0.000	0.022	0.280	0.001
59 Cicero Avenue, Cal-Sag Channel	0.000	0.005	0.021	0.277	0.000
43 Route 83, Cal-Sag Channel	0.001	0.000	0.024	0.250	0.000
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	0.000	0.000	0.053	0.059	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.010	0.044	0.069	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.025	0.285	0.000
64 Lake Street, West Branch Du Page River	0.001	0.009	0.035	0.203	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.040	0.086	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.026	0.206	0.000
18 Devon Avenue, Salt Creek	0.000	0.005	0.028	0.195	0.000
24 Wolf Road, Salt Creek	0.000	0.008	0.034	0.182	0.000
21 First Avenue, Salt Creek	0.001	0.007	0.033	0.176	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.047	0.083	0.000
78 Wille Road, Higgins Creek	0.000	0.007	0.023	0.366	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.006	0.046	0.101	0.000
13 Lake-Cook Road, Des Plaines River	0.001	0.012	0.036	0.166	0.000
17 Oakton Street, Des Plaines River	0.000	0.000	0.039	0.146	0.000
19 Belmont Avenue, Des Plaines River	0.001	0.000	0.034	0.176	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.034	0.181	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.008	0.034	0.178	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.031	0.185	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.034	0.182	0.000
91 Material Service Road, Des Plaines River	0.000	0.004	0.032	0.215	0.000

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

Sampling Station No.	Name	Cu mg/L	Cr mg/L	Fe mg/L	Soil Fe mg/L	Pb mg/L
<u>Chicago River System</u>						
30	Lake-Cook Road, West Fork North Branch	0.035	0.009	3.350	0.020	0.000
31	Lake-Cook Road, Middle Fork North Branch	0.011	0.001	0.634	0.185	0.004
32	Lake-Cook Road, Skokie River	0.011	0.002	0.565	0.183	0.004
34	Dempster Street, North Branch Chicago River	0.011	0.000	0.502	0.108	0.000
96	Albany Avenue, North Branch Chicago River	0.024	0.001	0.320	0.092	0.000
35	Central Street, North Shore Channel	0.007	0.000	0.268	0.072	0.000
36	Touhy Avenue, North Shore Channel	0.012	0.002	0.177	0.041	0.003
37	Wilson Avenue, North Branch Chicago River	0.014	0.001	0.248	0.055	0.000
73	Diversey Parkway, North Branch Chicago River	0.015	0.002	0.305	0.067	0.002
46	Grand Avenue, North Branch Chicago River	0.012	0.002	0.327	0.058	0.005
74	Lake Shore Drive, Chicago River	0.011	0.002	0.192	0.038	0.002
39	Madison Street, South Branch Chicago River	0.010	0.003	0.386	0.051	0.002
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.008	0.002	0.258	0.061	0.009
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.012	0.005	0.379	0.048	0.006
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.012	0.006	0.262	0.045	0.254
42	Route 83, Chicago Sanitary & Ship Canal	0.009	0.007	0.182	0.043	0.003
48	Stephen Street, Chicago Sanitary & Ship Canal	0.011	0.006	0.316	0.056	0.004
82	Lockport Trebler, Chicago Sanitary & Ship Canal	0.027	0.000	0.616	0.058	0.000
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.009	0.002	0.320	0.048	0.001
<u>Calumet River System</u>						
49	Ewing Avenue, Calumet River	0.009	0.003	0.317	0.038	0.000
50	Burnham Avenue, Wolf Lake	0.007	0.001	0.123	0.028	0.000
55	130th Street, Calumet River	0.008	0.002	0.365	0.041	0.010
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0.023	0.006	1.126	0.248	0.005
56	Indiana Avenue, Little Calumet River	0.010	0.003	0.470	0.053	0.002
76	Halsted Street, Little Calumet River	0.010	0.003	0.329	0.068	0.000
52	Wentworth Avenue, Little Calumet River	0.016	0.003	1.156	0.255	0.003
54	Joe Orr Road, Thorn Creek	0.010	0.003	0.433	0.124	0.007
57	Ashland Avenue, Little Calumet River	0.013	0.004	0.642	0.110	0.000
58	Ashland Avenue, Cal-Sag Channel	0.011	0.003	0.439	0.088	0.002
59	Cicero Avenue, Cal-Sag Channel	0.008	0.004	0.478	0.065	0.000
43	Route 83, Cal-Sag Channel	0.009	0.004	0.546	0.069	0.006
<u>Des Plaines River System</u>						
90	Route 19, Poplar Creek	0.006	0.002	0.611	0.127	0.000
63	Longmeadow Lane, West Branch Du Page River	0.007	0.001	0.844	0.249	0.003
89	Walnut Lane, West Branch Du Page River	0.011	0.001	0.417	0.087	0.002
64	Lake Street, West Branch Du Page River	0.008	0.001	0.773	0.148	0.004
79	Higgins Road, Salt Creek	0.007	0.001	0.858	0.183	0.004
80	Arlington Heights Road, Salt Creek	0.011	0.001	0.350	0.116	0.007
18	Devon Avenue, Salt Creek	0.011	0.002	0.517	0.132	0.000
24	Wolf Road, Salt Creek	0.011	0.004	0.621	0.099	0.000
21	First Avenue, Salt Creek	0.011	0.003	0.695	0.136	0.004
77	Elmhurst Road, Higgins Creek	0.009	0.002	0.733	0.147	0.000
78	Wille Road, Higgins Creek	0.011	0.003	0.214	0.057	0.000
12	Lake-Cook Road, Buffalo Creek	0.006	0.001	1.027	0.178	0.000
13	Lake-Cook Road, Des Plaines River	0.010	0.001	0.678	0.149	0.004
17	Oakton Street, Des Plaines River	0.010	0.003	0.770	0.158	0.004
19	Belmont Avenue, Des Plaines River	0.012	0.003	0.631	0.126	0.012
20	Roosevelt Road, Des Plaines River	0.010	0.003	0.632	0.167	0.000
22	Ogden Avenue, Des Plaines River	0.012	0.004	0.611	0.132	0.000
23	Willow Springs Road, Des Plaines River	0.010	0.003	0.652	0.121	0.004
29	Stephen Street, Des Plaines River	0.011	0.005	0.707	0.168	0.000
91	Material Service Road, Des Plaines River	0.011	0.002	0.669	0.093	0.003

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 2000

Sampling Station No. Name	Ni mg/L	Mn mg/L	Hg µg/L	Zn mg/L	Se mg/L
<u>Chicago River System</u>					
30 Lake-Cook Road, West Fork North Branch	0.020	0.139	0.000	0.079	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.080	0.000	0.020	0.000
32 Lake-Cook Road, Skokie River	0.000	0.100	0.024	0.024	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.067	0.022	0.036	0.000
96 Albany Avenue, North Branch Chicago River	0.000	0.035	0.000	0.038	0.000
35 Central Street, North Shore Channel	0.000	0.021	0.000	0.015	0.000
36 Touhy Avenue, North Shore Channel	0.004	0.029	0.017	0.047	0.000
37 Wilson Avenue, North Branch Chicago River	0.007	0.042	0.007	0.046	0.000
73 Diversey Parkway, North Branch Chicago River	0.004	0.081	0.059	0.062	0.000
46 Grand Avenue, North Branch Chicago River	0.004	0.044	0.028	0.049	0.000
74 Lake Shore Drive, Chicago River	0.002	0.035	0.015	0.031	0.000
39 Madison Street, South Branch Chicago River	0.004	0.039	0.029	0.043	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.003	0.038	0.011	0.039	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.047	0.028	0.046	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.003	0.046	0.026	0.047	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.028	0.015	0.036	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.049	0.005	0.046	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.049	0.007	0.075	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.002	0.074	0.009	0.053	0.001
<u>Calumet River System</u>					
49 Ewing Avenue, Calumet River	0.002	0.024	0.013	0.022	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.044	0.010	0.015	0.000
55 130th Street, Calumet River	0.001	0.037	0.000	0.022	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.002	0.090	0.000	0.078	0.000
56 Indiana Avenue, Little Calumet River	0.002	0.040	0.008	0.040	0.000
76 Halsted Street, Little Calumet River	0.004	0.058	0.005	0.047	0.017
52 Wentworth Avenue, Little Calumet River	0.000	0.138	0.015	0.045	0.000
54 Joe Orr Road, Thorn Creek	0.002	0.065	0.000	0.060	0.000
57 Ashland Avenue, Little Calumet River	0.001	0.093	0.000	0.060	0.000
58 Ashland Avenue, Cal-Sag Channel	0.003	0.069	0.014	0.054	0.000
59 Cicero Avenue, Cal-Sag Channel	0.002	0.064	0.016	0.044	0.000
43 Route 83, Cal-Sag Channel	0.003	0.063	0.008	0.062	0.000
<u>Des Plaines River System</u>					
90 Route 19, Poplar Creek	0.000	0.155	0.000	0.012	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.118	0.000	0.022	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.105	0.017	0.047	0.000
64 Lake Street, West Branch Du Page River	0.002	0.065	0.007	0.037	0.000
79 Higgins Road, Salt Creek	0.000	0.092	0.018	0.018	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.061	0.010	0.034	0.000
18 Devon Avenue, Salt Creek	0.000	0.084	0.000	0.034	0.000
24 Wolf Road, Salt Creek	0.002	0.087	0.000	0.143	0.000
21 First Avenue, Salt Creek	0.002	0.061	0.000	0.038	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.132	0.000	0.032	0.000
78 Wille Road, Higgins Creek	0.003	0.064	0.008	0.067	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.147	0.000	0.020	0.020
13 Lake-Cook Road, Des Plaines River	0.000	0.071	0.000	0.030	0.000
17 Oakton Street, Des Plaines River	0.000	0.093	0.000	0.033	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.069	0.000	0.030	0.000
20 Roosevelt Road, Des Plaines River	0.002	0.065	0.000	0.029	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.060	0.000	0.047	0.000
23 Willow Springs Road, Des Plaines River	0.002	0.093	0.000	0.056	0.000
29 Stephen Street, Des Plaines River	0.002	0.081	0.000	0.043	0.000
91 Material Service Road, Des Plaines River	0.001	0.061	0.002	0.046	0.005

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-2

DISSOLVED OXYGEN VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>							
No.	Name	00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	1/ 9	0/ 2	2/ 9
31	Lake-Cook Road, Middle Fork North Branch	4/ 10	3/ 10	6/ 12	2/ 10	4/ 8	5/ 10	3/ 10	2/ 12
32	Lake-Cook Road, Skokie River	3/ 10	6/ 11	2/ 12	2/ 10	1/ 8	4/ 9	3/ 8	1/ 12
34	Dempster Street, North Branch Chicago River	1/ 11	1/ 11	0/ 12	2/ 11	0/ 12	3/ 10	1/ 11	2/ 12
96	Albany Avenue, North Branch Chicago River	1/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	1/ 8	2/ 10	2/ 9	0/ 10	2/ 9	1/ 8	0/ 8	0/ 12
36	Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 11
37	Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12	0/ 8
73	Diversey Parkway, North Branch Chicago River	1/ 12	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12
46	Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	1/ 12	2/ 12
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39	Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 8	0/ 12
40	Damen Avenue, Chicago Sanitary & Ship Canal	2/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	1/ 12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	2/ 12	2/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12
42	Route 81, Chicago Sanitary & Ship Canal	0/ 11	1/ 12	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	3/ 12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 11	2/ 12
82	Lockport Trebley, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	8/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	0/ 24	0/ 24	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55	130th Street, Calumet River	1/ 23	0/ 22	0/ 24	1/ 23	0/ 15	0/ 11	0/ 12	0/ 12
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	4/ 11	3/ 11	2/ 12	2/ 12	9/ 11	10/ 13	10/ 13	8/ 12
56	Indiana Avenue, Little Calumet River	0/ 23	0/ 23	0/ 23	0/ 22	0/ 15	0/ 11	1/ 12	0/ 12
76	Halsted Street, Little Calumet River	1/ 24	0/ 23	0/ 24	0/ 24	0/ 4	0/ 12	0/ 12	1/ 12
52	Wentworth Avenue, Little Calumet River	5/ 11	5/ 11	2/ 12	5/ 12	3/ 9	4/ 10	6/ 11	4/ 12
54	Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	3/ 12
57	Ashland Avenue, Little Calumet River	4/ 11	5/ 11	5/ 12	4/ 12	4/ 9	4/ 11	1/ 12	5/ 11
58	Ashland Avenue, Cal-Sag Channel	1/ 24	0/ 23	0/ 16	0/ 15	0/ 17	0/ 12	0/ 12	0/ 12
59	Cicero Avenue, Cal-Sag Channel	0/ 24	0/ 23	0/ 24	0/ 24	0/ 16	0/ 12	0/ 12	0/ 12
43	Route 83, Cal-Sag Channel	0/ 23	0/ 23	0/ 24	0/ 24	0/ 16	0/ 12	0/ 12	2/ 12
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	1/ 11	1/ 10	0/ 11	1/ 11
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	1/ 11	0/ 12	1/ 10	1/ 12
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	1/ 12
64	Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 11	0/ 11
79	Higgins Road, Salt Creek	4/ 10	1/ 10	1/ 10	1/ 11	1/ 10	0/ 10	3/ 13	2/ 11
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 10	1/ 12
18	Devon Avenue, Salt Creek	0/ 12	1/ 11	0/ 12	0/ 12	2/ 11	0/ 12	1/ 12	1/ 12
24	Wolf Road, Salt Creek	0/ 10	1/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21	First Avenue, Salt Creek	1/ 10	1/ 11	2/ 12	3/ 11	3/ 12	2/ 12	1/ 11	3/ 12
77	Elmhurst Road, Higgins Creek	1/ 10	0/ 11	2/ 12	2/ 11	1/ 12	1/ 12	0/ 11	0/ 12
78	Willa Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	1/ 12
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	2/ 12	0/ 12	0/ 10	0/ 12
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	1/ 12	0/ 12	1/ 9	0/ 11
17	Oakton Street, Des Plaines River	0/ 10	1/ 11	0/ 12	2/ 11	1/ 12	0/ 11	0/ 3	2/ 12
19	Belmont Avenue, Des Plaines River	2/ 10	4/ 11	4/ 12	2/ 12	1/ 12	2/ 12	3/ 12	3/ 12
20	Roosevelt Road, Des Plaines River	2/ 10	4/ 11	5/ 12	2/ 12	2/ 12	2/ 12	2/ 12	2/ 12
22	Ogden Avenue, Des Plaines River	0/ 10	2/ 11	0/ 12	0/ 12	0/ 13	1/ 12	0/ 11	0/ 12
23	Willow Springs Road, Des Plaines River	1/ 10	0/ 11	0/ 12	1/ 11	1/ 11	0/ 12	0/ 11	2/ 12
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 11	2/ 12
91	Material Service Road, Des Plaines River	0/ 49	ND	ND	ND	ND	ND	ND	ND

ND = No Data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-3

TEMPERATURE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 9	0/ 10	0/ 12	0/ 8	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 9	0/ 10	0/ 12	0/ 8	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 8	0/ 9	0/ 9	0/ 8	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 11	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 11	0/ 12	0/ 9	0/ 12	0/ 7	0/ 12	0/ 11
74 Lake Shore Drive, Chicago River	0/ 12	0/ 10	0/ 12	0/ 7	0/ 11	0/ 10	0/ 10	0/ 11
39 Madison Street, South Branch Chicago River	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 11	0/ 5	0/ 11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 10	0/ 12	0/ 10	0/ 12	0/ 9	0/ 12	0/ 11
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 9	0/ 12	0/ 11
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 10	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 10	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 10	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 11
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 48	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 11	0/ 20	0/ 24	0/ 23	0/ 14	0/ 10	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 10	0/ 18	0/ 24	0/ 23	0/ 14	0/ 10	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 10	0/ 10	0/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 11	0/ 19	0/ 23	0/ 22	0/ 14	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 11	0/ 19	0/ 24	0/ 24	0/ 4	0/ 12	0/ 12	0/ 10
52 Wentworth Avenue, Little Calumet River	0/ 10	0/ 10	0/ 12	0/ 12	0/ 8	0/ 9	0/ 10	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 10
57 Ashland Avenue, Little Calumet River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 8	0/ 11	0/ 10	0/ 9
58 Ashland Avenue, Cal-Sag Channel	0/ 11	0/ 20	0/ 16	0/ 15	0/ 15	0/ 11	0/ 12	0/ 10
59 Cicero Avenue, Cal-Sag Channel	0/ 11	0/ 20	0/ 24	0/ 24	0/ 14	0/ 12	0/ 12	0/ 10
43 Route 83, Cal-Sag Channel	0/ 11	0/ 20	0/ 24	0/ 24	0/ 13	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 9	1/ 11	0/ 8	0/ 11	0/ 10	0/ 9	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	1/ 8	0/ 8	0/ 11	0/ 12	0/ 9	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 10	1/ 12	0/ 10	0/ 12	0/ 12	0/ 10	0/ 12
64 Lake Street, West Branch Du Page River	0/ 10	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 11
79 Higgins Road, Salt Creek	0/ 10	0/ 9	1/ 10	0/ 9	0/ 10	1/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	1/ 6	0/ 8	0/ 11	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	1/ 12	0/ 9	0/ 11	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	1/ 12	0/ 7	0/ 11	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 11	0/ 11	1/ 12	0/ 8	0/ 11	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 10	1/ 11	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 12
17 Oakton Steet, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 8	0/ 11	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 7	0/ 11	0/ 10	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 9	0/ 11	1/ 12	0/ 8	0/ 11	0/ 11	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 48	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-4

pH VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 9	0/ 10	0/ 12	1/ 8	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 9	0/ 10	0/ 12	1/ 8	0/ 8	0/ 9	0/ 9	2/ 12
34 Dempster Street, North Branch Chicago River	0/ 10	0/ 11	0/ 12	1/ 10	1/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 8	1/ 9	2/ 9	1/ 8	1/ 9	1/ 8	2/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 11	1/ 12	1/ 10	0/ 12	0/ 13	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 11	2/ 12	1/ 11	1/ 12	0/ 12	2/ 12	0/ 8
73 Diversely Parkway, North Branch Chicago River	1/ 12	0/ 11	2/ 12	3/ 11	1/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 11	0/ 12	1/ 9	0/ 12	0/ 7	0/ 12	0/ 11
74 Lake Shore Drive, Chicago River	0/ 12	0/ 10	1/ 12	0/ 7	1/ 11	1/ 10	2/ 10	0/ 11
39 Madison Street, South Branch Chicago River	0/ 12	1/ 11	1/ 12	0/ 7	0/ 12	0/ 13	0/ 5	0/ 11
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 10	3/ 12	0/ 10	0/ 12	0/ 9	1/ 12	0/ 11
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	1/ 12	2/ 12	1/ 10	0/ 12	0/ 12	2/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 10	1/ 12	0/ 9	1/ 12	1/ 12	0/ 11	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	1/ 12	0/ 7	1/ 12	0/ 12	0/ 10	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 10	1/ 12	0/ 9	1/ 12	0/ 12	1/ 12	0/ 11
82 Lockport Treblex, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 150	2/ 252	0/ 33
92 Lockport Forebay, Chicago Sanitary & Ship Canal	2/ 48	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	1/ 11	3/ 20	1/ 24	2/ 23	3/ 13	0/ 10	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	1/ 10	0/ 11	1/ 12	2/ 12	4/ 11	0/ 11	0/ 12	1/ 12
55 130th Street, Calumet River	0/ 9	1/ 18	2/ 24	2/ 23	5/ 13	1/ 10	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 9	0/ 10	1/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 12
56 Indiana Avenue, Little Calumet River	1/ 10	1/ 19	3/ 23	0/ 22	3/ 13	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	1/ 19	2/ 24	2/ 23	0/ 4	0/ 12	0/ 12	0/ 10
52 Westworth Avenue, Little Calumet River	0/ 9	0/ 10	0/ 12	0/ 12	3/ 8	0/ 9	0/ 10	0/ 12
54 Joe Orr Road, Thonx Creek	1/ 12	2/ 11	1/ 12	1/ 12	0/ 11	0/ 12	1/ 12	0/ 10
57 Ashland Avenue, Little Calumet River	1/ 11	1/ 11	1/ 12	2/ 12	1/ 8	0/ 11	0/ 10	0/ 9
58 Ashland Avenue, Cal-Sag Channel	0/ 12	1/ 20	2/ 16	1/ 14	1/ 15	0/ 11	0/ 12	0/ 10
59 Cicero Avenue, Cal-Sag Channel	0/ 12	1/ 20	4/ 24	2/ 23	1/ 14	0/ 12	0/ 12	0/ 10
43 Route 83, Cal-Sag Channel	0/ 12	1/ 20	3/ 24	3/ 23	1/ 14	0/ 12	0/ 12	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 8	1/ 11	0/ 8	0/ 11	0/ 10	0/ 9	1/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 8	2/ 8	0/ 8	0/ 11	0/ 12	0/ 9	2/ 12
89 Walnut Lane, West Branch Du Page River	1/ 12	0/ 9	0/ 12	0/ 10	0/ 12	0/ 12	0/ 10	1/ 12
64 Lake Street, West Branch Du Page River	1/ 10	1/ 9	2/ 12	0/ 10	0/ 11	0/ 12	0/ 9	1/ 12
79 Higgins Road, Salt Creek	1/ 10	2/ 8	2/ 10	0/ 9	0/ 10	0/ 10	0/ 10	1/ 11
80 Arlington Heights Road, Salt Creek	1/ 12	0/ 9	1/ 12	0/ 10	0/ 12	0/ 12	0/ 9	1/ 12
18 Devon Avenue, Salt Creek	1/ 12	0/ 9	0/ 12	0/ 10	0/ 12	0/ 12	2/ 12	1/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	2/ 8	3/ 11	0/ 12	2/ 12	4/ 12
21 First Avenue, Salt Creek	0/ 10	1/ 11	0/ 12	0/ 9	0/ 11	1/ 12	0/ 11	2/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	1/ 11	0/ 12	1/ 7	1/ 11	0/ 12	0/ 11	2/ 12
78 Wille Road, Higgins Creek	0/ 11	0/ 11	0/ 12	4/ 8	1/ 11	0/ 12	0/ 11	2/ 12
12 Lake-Cook Road, Buffalo Creek	3/ 10	1/ 9	4/ 11	2/ 10	1/ 12	1/ 12	2/ 10	2/ 12
13 Lake-Cook Road, Des Plaines River	1/ 12	0/ 9	3/ 12	0/ 10	1/ 12	1/ 12	2/ 9	1/ 12
17 Oakton Steet, Des Plaines River	0/ 10	1/ 11	0/ 12	0/ 8	1/ 11	1/ 11	1/ 11	2/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 10	0/ 11	0/ 12	0/ 12	2/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 11	1/ 12	0/ 12	1/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	3/ 11	0/ 12	1/ 10	0/ 12	1/ 12	1/ 11	3/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	2/ 7	2/ 11	0/ 10	1/ 11	5/ 12
29 Stephen Street, Des Plaines River	0/ 9	1/ 11	0/ 12	2/ 8	3/ 11	0/ 11	1/ 11	4/ 12
91 Material Service Road, Des Plaines River	2/ 48	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-5

CHLORIDE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	1/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	1/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	1/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	2/ 10	1/ 11	0/ 12	1/ 10	1/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	1/ 11	1/ 11	0/ 12	1/ 11	1/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	1/ 12
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	1/ 12
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	ND
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	1/ 11	1/ 9	1/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	1/ 9	0/ 8	2/ 10	3/ 11	0/ 12	0/ 10	2/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	1/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	2/ 12
79 Higgins Road, Salt Creek	2/ 10	0/ 10	0/ 10	1/ 11	2/ 10	0/ 10	0/ 10	1/ 11
80 Arlington Heights Road, Salt Creek	1/ 12	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 10	1/ 12
18 Devon Avenue, Salt Creek	1/ 12	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12	1/ 12
24 Wolf Road, Salt Creek	1/ 10	0/ 11	1/ 6	1/ 12	0/ 12	0/ 12	0/ 11	2/ 12
21 First Avenue, Salt Creek	1/ 10	0/ 11	1/ 12	0/ 11	0/ 12	0/ 12	0/ 11	2/ 12
77 Elmhurst Road, Higgins Creek	2/ 10	3/ 11	3/ 12	3/ 11	3/ 12	0/ 12	0/ 11	1/ 11
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	1/ 12	1/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	1/ 12	0/ 12	0/ 10	2/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	1/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	1/ 12	1/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	1/ 12	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	2/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-6

AMMONIUM NITROGEN VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	3/ 9	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	1/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	ND	ND	1/ 12	1/ 12	2/ 12	0/ 12	1/ 12	1/ 11
37 Wilson Avenue, North Branch Chicago River	ND	ND	2/ 12	2/ 12	3/ 12	0/ 12	2/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	ND	ND	2/ 12	2/ 12	2/ 12	0/ 12	0/ 12	1/ 12
46 Grand Avenue, North Branch Chicago River	ND	ND	2/ 12	0/ 11	0/ 12	0/ 7	1/ 12	0/ 11
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	ND	ND	1/ 12	0/ 11	0/ 12	0/ 11	0/ 8	0/ 11
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	3/ 12	0/ 12	0/ 12	0/ 9	1/ 12	0/ 11
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	1/ 12	0/ 12	0/ 12	1/ 12	1/ 12	1/ 11
82 Lockport Treblex, Chicago Sanitary & Ship Canal	ND	ND	0/ 52	0/ 51	0/ 52	0/146	0/251	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 20	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 18	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	0/ 12	0/ 12	4/ 11	1/ 13	1/ 13	0/ 12
56 Indiana Avenue, Little Calumet River	ND	ND	1/ 23	0/ 22	4/ 15	1/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	ND	ND	0/ 24	1/ 24	0/ 4	1/ 12	0/ 12	0/ 10
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 10
58 Ashland Avenue, Cal-Sag Channel	ND	ND	1/ 16	1/ 15	0/ 17	0/ 11	1/ 12	0/ 10
59 Cicero Avenue, Cal-Sag Channel	ND	ND	0/ 24	2/ 24	1/ 16	1/ 12	0/ 12	1/ 10
43 Route 83, Cal-Sag Channel	ND	ND	3/ 24	3/ 24	0/ 16	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	1/ 11	0/ 12	0/ 13	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-7

UN-IONIZED AMMONIA VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0/ 9	0/ 10	0/ 12	0/ 8	0/ 8	ND	ND	ND
32 Lake-Cook Road, Skokie River	0/ 9	0/ 10	0/ 12	0/ 8	1/ 8	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 8	0/ 9	0/ 9	0/ 8	2/ 9	ND	ND	ND
36 Touhy Avenue, North Shore Channel	1/ 11	1/ 11	1/ 12	1/ 10	2/ 12	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	1/ 12	2/ 11	2/ 12	2/ 11	3/ 12	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	1/ 12	0/ 11	2/ 12	2/ 11	2/ 12	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 11	2/ 12	0/ 9	0/ 12	ND	ND	ND
74 Lake Shore Drive, Chicago River	0/ 12	0/ 10	0/ 12	0/ 7	0/ 11	ND	ND	ND
39 Madison Street, South Branch Chicago River	0/ 12	1/ 11	1/ 12	0/ 7	0/ 12	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	1/ 10	3/ 12	0/ 10	0/ 12	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	1/ 12	1/ 12	1/ 10	0/ 12	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 10	1/ 12	0/ 9	0/ 12	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	1/ 12	0/ 7	0/ 12	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 10	1/ 12	0/ 9	0/ 12	ND	ND	ND
82 Lockport Treblier, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1/ 48	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 11	0/ 19	0/ 24	0/ 23	1/ 13	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0/ 10	0/ 11	0/ 12	0/ 12	0/ 11	ND	ND	ND
55 130th Street, Calumet River	0/ 9	0/ 17	0/ 24	0/ 23	4/ 13	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	2/ 9	1/ 10	0/ 12	0/ 12	4/ 10	ND	ND	ND
56 Indiana Avenue, Little Calumet River	1/ 10	0/ 18	1/ 23	0/ 22	4/ 13	ND	ND	ND
76 Halsted Street, Little Calumet River	0/ 11	0/ 18	0/ 24	1/ 23	0/ 4	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0/ 9	0/ 10	0/ 12	0/ 12	3/ 8	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 11	0/ 11	0/ 12	1/ 12	0/ 11	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0/ 10	0/ 11	0/ 12	1/ 12	0/ 8	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	0/ 11	1/ 19	1/ 16	1/ 14	0/ 15	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	0/ 11	0/ 19	0/ 24	2/ 23	1/ 14	ND	ND	ND
43 Route 83, Cal-Sag Channel	0/ 11	1/ 19	3/ 24	3/ 23	0/ 14	ND	ND	ND
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 8	0/ 11	0/ 8	0/ 11	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 8	0/ 8	0/ 8	1/ 11	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	1/ 12	0/ 9	0/ 12	0/ 10	1/ 12	ND	ND	ND
64 Lake Street, West Branch Du Page River	1/ 10	0/ 9	0/ 12	0/ 10	1/ 11	ND	ND	ND
79 Higgins Road, Salt Creek	1/ 10	0/ 8	0/ 10	0/ 9	0/ 10	ND	ND	ND
80 Arlington Heights Road, Salt Creek	1/ 12	0/ 9	0/ 12	1/ 10	0/ 12	ND	ND	ND
18 Devon Avenue, Salt Creek	1/ 12	0/ 9	0/ 12	0/ 10	0/ 12	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 8	0/ 11	ND	ND	ND
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 9	1/ 11	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 7	0/ 11	ND	ND	ND
78 Wille Road, Higgins Creek	0/ 11	0/ 11	0/ 12	1/ 8	0/ 11	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 9	0/ 11	0/ 10	0/ 12	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 9	0/ 12	0/ 10	1/ 12	ND	ND	ND
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 8	0/ 11	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 11	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 11	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 10	0/ 12	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 7	0/ 11	ND	ND	ND
29 Stephen Street, Des Plaines River	0/ 9	0/ 11	0/ 12	0/ 8	1/ 11	ND	ND	ND
91 Material Service Road, Des Plaines River	0/ 48	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-8

TOTAL DISSOLVED SOLIDS VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	1/ 1	ND	ND	ND	1/ 3	1/ 9	0/ 2	2/ 9
31 Lake-Cook Road, Middle Fork North Branch	3/ 10	1/ 11	0/ 12	1/ 10	2/ 7	1/ 10	0/ 10	1/ 12
32 Lake-Cook Road, Skokie River	4/ 10	1/ 11	1/ 12	1/ 10	2/ 7	0/ 9	1/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	4/ 11	1/ 11	1/ 12	1/ 11	3/ 11	1/ 10	1/ 11	1/ 12
96 Albany Avenue, North Branch Chicago River	1/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 8	0/ 8	0/ 8	1/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	1/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	1/ 12	1/ 12	0/ 12	0/ 12	0/ 11	1/ 12	0/ 12	1/ 8
73 Diversey Parkway, North Branch Chicago River	1/ 12	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 10	1/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 8	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 11	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
41 Haxley Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
82 Lockport Trestle, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 147	1/ 252	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	1/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	1/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 12	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	3/ 11	2/ 11	0/ 12	0/ 12	0/ 9	0/ 10	1/ 12	2/ 12
54 Joe Orr Road, Thorn Creek	6/ 12	7/ 12	8/ 12	9/ 12	5/ 12	3/ 12	1/ 12	1/ 12
57 Ashland Avenue, Little Calumet River	6/ 11	4/ 11	4/ 12	3/ 12	2/ 9	0/ 11	1/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	1/ 11	1/ 9	1/ 11	1/ 10	0/ 11	1/ 11
63 Longmeadow Lane, West Branch Du Page River	1/ 9	3/ 9	2/ 8	5/ 10	2/ 11	4/ 12	2/ 10	4/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	2/ 12	1/ 12	1/ 12	2/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	1/ 12	0/ 12	2/ 11	1/ 12	1/ 11	2/ 12
79 Higgins Road, Salt Creek	3/ 10	2/ 10	2/ 10	2/ 11	2/ 10	2/ 10	4/ 10	3/ 11
80 Arlington Heights Road, Salt Creek	1/ 12	1/ 11	1/ 12	1/ 12	3/ 12	2/ 12	1/ 10	3/ 12
18 Devon Avenue, Salt Creek	2/ 12	1/ 11	1/ 12	2/ 12	3/ 12	1/ 12	0/ 12	3/ 12
24 Wolf Road, Salt Creek	2/ 10	1/ 11	3/ 6	1/ 12	4/ 12	4/ 12	0/ 11	3/ 12
21 First Avenue, Salt Creek	2/ 10	1/ 11	3/ 12	0/ 11	3/ 12	2/ 12	1/ 11	3/ 12
77 Elmhurst Road, Higgins Creek	3/ 10	3/ 11	4/ 12	4/ 11	4/ 12	3/ 12	4/ 11	3/ 12
78 Willie Road, Higgins Creek	2/ 12	0/ 11	2/ 12	1/ 12	1/ 12	0/ 12	0/ 11	1/ 12
12 Lake-Cook Road, Buffalo Creek	2/ 10	0/ 11	2/ 11	1/ 11	3/ 12	1/ 12	1/ 10	2/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 11	1/ 12	0/ 11	0/ 8	1/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	1/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	1/ 12	1/ 12	0/ 12	1/ 12	1/ 12	1/ 12
22 Ogden Avenue, Des Plaines River	1/ 10	0/ 11	1/ 12	2/ 12	1/ 13	1/ 12	0/ 11	1/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	1/ 12	0/ 11	0/ 11	0/ 11	0/ 11	1/ 12
29 Stephen Street, Des Plaines River	1/ 10	0/ 11	1/ 12	1/ 12	1/ 12	1/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	7/ 50	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-9

PHENOLS VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 8	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 9	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 9	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 9	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversely Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 11	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 51	0/151	0/252	0/ 33
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	1/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 6	0/ 10	0/ 9	0/ 8	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 7	0/ 9	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 8	0/ 10	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 11	0/ 11	1/ 11	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 10	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 10	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 11	0/ 10	0/ 12	0/ 11	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 9	0/ 10	0/ 10	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-10

SULFATE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 9	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 8	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 7	0/ 9	0/ 12
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 9	0/ 12
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trestle, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	ND
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 11
51 IHE Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 10	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 11
54 Joe Orr Road, Thorn Creek	2/ 12	3/ 12	4/ 12	4/ 12	3/ 12	0/ 12	0/ 12	0/ 11
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 10
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 81, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 8	0/ 10	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 10	0/ 9	0/ 11
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 10	0/ 10	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 8	0/ 9	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 9	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 10	0/ 9	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 8	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 9	0/ 2	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 10	0/ 9	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 9	0/ 10	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-11

FATS, OILS, AND GREASES VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	ND	0/ 3	1/ 12	0/ 12	1/ 12	1/ 11	2/ 11
37 Wilson Avenue, North Branch Chicago River	ND	ND	0/ 3	2/ 12	1/ 12	0/ 12	1/ 12	2/ 8
73 Diversey Parkway, North Branch Chicago River	ND	ND	0/ 2	2/ 12	0/ 12	0/ 12	0/ 12	3/ 12
46 Grand Avenue, North Branch Chicago River	ND	ND	0/ 2	2/ 11	1/ 12	1/ 7	0/ 12	3/ 12
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	0/ 2	0/ 11	0/ 12	1/ 11	0/ 5	1/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	0/ 2	0/ 12	0/ 12	2/ 9	1/ 12	3/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	0/ 2	1/ 12	0/ 12	3/ 12	0/ 12	2/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	0/ 2	1/ 12	0/ 12	2/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	0/ 2	1/ 10	0/ 12	1/ 12	0/ 11	1/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	0/ 2	2/ 12	0/ 12	3/ 12	1/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	2/ 12
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	0/ 3	2/ 12	1/ 11	1/ 12	0/ 12	1/ 12
56 Indiana Avenue, Little Calumet River	ND	ND	0/ 3	1/ 11	0/ 9	0/ 10	0/ 11	1/ 12
76 Halsted Street, Little Calumet River	ND	ND	0/ 3	2/ 12	0/ 4	0/ 11	0/ 12	2/ 12
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	1/ 6	0/ 11	0/ 10	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	ND	ND	0/ 3	0/ 12	1/ 11	1/ 11	0/ 12	3/ 12
43 Route 83, Cal-Sag Channel	ND	ND	0/ 3	0/ 12	0/ 11	1/ 10	0/ 11	2/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Steet, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-12

TOTAL CYANIDE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	0/ 3	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversay Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	0/ 2	0/ 9	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Treblex, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 48	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	0/ 1	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	0/ 3	1/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	ND	ND	ND	ND	0/ 1	0/ 11	0/ 11	0/ 12
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 10	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 11	0/ 12
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	2/ 10	2/ 10	0/ 12
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	1/ 11	1/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	ND	ND	ND	ND	0/ 2	0/ 10	0/ 12	0/ 11
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	0/ 2	1/ 12	0/ 10	1/ 12
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	0/ 3	1/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	0/ 2	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	ND	ND	ND	ND	0/ 1	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	0/ 2	1/ 13	0/ 12	0/ 12
24 Wolf Road, Salt Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12
77 Kimburt Road, Higgins Creek	ND	ND	ND	ND	0/ 3	0/ 11	0/ 11	0/ 12
78 Wille Road, Higgins Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	0/ 3	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 12	0/ 9	1/ 12
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	0/ 2	0/ 11	1/ 11	0/ 12
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-13

WEAK ACID DISSOCIABLE CYANIDE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 13	0/ 10	0/ 8	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 11	0/ 11	0/ 9	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND
55 110th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	1/ 11	2/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 9	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0/ 8	0/ 8	0/ 8	0/ 10	0/ 9	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND
64 Lake Street, West Branch Du Page River	0/ 10	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND
79 Higgins Road, Salt Creek	0/ 9	0/ 10	0/ 10	0/ 11	0/ 9	ND	ND	ND
80 Arlington Heights Road, Salt Creek	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
18 Devon Avenue, Salt Creek	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 9	0/ 10	0/ 6	0/ 12	0/ 9	ND	ND	ND
21 First Avenue, Salt Creek	0/ 9	0/ 10	0/ 12	0/ 11	0/ 9	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/ 9	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
78 Wille Road, Higgins Creek	0/ 11	1/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0/ 9	0/ 11	0/ 11	0/ 11	0/ 9	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0/ 11	1/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
17 Oakton Steet, Des Plaines River	0/ 9	1/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0/ 9	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 9	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0/ 9	0/ 10	0/ 12	0/ 12	0/ 10	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0/ 9	0/ 10	0/ 12	0/ 11	0/ 9	ND	ND	ND
29 Stephen Street, Des Plaines River	0/ 9	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND
91 Material Service Road, Des Plaines River	0/ 48	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-14

FLUORIDE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 8	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 12	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversy Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 8	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 49	0/ 48	0/ 51	0/ 30	0/ 95	0/ 52	0/ 32
92 Lockport Forsbay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	7/ 11	4/ 11	2/ 12	6/ 12	2/ 9	3/ 10	4/ 12	3/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	5/ 11	0/ 11	2/ 12	1/ 12	0/ 9	1/ 11	1/ 12	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 18, Poplar Creek	0/ 7	0/ 10	0/ 9	0/ 8	0/ 11	0/ 9	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 6	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	1/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 8	0/ 10	0/ 10	0/ 9	0/ 12	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	1/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 5	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 10	0/ 10	0/ 12	0/ 11	0/ 12	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 10	0/ 10	0/ 12	0/ 11	0/ 12	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 9	0/ 10	0/ 12	0/ 11	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 10	1/ 10	0/ 12	0/ 11	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 10	0/ 12	0/ 9	0/ 8	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 11	0/ 13	0/ 11	0/ 10	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-15

FECAL COLIFORM VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>								
No.	Name	00	99	98	97	96	95	94	93	
<u>Chicago River System</u>										
30	Lake-Cook Road, West Fork North Branch	1/ 1	ND	ND	ND	4/ 4	9/2	2/ 2	9/2	
31	Lake-Cook Road, Middle Fork North Branch	7/ 10	9/ 11	10/ 12	7/ 10	7/ 8	8/ 10	9/ 10	11/ 12	
32	Lake-Cook Road, Skokie River	8/ 10	11/ 11	10/ 12	9/ 10	8/ 8	9/2	9/2	12/ 12	
34	Dempster Street, North Branch Chicago River	11/ 11	11/ 11	11/ 12	5/ 11	9/ 12	8/ 10	10/ 11	9/ 12	
96	Albany Avenue, North Branch Chicago River	6/ 6	ND	ND	ND	ND	ND	ND	ND	
35	Central Street, North Shore Channel	5/ 9	2/ 10	3/ 9	1/ 10	4/ 9	4/ 8	1/ 8	4/ 12	
36	Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	
37	Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
73	Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
46	Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
74	Lake Shore Drive, Chicago River	2/ 12	0/ 11	2/ 12	0/ 11	1/ 11	1/ 10	1/ 10	1/ 12	
39	Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
40	Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
75	Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
41	Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
42	Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
48	Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
92	Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
<u>Calumet River System</u>										
49	Ewing Avenue, Calumet River	0/ 12	0/ 12	1/ 12	0/ 12	0/ 10	1/ 10	2/ 11	ND	
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
55	130th Street, Calumet River	2/ 11	1/ 11	0/ 12	0/ 12	1/ 10	1/ 11	3/ 11	2/ 12	
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
86	Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
56	Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
76	Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
52	Wentworth Avenue, Little Calumet River	10/ 11	10/ 11	11/ 12	12/ 12	8/ 9	9/ 10	10/ 11	12/ 12	
54	Joe Orr Road, Thorn Creek	9/ 12	10/ 12	8/ 12	12/ 12	12/ 12	10/ 12	10/ 12	11/ 12	
57	Ashland Avenue, Little Calumet River	8/ 11	10/ 11	9/ 12	10/ 12	7/ 9	9/ 11	8/ 10	10/ 11	
58	Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
59	Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
43	Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
<u>Des Plaines River System</u>										
90	Route 19, Poplar Creek	3/ 7	4/ 10	3/ 11	6/ 9	4/ 11	6/ 10	6/ 11	5/ 11	
63	Longmeadow Lane, West Branch Du Page River	8/ 9	6/ 9	5/ 8	8/ 10	10/ 11	9/ 12	8/ 10	10/ 12	
89	Walnut Lane, West Branch Du Page River	8/ 12	6/ 11	6/ 12	10/ 12	11/ 12	9/ 12	10/ 12	10/ 12	
64	Lake Street, West Branch Du Page River	8/ 11	7/ 11	7/ 12	11/ 12	10/ 11	10/ 12	10/ 11	10/ 12	
79	Higgins Road, Salt Creek	5/ 10	0/ 10	0/ 10	3/ 11	3/ 10	3/ 10	2/ 10	7/ 11	
80	Arlington Heights Road, Salt Creek	8/ 12	3/ 11	5/ 12	8/ 12	7/ 12	8/ 12	6/ 10	7/ 12	
18	Devon Avenue, Salt Creek	9/ 12	7/ 11	10/ 12	8/ 12	12/ 12	10/ 12	9/ 12	11/ 12	
24	Wolf Road, Salt Creek	8/ 10	5/ 11	5/ 6	11/ 12	11/ 12	12/ 12	8/ 11	11/ 12	
21	First Avenue, Salt Creek	9/ 10	9/ 11	8/ 12	8/ 11	10/ 12	10/ 12	9/ 11	12/ 12	
77	Elmhurst Road, Higgins Creek	6/ 10	6/ 11	3/ 12	7/ 11	11/ 12	9/ 12	7/ 11	7/ 12	
78	Wille Road, Higgins Creek	7/ 12	5/ 11	6/ 12	7/ 12	9/ 12	7/ 12	6/ 11	8/ 12	
12	Lake-Cook Road, Buffalo Creek	4/ 10	3/ 11	4/ 11	5/ 11	7/ 12	4/ 12	7/ 10	6/ 12	
13	Lake-Cook Road, Des Plaines River	6/ 12	5/ 11	5/ 12	7/ 11	8/ 12	7/ 12	5/ 9	8/ 12	
17	Oakton Street, Des Plaines River	6/ 10	8/ 11	5/ 12	7/ 11	11/ 12	5/ 11	2/ 3	9/ 12	
19	Belmont Avenue, Des Plaines River	8/ 10	8/ 11	9/ 12	12/ 12	11/ 12	11/ 12	8/ 12	10/ 12	
20	Roosevelt Road, Des Plaines River	8/ 10	9/ 11	11/ 12	11/ 12	10/ 12	11/ 12	8/ 12	11/ 12	
22	Ogden Avenue, Des Plaines River	8/ 10	7/ 11	7/ 12	10/ 12	12/ 13	11/ 12	7/ 11	11/ 12	
23	Willow Springs Road, Des Plaines River	8/ 10	5/ 11	5/ 12	7/ 11	6/ 11	5/ 11	6/ 11	9/ 12	
29	Stephen Street, Des Plaines River	7/ 10	4/ 11	4/ 12	9/ 12	6/ 12	7/ 12	4/ 11	10/ 12	
91	Material Service Road, Des Plaines River	19/ 50	ND	ND	ND	ND	ND	ND	ND	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-16

GROSS BETA RADIOACTIVITY VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>							
No.	Name	00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	0/ 2	ND
31	Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	0/ 10	ND
32	Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	0/ 9	ND
34	Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	0/ 11	ND
96	Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	ND	0/ 10	0/ 9	0/ 8	0/ 8	0/ 11
36	Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37	Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73	Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46	Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74	Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	0/ 10	ND
39	Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40	Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75	Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41	Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42	Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48	Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
82	Lockport Trehler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	0/ 9	ND
50	Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	0/ 10	ND
55	130th Street, Calumet River	ND	ND	ND	ND	ND	ND	0/ 9	ND
51	IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56	Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76	Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
52	Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0/ 9	ND
54	Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	0/ 10	ND
57	Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	0/ 8	ND
58	Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59	Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43	Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	0/ 11	ND
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	ND	0/ 10	0/ 11	0/ 11	0/ 12	0/ 11
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
64	Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	0/ 11	ND
79	Higgins Road, Salt Creek	0/ 10	0/ 10	ND	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
18	Devon Avenue, Salt Creek	ND	ND	ND	0/ 1	ND	ND	0/ 12	ND
24	Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	0/ 11	ND
21	First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	0/ 11	ND
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	ND	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
78	Wille Road, Higgins Creek	0/ 12	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
12	Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	0/ 10	ND
13	Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 9	ND
17	Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 3	ND
19	Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 12	ND
20	Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 12	ND
22	Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 11	ND
23	Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 11	ND
29	Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	0/ 11	ND
91	Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-17

TOTAL SILVER VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u> No. Name		Ratio of Violations/Sampling Frequency Per Year							
		00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31	Lake-Cook Road, Middle Fork North Branch	1/ 10	1/ 11	1/ 12	0/ 10	1/ 8	0/ 10	0/ 10	0/ 12
32	Lake-Cook Road, Skokie River	1/ 10	0/ 11	1/ 12	0/ 10	1/ 8	0/ 9	0/ 9	0/ 12
34	Dempster Street, North Branch Chicago River	0/ 11	1/ 11	2/ 12	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12
96	Albany Avenue, North Branch Chicago River	1/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36	Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37	Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73	Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46	Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	1/ 11	1/ 11	0/ 10	0/ 10	0/ 12
39	Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42	Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82	Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	2/ 12	0/ 12	2/ 12	3/ 12	1/ 10	0/ 11	0/ 11	0/ 12
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	2/ 12	1/ 12	1/ 12	0/ 12	0/ 12	0/ 12
55	130th Street, Calumet River	0/ 11	0/ 11	1/ 12	0/ 12	1/ 10	0/ 11	0/ 11	0/ 12
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56	Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76	Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52	Wentworth Avenue, Little Calumet River	2/ 11	0/ 11	2/ 12	0/ 12	2/ 9	0/ 10	0/ 11	0/ 12
54	Joe Orr Road, Thorn Creek	1/ 12	0/ 12	2/ 12	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12
57	Ashland Avenue, Little Calumet River	2/ 11	0/ 11	0/ 12	1/ 12	2/ 9	0/ 11	0/ 10	0/ 11
58	Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59	Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43	Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	1/ 11	3/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	3/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	3/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64	Lake Street, West Branch Du Page River	1/ 11	0/ 11	1/ 12	4/ 12	1/ 11	0/ 12	0/ 11	0/ 12
79	Higgins Road, Salt Creek	0/ 10	0/ 10	1/ 10	4/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	3/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18	Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	4/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24	Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21	First Avenue, Salt Creek	1/ 10	0/ 11	0/ 12	1/ 11	1/ 12	0/ 12	0/ 11	0/ 12
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	4/ 11	1/ 12	0/ 12	0/ 11	0/ 12
78	Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	4/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	3/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17	Oakton Steet, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19	Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20	Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22	Ogden Avenue, Des Plaines River	0/ 10	1/ 11	0/ 12	3/ 12	1/ 13	0/ 12	0/ 11	0/ 12
23	Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	2/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91	Material Service Road, Des Plaines River	2/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-18

TOTAL ARSENIC VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name		Ratio of Violations/Sampling Frequency Per Year							
		00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 7	0/ 9
31	Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32	Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34	Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96	Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36	Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37	Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73	Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46	Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39	Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 8	0/ 12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42	Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82	Lockport Treble, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55	130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51	IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56	Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76	Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52	Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54	Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57	Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 10	0/ 11
58	Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 12	0/ 12	0/ 12
59	Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43	Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64	Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79	Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18	Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24	Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21	First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78	Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17	Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19	Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20	Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22	Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23	Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91	Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-19

TOTAL BARIUM VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-20

TOTAL BORON VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>							
No.	Name	00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	ND	ND	ND
31	Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND
32	Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND
34	Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
96	Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	ND	ND	ND
36	Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37	Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73	Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46	Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
39	Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40	Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
75	Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41	Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42	Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48	Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND
55	138th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 7	ND	ND	ND
51	IRB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56	Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76	Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
52	Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	1/ 12	0/ 7	ND	ND	ND
54	Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND
57	Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	1/ 12	0/ 7	ND	ND	ND
58	Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59	Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43	Route 93, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 9	ND	ND	ND
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 9	ND	ND	ND
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
64	Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
79	Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 9	ND	ND	ND
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
18	Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
24	Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 9	ND	ND	ND
21	First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
78	Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 9	ND	ND	ND
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
17	Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
19	Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
20	Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
22	Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 10	ND	ND	ND
23	Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND
91	Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-21

TOTAL CADMIUM VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Steet, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-22

TOTAL COPPER VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
10 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	3/ 9	1/ 2	0/ 9
11 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	2/ 10	0/ 10	0/ 12
12 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	2/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	2/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	1/ 6	ND	ND	ND	ND	ND	ND	ND
15 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	2/ 8	0/ 6	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diverser Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	1/ 12	0/ 11	0/ 12	0/ 11	0/ 11	1/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 8	0/ 12
40 Eamen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	1/ 52	0/ 51	0/ 52	0/ 48	0/ 51	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	1/ 12	0/ 12	0/ 12	0/ 12	0/ 10	2/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	1/ 11	0/ 11	0/ 12
51 EHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	1/ 11	0/ 11	0/ 12	0/ 12	0/ 9	1/ 10	1/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 12	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	1/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	5/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	2/ 12	0/ 12	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	2/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	1/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	1/ 12	2/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	1/ 11	1/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	1/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	1/ 12	1/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	2/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 11	1/ 8	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	2/ 12	0/ 11	1/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	2/ 11	1/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	1/ 11	1/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-23

TOTAL CHROMIUM VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 10
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Steet, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-24

TOTAL IRON VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	1/ 1	ND	ND	ND	1/ 4	1/ 9	1/ 2	1/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	1/ 11	0/ 12	3/ 10	2/ 8	3/ 10	1/ 10	2/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	1/ 8	2/ 9	0/ 9	2/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	1/ 11	0/ 12	0/ 11	1/ 12	1/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	6/ 50	9/ 52	10/ 51	3/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	1/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	1/ 12	0/ 12	4/ 11	4/ 13	2/ 12	2/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	1/ 12
52 Westworth Avenue, Little Calumet River	8/ 11	4/ 11	8/ 12	5/ 12	5/ 9	1/ 10	6/ 11	9/ 12
54 Joe Orr Road, Thorn Creek	2/ 12	0/ 12	1/ 12	2/ 12	0/ 12	0/ 12	0/ 12	1/ 12
57 Ashland Avenue, Little Calumet River	1/ 11	2/ 11	2/ 12	2/ 12	1/ 9	0/ 11	2/ 10	3/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	1/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	1/ 7	0/ 10	0/ 11	2/ 9	4/ 11	0/ 10	0/ 11	3/ 11
63 Longmeadow Lane, West Branch Du Page River	2/ 9	1/ 9	2/ 8	0/ 10	4/ 11	2/ 12	1/ 10	2/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	1/ 11	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	2/ 11	0/ 11	0/ 12	2/ 12	3/ 11	2/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	4/ 10	1/ 10	1/ 10	2/ 11	3/ 10	0/ 10	1/ 10	5/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	1/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	1/ 12	2/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	1/ 11	0/ 6	1/ 12	0/ 12	2/ 12	2/ 11	3/ 12
21 First Avenue, Salt Creek	1/ 10	0/ 11	1/ 12	0/ 11	1/ 12	1/ 12	0/ 11	3/ 12
77 Elmhurst Road, Higgins Creek	1/ 10	3/ 11	2/ 12	2/ 11	5/ 12	4/ 12	1/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	1/ 12	0/ 12	1/ 12	2/ 12	1/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	4/ 10	3/ 11	0/ 11	0/ 11	3/ 12	0/ 12	2/ 10	1/ 12
13 Lake-Cook Road, Des Plaines River	2/ 12	1/ 11	1/ 12	0/ 11	1/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	2/ 10	1/ 11	0/ 12	1/ 11	0/ 12	0/ 11	0/ 3	1/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	1/ 12	1/ 12	0/ 12	2/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	1/ 10	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	1/ 12	1/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	2/ 12	0/ 13	0/ 12	1/ 11	3/ 12
23 Willow Springs Road, Des Plaines River	1/ 10	0/ 11	0/ 12	1/ 11	0/ 11	0/ 11	0/ 11	1/ 12
29 Stephen Street, Des Plaines River	1/ 10	0/ 11	1/ 12	0/ 12	1/ 12	0/ 12	2/ 11	3/ 12
91 Material Service Road, Des Plaines River	7/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-25

SOLUBLE IRON VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	1/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	1/ 11	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	1/ 12	0/ 12	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	1/ 6	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	1/ 12	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	1/ 12	ND	ND	ND	ND
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	1/ 9	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	ND	ND	ND	ND
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
78 Wills Road, Higgins Creek	0/ 11	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-26

TOTAL LEAD VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	00	99	98	97	96	95	94	93	
<u>Chicago River System</u>									
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9	
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	2/ 10	0/ 10	0/ 12	
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	1/ 10	0/ 11	0/ 12	
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND	
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 11	
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 8	
73 Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Treblec, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	1/ 51	2/ 52	0/ 48	0/ 51	0/ 50	
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND	
<u>Calumet River System</u>									
49 Swing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	3/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	1/ 12	0/ 11	0/ 12	0/ 12	
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	
<u>Des Plaines River System</u>									
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	
61 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	1/ 10	0/ 10	0/ 11	
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	
78 Willis Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12	
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 11	0/ 3	0/ 12	
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	1/ 12	0/ 11	0/ 12	
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND	

ND = No Data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-27

TOTAL NICKEL VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diverssey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Steet, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-28

TOTAL MANGANESE VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	1/ 11	0/ 12	0/ 12	0/ 10	0/ 8	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 12	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 9	0/ 12
36 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diverseray Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebley, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	1/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	1/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Steet, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 9	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	1/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 49	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-29

TOTAL MERCURY VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>							
No.	Name	00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31	Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32	Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34	Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96	Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36	Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37	Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73	Diverssey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46	Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	1/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39	Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42	Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82	Lockport Trehler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	1/ 48	0/ 51	0/ 50
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 10	0/ 11	0/ 12
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
55	130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 10	0/ 11	0/ 12
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	3/ 11	0/ 12	0/ 12	0/ 12
56	Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12
76	Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	1/ 12	0/ 4	0/ 11	0/ 12	0/ 12
52	Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 9	0/ 11	0/ 12
54	Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
57	Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 10	0/ 11
58	Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	1/ 6	0/ 12	0/ 10	0/ 12	0/ 12
59	Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12	0/ 12
43	Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 12
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	1/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64	Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79	Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18	Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24	Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21	First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78	Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17	Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19	Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20	Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22	Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23	Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91	Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-30

TOTAL ZINC VIOLATION HISTORY THROUGH 2000

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	00	99	98	97	96	95	94	93
<u>Chicago River System</u>								
30 Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 9	0/ 9
31 Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32 Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34 Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96 Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
15 Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 9	0/ 12
16 Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
17 Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73 Diversely Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74 Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39 Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 8	0/ 12
40 Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 11	0/ 12
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48 Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	1/ 52	0/ 48	0/ 51	0/ 50
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
49 Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50 Burdham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55 130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burdham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56 Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76 Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52 Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57 Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58 Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59 Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43 Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>								
90 Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63 Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64 Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79 Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
80 Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18 Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21 First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77 Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78 Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12 Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13 Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17 Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 3	0/ 12
19 Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 13	0/ 11	0/ 12
23 Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29 Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91 Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-31

TOTAL SELENIUM VIOLATION HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Ratio of Violations/Sampling Frequency Per Year</u>							
No.	Name	00	99	98	97	96	95	94	93
<u>Chicago River System</u>									
30	Lake-Cook Road, West Fork North Branch	0/ 1	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9
31	Lake-Cook Road, Middle Fork North Branch	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12
32	Lake-Cook Road, Skokie River	0/ 10	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12
34	Dempster Street, North Branch Chicago River	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12
96	Albany Avenue, North Branch Chicago River	0/ 6	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0/ 9	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12
36	Touhy Avenue, North Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11
37	Wilson Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8
73	Diversey Parkway, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46	Grand Avenue, North Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12
74	Lake Shore Drive, Chicago River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12
39	Madison Street, South Branch Chicago River	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12
40	Damen Avenue, Chicago Sanitary & Ship Canal	0/ 9	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42	Route 83, Chicago Sanitary & Ship Canal	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12
48	Stephen Street, Chicago Sanitary & Ship Canal	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82	Lockport Trehler, Chicago Sanitary & Ship Canal	0/ 15	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0/ 50	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>									
49	Ewing Avenue, Calumet River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
50	Burnham Avenue, Wolf Lake	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
55	130th Street, Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12
56	Indiana Avenue, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12
76	Halsted Street, Little Calumet River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12
52	Wentworth Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12
54	Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
57	Ashland Avenue, Little Calumet River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11
58	Ashland Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12
59	Cicero Avenue, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
43	Route 83, Cal-Sag Channel	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
<u>Des Plaines River System</u>									
90	Route 19, Poplar Creek	0/ 7	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
63	Longmeadow Lane, West Branch Du Page River	0/ 9	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12
89	Walnut Lane, West Branch Du Page River	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
64	Lake Street, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12
79	Higgins Road, Salt Creek	0/ 10	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11
60	Arlington Heights Road, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12
18	Devon Avenue, Salt Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24	Wolf Road, Salt Creek	0/ 10	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
21	First Avenue, Salt Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
77	Elmhurst Road, Higgins Creek	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12
78	Wille Road, Higgins Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
12	Lake-Cook Road, Buffalo Creek	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
13	Lake-Cook Road, Des Plaines River	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12
17	Oakton Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12
19	Belmont Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20	Roosevelt Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22	Ogden Avenue, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12
23	Willow Springs Road, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12
29	Stephen Street, Des Plaines River	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12
91	Material Service Road, Des Plaines River	0/ 50	ND	ND	ND	ND	ND	ND	ND

ND - No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-32

BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	5.00	3.75	4.67
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	3.00	3.20	2.91
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	3.00	3.90	4.00
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	3.25	3.50
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	4.00	1.91	3.00
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	14.00	5.17	6.00
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.00	4.75	6.50
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	3.50	5.42
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.00	3.00	3.50
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	2.08	2.08
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	3.17	2.83
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	8.00	2.75	2.75
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	4.00	2.50	3.00
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	7.00	3.25	4.18
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	6.00	2.75	3.00
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	7.00	3.58	3.50
82 Lockport Trebley, Chicago Sanitary & Ship Canal	6.60	6.20	5.29	7.10	6.19	4.41	4.77	4.76	5.04	4.74	5.02
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	7.00	3.91	2.50
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	3.40	2.75
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	7.00	7.82	6.00
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	4.00	3.91
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	7.00	5.55	5.58
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	5.64	4.50
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	12.00	3.82	4.75
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	4.50	4.45
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	6.00	4.82	5.92
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	6.00	5.18	6.17
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	7.00	4.55	5.25
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.64	3.42
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	6.00	4.09	4.45
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	2.00	3.25	3.42
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	7.00	6.75	4.33
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.20	4.00
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	3.00	2.58	4.08
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	2.00	2.25	4.00
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	3.00	4.83	3.92
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	4.00	4.83	4.00
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	7.00	5.36	4.50
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	3.00	3.55	3.58
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	3.00	3.50	5.33
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	3.42	4.00
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.42	3.67
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	6.42	4.25
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	6.45	4.00
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	4.00	5.75	4.00
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	5.83	4.17
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	5.00	5.00	4.75
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-33

DISSOLVED OXYGEN MEAN HISTORY THROUGH 2000

<u>Sampling Station</u>		<u>Annual Means (mg/L)</u>										
No.	Name	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	10.50	ND	ND	ND	8.73	7.51	9.35	6.17	7.54	8.16	7.96
31	Lake-Cook Road, Middle Fork North Branch	6.99	6.72	6.56	7.44	6.51	5.74	6.04	6.88	6.90	6.48	7.30
32	Lake-Cook Road, Skokie River	7.25	6.59	7.56	7.49	7.91	6.63	6.11	7.41	7.40	7.10	7.43
34	Dempster Street, North Branch Chicago River	7.50	7.93	8.04	8.18	8.45	6.88	7.66	7.13	7.83	7.75	6.68
96	Albany Avenue, North Branch Chicago River	6.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	7.48	7.51	7.20	9.69	6.36	8.18	9.20	9.23	9.47	10.05	7.78
36	Touhy Avenue, North Shore Channel	7.24	7.43	7.31	7.85	7.35	6.45	7.58	7.65	7.39	8.21	7.33
37	Wilson Avenue, North Branch Chicago River	6.68	6.75	7.04	7.36	6.82	6.37	6.65	7.29	7.43	7.76	7.23
73	Diversey Parkway, North Branch Chicago River	5.84	5.81	6.05	6.36	6.27	6.08	6.67	6.58	6.96	6.92	7.27
46	Grand Avenue, North Branch Chicago River	6.13	6.53	6.35	5.92	6.95	6.93	5.68	5.65	5.83	5.87	5.76
74	Lake Shore Drive, Chicago River	8.04	9.26	9.36	9.79	10.15	9.93	9.68	9.76	9.17	10.03	8.87
39	Madison Street, South Branch Chicago River	6.67	6.89	7.38	7.82	8.75	8.02	8.30	7.03	7.82	7.56	6.24
40	Damen Avenue, Chicago Sanitary & Ship Canal	5.43	6.19	7.00	7.48	8.21	7.08	7.65	6.03	7.39	6.99	6.35
75	Cicero Avenue, Chicago Sanitary & Ship Canal	4.98	5.99	6.21	7.16	6.85	7.00	6.81	5.88	6.64	6.43	5.38
41	Harlem Avenue, Chicago Sanitary & Ship Canal	6.52	7.15	7.13	6.96	7.16	6.97	7.20	6.23	6.84	6.80	6.54
42	Route 83, Chicago Sanitary & Ship Canal	5.46	5.76	5.90	6.23	6.35	6.10	6.10	5.50	6.43	6.05	5.57
48	Stephen Street, Chicago Sanitary & Ship Canal	5.40	5.63	6.03	6.07	6.40	5.84	5.80	5.27	5.42	5.05	5.03
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	5.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	9.44	9.81	9.36	10.17	9.53	9.99	8.45	10.56	9.63	ND	10.70
50	Burnham Avenue, Wolf Lake	9.33	9.45	9.25	9.73	10.25	9.56	8.59	9.92	9.69	9.61	9.80
55	130th Street, Calumet River	8.43	8.97	8.56	8.95	8.97	9.92	9.05	9.63	8.18	8.39	9.28
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	4.43	5.14	5.63	5.25	3.19	3.55	2.50	3.27	3.16	4.26	5.65
56	Indiana Avenue, Little Calumet River	8.20	8.48	7.84	8.16	8.72	8.00	6.59	7.34	8.38	7.60	7.31
76	Halsted Street, Little Calumet River	6.60	6.69	6.60	6.53	7.35	6.29	6.09	5.64	6.31	6.04	5.63
52	Wentworth Avenue, Little Calumet River	6.52	6.23	6.91	6.47	6.08	6.43	6.01	7.43	6.43	7.13	5.68
54	Joe Orr Road, Thorn Creek	8.28	8.85	8.61	8.03	8.36	8.58	8.33	7.72	8.18	8.63	7.92
57	Ashland Avenue, Little Calumet River	6.28	5.80	6.34	6.08	5.56	6.77	6.25	6.03	6.70	7.10	6.54
58	Ashland Avenue, Cal-Sag Channel	6.37	6.21	5.61	6.66	6.31	5.85	6.34	6.18	6.25	6.50	5.61
59	Cicero Avenue, Cal-Sag Channel	6.35	6.12	6.04	6.44	6.26	6.29	5.81	6.68	5.91	5.45	5.41
43	Route 83, Cal-Sag Channel	6.17	5.95	5.64	6.04	5.83	5.24	5.99	5.64	5.64	4.95	5.08
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	7.91	10.15	8.40	9.26	9.09	9.71	10.03	8.67	9.88	9.66	9.05
63	Longmeadow Lane, West Branch Du Page River	7.50	10.04	8.36	9.38	7.76	9.29	8.62	8.76	8.33	8.63	9.07
89	Walnut Lane, West Branch Du Page River	7.01	8.20	7.33	8.22	7.61	8.43	8.52	7.63	8.58	9.09	7.31
64	Lake Street, West Branch Du Page River	7.79	8.74	7.79	7.71	7.37	8.47	9.10	8.49	9.22	8.68	8.07
79	Higgins Road, Salt Creek	7.09	9.07	7.77	8.94	7.35	9.28	8.34	7.65	9.31	8.51	8.36
80	Arlington Heights Road, Salt Creek	7.79	7.97	7.31	8.43	7.74	8.42	8.27	8.58	8.80	8.83	8.84
18	Devon Avenue, Salt Creek	7.78	7.93	7.66	8.98	7.26	8.85	8.30	8.64	9.58	9.36	8.39
24	Wolf Road, Salt Creek	7.74	9.04	9.70	9.73	8.89	8.94	9.32	9.63	9.73	8.77	8.26
21	First Avenue, Salt Creek	6.72	7.65	6.48	7.07	7.08	7.49	7.63	7.42	8.11	8.10	7.93
77	Elmhurst Road, Higgins Creek	7.71	9.39	7.97	9.23	7.95	8.28	8.75	9.94	9.06	8.46	8.46
78	Wille Road, Higgins Creek	8.43	8.61	7.80	8.97	8.26	8.36	8.87	8.88	8.56	8.63	8.56
12	Lake-Cook Road, Buffalo Creek	7.97	8.60	8.47	8.63	8.50	10.18	8.85	9.42	10.28	8.81	10.04
13	Lake-Cook Road, Des Plaines River	8.04	8.46	8.01	8.55	7.06	8.86	8.97	8.15	8.58	9.01	7.80
17	Oakton Steet, Des Plaines River	7.66	8.32	8.11	8.49	7.94	8.14	8.50	8.33	8.27	8.33	8.47
19	Belmont Avenue, Des Plaines River	6.41	7.26	6.58	8.26	7.18	7.38	6.38	7.14	7.70	7.58	7.83
20	Roosevelt Road, Des Plaines River	6.44	7.24	6.44	8.05	7.28	7.63	7.28	7.53	8.28	6.64	7.26
22	Ogden Avenue, Des Plaines River	7.72	8.43	8.40	9.18	8.25	8.61	8.21	8.55	9.26	8.25	8.31
23	Willow Springs Road, Des Plaines River	7.65	8.68	8.41	9.14	8.42	8.85	9.06	7.93	8.89	7.68	8.08
29	Stephen Street, Des Plaines River	7.81	9.15	9.11	9.74	8.82	8.43	9.78	8.12	9.54	9.28	8.20
91	Material Service Road, Des Plaines River	8.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-34

CHEMICAL OXYGEN DEMAND MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	26.3	31.5	38.2	32.8	44.0	45.5
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	21.0	33.3	33.8	28.8	31.8	33.1
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	23.7	33.3	29.9	27.7	33.2	32.8
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	17.5	48.8	25.6	26.3	26.9	30.8
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	8.7	12.5	12.4	11.7	13.0	15.0
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	22.8	27.8	22.4	32.8	27.5	30.0
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	26.6	26.0	21.4	22.3	24.2	28.7
73 Diversy Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	16.4	24.7	22.3	20.0	23.0	30.3
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	24.0	25.0	21.3	22.0	25.7	22.8
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	5.8	10.4	13.4	9.8	12.1	13.8
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	19.8	15.8	15.8	17.8	22.9	20.9
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	31.7	20.7	16.1	18.0	19.5	20.4
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	17.2	22.0	18.8	16.8	20.1	22.1
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	18.4	26.3	21.6	25.4	23.4	26.0
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	16.8	26.6	20.4	20.8	22.7	23.4
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	29.8	26.7	25.3	27.6	29.6	27.1
82 Lockport Trebley, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	22.3	28.4	26.7	23.9	23.8	29.1
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	9.6	10.2	9.7	14.9	ND	17.0
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	14.3	23.9	19.2	19.7	23.6	22.4
55 130th Street, Calumet River	ND	ND	ND	ND	ND	12.8	13.6	13.8	13.0	21.6	20.1
51 IBE Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	49.3	59.9	60.7	90.4	51.5	64.3
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	26.0	25.8	28.2	20.0	31.6	29.2
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	29.2	29.3	27.6	30.0	37.8	34.0
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	27.5	37.2	37.9	35.1	45.0	38.5
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	27.0	33.9	34.5	27.0	33.8	36.3
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	27.4	33.8	32.1	31.1	64.8	31.6
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	31.6	30.6	29.2	30.9	42.3	37.7
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	32.0	31.1	31.4	27.6	38.3	36.6
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	31.3	31.5	33.4	26.3	42.4	35.4
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	35.8	33.3	33.8	27.7	35.5	26.9
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	ND	62.5	40.7	40.3	36.1	38.1	36.8
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	54.0	40.9	34.8	35.6	36.0	29.9
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	51.0	44.4	41.8	35.1	42.9	37.8
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	38.6	40.8	34.1	30.6	31.3	34.4
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	28.5	29.9	25.0	27.8	27.9	27.3
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	30.8	35.4	29.1	27.9	25.4	30.6
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	33.8	39.2	32.0	31.6	37.0	33.7
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	31.0	37.7	36.8	30.3	35.5	34.9
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	39.8	57.4	33.8	35.2	37.3	33.9
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	37.2	35.1	29.1	29.3	28.1	30.2
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	34.3	37.5	37.4	30.7	35.4	47.3
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	28.0	36.3	32.2	29.4	34.8	37.1
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	36.5	34.0	30.0	34.3	37.2	33.3
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	45.0	45.4	32.3	34.2	40.8	33.7
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	31.7	40.0	30.9	37.0	35.3	34.3
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	31.2	42.2	34.3	32.5	35.8	33.2
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	30.7	40.4	30.0	32.6	36.5	36.8
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	35.2	44.4	36.0	36.6	38.6	38.3
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-35

TEMPERATURE MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (°C)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	1.1	ND	ND	ND	15.0	16.3	21.1	14.3	14.3	14.3	14.3
31 Lake-Cook Road, Middle Fork North Branch	15.5	13.9	12.2	11.6	13.4	12.8	13.3	11.7	12.9	13.6	13.4
32 Lake-Cook Road, Skokie River	15.5	14.0	11.9	12.1	13.1	14.9	15.6	12.1	13.5	14.8	12.7
34 Dempster Street, North Branch Chicago River	15.3	14.5	13.2	12.4	10.9	14.0	13.6	12.7	12.7	13.4	13.1
96 Albany Avenue, North Branch Chicago River	16.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	18.0	15.9	16.2	12.0	13.9	15.0	16.2	11.8	12.4	12.2	13.2
36 Touhy Avenue, North Shore Channel	15.8	16.9	15.8	12.8	14.7	14.2	15.2	15.1	14.9	15.4	15.5
37 Wilson Avenue, North Branch Chicago River	14.9	16.0	15.2	12.4	13.7	13.0	14.6	10.6	14.9	14.4	15.3
73 Diversay Parkway, North Branch Chicago River	15.4	16.5	15.4	12.4	13.7	13.5	15.1	14.8	15.1	14.0	15.2
46 Grand Avenue, North Branch Chicago River	14.4	15.1	15.0	14.6	12.1	8.8	14.5	12.2	14.0	15.1	14.2
74 Lake Shore Drive, Chicago River	13.8	14.9	13.3	11.5	10.6	12.4	13.6	9.7	11.4	10.7	12.8
39 Madison Street, South Branch Chicago River	14.7	14.7	13.8	12.1	10.8	12.2	10.9	11.1	12.7	12.3	14.1
40 Damen Avenue, Chicago Sanitary & Ship Canal	18.3	16.8	15.4	13.3	11.6	14.9	13.8	12.8	13.1	13.8	15.3
75 Cicero Avenue, Chicago Sanitary & Ship Canal	18.7	15.6	18.0	12.5	13.5	14.1	14.3	14.5	13.7	14.9	15.2
41 Harlem Avenue, Chicago Sanitary & Ship Canal	17.0	17.9	16.7	13.9	13.5	13.7	15.1	13.6	14.1	15.3	15.4
42 Route 83, Chicago Sanitary & Ship Canal	19.1	18.0	17.2	15.0	14.7	14.8	14.5	14.5	14.7	15.8	15.8
48 Stephen Street, Chicago Sanitary & Ship Canal	18.3	18.5	16.6	14.6	14.2	14.4	14.9	13.3	14.5	15.8	16.1
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	19.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	13.4	13.5	14.8	12.6	13.3	13.1	13.3	11.7	13.1	ND	13.0
50 Burnham Avenue, Wolf Lake	13.5	13.6	15.0	12.4	12.5	13.1	14.0	12.7	12.8	12.6	14.5
55 130th Street, Calumet River	14.8	15.7	15.5	13.3	14.8	15.3	14.6	12.8	12.8	14.7	13.2
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	15.1	15.3	15.6	13.7	13.9	14.3	15.4	14.3	14.5	13.6	15.2
56 Indiana Avenue, Little Calumet River	15.2	15.7	16.7	14.1	14.7	14.4	15.2	13.3	14.1	14.8	14.9
76 Halsted Street, Little Calumet River	16.2	16.5	16.4	13.6	4.3	14.9	14.5	14.8	15.5	13.9	14.9
52 Wentworth Avenue, Little Calumet River	14.6	15.3	14.3	11.9	14.7	14.7	14.3	12.5	12.7	11.9	12.2
54 Joe Orr Road, Thorn Creek	17.3	15.0	15.8	13.2	14.0	15.4	14.7	15.2	16.4	13.7	14.0
57 Ashland Avenue, Little Calumet River	15.6	16.0	14.6	11.2	15.2	13.6	15.5	13.5	13.9	13.1	14.1
58 Ashland Avenue, Cal-Sag Channel	15.7	16.7	19.1	14.1	13.6	15.5	13.7	13.8	14.4	12.9	13.7
59 Cicero Avenue, Cal-Sag Channel	15.5	16.6	16.0	13.1	14.4	13.9	14.1	13.8	14.6	12.6	14.0
43 Route 83, Cal-Sag Channel	15.5	16.5	15.5	14.0	14.9	13.5	13.3	14.2	14.2	13.5	13.5
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	17.7	13.1	17.1	14.6	13.7	15.3	13.2	13.1	13.3	18.4	12.6
63 Longmeadow Lane, West Branch Du Page River	16.2	13.9	17.8	10.6	13.4	13.2	15.4	12.5	12.6	17.5	14.1
89 Walnut Lane, West Branch Du Page River	15.2	16.1	18.3	15.1	14.3	15.5	14.0	14.3	15.0	17.2	16.1
64 Lake Street, West Branch Du Page River	15.5	14.7	17.9	13.9	14.7	14.1	14.8	15.0	14.3	16.5	15.7
79 Higgins Road, Salt Creek	15.9	14.4	19.1	14.2	14.5	16.1	16.1	14.1	12.8	17.9	14.9
80 Arlington Heights Road, Salt Creek	14.2	15.2	17.6	14.2	15.2	14.4	12.7	14.1	14.0	16.7	15.5
18 Devon Avenue, Salt Creek	14.5	14.8	17.5	13.5	14.8	14.7	15.0	14.0	19.8	16.8	16.2
24 Wolf Road, Salt Creek	16.3	14.8	9.9	9.6	14.2	13.9	14.3	13.6	12.7	14.3	13.0
21 First Avenue, Salt Creek	15.3	13.5	14.8	11.6	13.5	12.5	13.0	12.1	10.7	12.4	13.1
77 Elmhurst Road, Higgins Creek	15.2	14.0	15.3	9.2	12.3	12.7	13.1	12.2	12.2	13.5	13.5
78 Wille Road, Higgins Creek	16.3	16.1	17.3	11.5	15.3	15.4	15.4	14.7	14.6	15.7	15.4
12 Lake-Cook Road, Buffalo Creek	15.4	12.9	16.9	12.1	13.2	14.6	15.7	13.1	11.4	14.4	13.3
13 Lake-Cook Road, Des Plaines River	13.3	12.9	15.7	11.6	13.8	13.1	12.7	12.3	12.4	15.3	12.6
17 Oakton Street, Des Plaines River	15.1	13.8	15.1	10.0	13.3	13.6	2.1	12.8	12.4	13.0	12.3
19 Belmont Avenue, Des Plaines River	15.1	13.7	15.3	10.7	13.4	13.0	12.8	12.7	11.8	13.4	12.2
20 Roosevelt Road, Des Plaines River	15.0	13.3	15.2	10.6	13.5	12.4	12.5	12.2	11.5	13.6	12.0
22 Ogden Avenue, Des Plaines River	15.5	14.1	14.8	11.2	14.6	13.1	14.3	13.0	13.2	13.0	13.7
23 Willow Springs Road, Des Plaines River	16.1	14.8	16.2	10.0	14.2	13.8	14.1	13.3	12.7	14.4	12.8
29 Stephen Street, Des Plaines River	16.6	14.9	16.7	9.0	14.5	13.5	14.7	13.6	12.9	15.0	13.0
91 Material Service Road, Des Plaines River	15.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-36

pH MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	8.00	ND	ND	ND	7.94	8.01	7.86	7.37	7.45	7.75	7.48
31	Lake-Cook Road, Middle Fork North Branch	7.79	7.87	7.77	6.75	7.93	8.04	7.61	7.58	7.35	7.87	7.60
32	Lake-Cook Road, Skokie River	7.95	7.96	7.82	6.67	7.94	8.10	7.55	7.36	7.58	7.82	7.50
34	Dempster Street, North Branch Chicago River	7.78	7.84	7.72	6.79	7.73	7.88	7.39	7.38	7.44	8.11	7.37
96	Albany Avenue, North Branch Chicago River	7.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	8.31	8.12	8.24	7.03	8.07	8.37	8.05	7.95	7.88	8.32	7.70
36	Touhy Avenue, North Shore Channel	7.63	7.56	7.50	6.95	7.59	7.64	7.47	7.51	7.57	7.94	7.45
37	Wilson Avenue, North Branch Chicago River	7.57	7.58	7.68	6.99	7.71	7.38	7.03	7.21	7.48	7.88	7.44
73	Diversesey Parkway, North Branch Chicago River	7.59	7.41	7.84	7.16	7.94	7.24	7.28	7.54	7.18	7.82	7.52
46	Grand Avenue, North Branch Chicago River	7.60	7.74	7.82	6.48	7.55	7.60	7.53	7.56	7.17	7.49	7.39
74	Lake Shore Drive, Chicago River	7.70	8.09	8.15	7.96	7.88	7.53	8.08	8.02	7.65	7.55	7.65
39	Madison Street, South Branch Chicago River	7.54	7.89	7.89	7.75	7.52	7.38	7.65	7.69	7.34	7.79	7.34
40	Damen Avenue, Chicago Sanitary & Ship Canal	7.45	7.72	8.06	7.48	7.68	7.27	7.89	7.60	7.53	7.55	7.51
75	Cicero Avenue, Chicago Sanitary & Ship Canal	7.27	7.85	8.02	7.90	7.82	7.24	7.61	7.21	7.18	7.24	7.48
41	Harlem Avenue, Chicago Sanitary & Ship Canal	7.42	7.67	7.97	7.44	7.38	7.10	7.49	7.38	7.14	7.34	7.23
42	Route 83, Chicago Sanitary & Ship Canal	7.32	7.71	7.98	7.54	7.51	7.33	7.53	7.44	7.33	7.42	7.36
48	Stephen Street, Chicago Sanitary & Ship Canal	7.48	7.62	7.97	7.58	7.49	7.48	7.54	7.54	7.29	7.37	7.38
82	Lockport Trebler, Chicago Sanitary & Ship Canal	7.75	7.61	7.65	7.80	7.64	7.45	7.72	7.40	7.52	7.83	7.67
92	Lockport Forebay, Chicago Sanitary & Ship Canal	7.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	7.96	8.19	8.25	7.88	8.00	7.66	7.86	7.70	7.44	ND	7.50
50	Burnham Avenue, Wolf Lake	8.06	8.29	8.34	7.93	8.31	8.12	7.72	7.65	7.83	7.76	7.80
55	130th Street, Calumet River	7.72	8.21	8.12	7.91	8.35	8.27	7.87	7.35	7.53	7.68	7.69
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	7.74	7.79	7.94	7.47	8.02	7.55	7.22	7.50	7.37	7.45	7.18
56	Indiana Avenue, Little Calumet River	7.73	8.10	8.03	7.75	8.32	8.16	7.32	7.19	7.16	7.57	7.62
76	Halsted Street, Little Calumet River	7.47	7.82	7.56	7.49	7.32	7.66	7.55	7.38	7.51	7.64	7.28
52	Wentworth Avenue, Little Calumet River	7.84	7.95	8.09	7.70	8.65	7.98	7.58	7.53	7.68	7.88	7.30
54	Joe Orr Road, Thora Creek	7.51	8.10	7.53	7.07	7.51	7.65	7.34	7.44	7.68	7.86	7.13
57	Ashland Avenue, Little Calumet River	7.41	7.91	7.65	7.03	7.29	7.61	7.42	7.52	7.38	7.65	7.41
58	Ashland Avenue, Cal-Sag Channel	7.31	7.78	7.92	7.78	7.27	7.68	7.58	7.44	7.48	7.57	7.24
59	Cicero Avenue, Cal-Sag Channel	7.17	7.79	7.74	7.43	7.45	7.54	7.37	7.46	7.27	7.48	7.18
43	Route 83, Cal-Sag Channel	7.17	7.72	7.74	7.63	7.39	7.26	7.36	7.30	6.84	7.39	7.14
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	8.08	8.16	8.17	7.93	7.94	8.00	7.90	7.73	7.73	8.18	7.82
63	Longmeadow Lane, West Branch Du Page River	7.95	7.90	8.13	7.66	7.94	7.95	7.81	7.46	7.63	7.88	7.71
89	Walnut Lane, West Branch Du Page River	8.13	7.89	7.90	7.67	7.92	7.85	7.76	7.54	7.53	7.71	7.35
64	Lake Street, West Branch Du Page River	8.30	7.71	8.06	7.88	8.06	7.87	7.82	7.63	7.65	7.84	7.35
79	Higgins Road, Salt Creek	8.16	8.24	8.29	8.09	7.73	8.11	7.65	7.85	7.59	8.24	7.71
80	Arlington Heights Road, Salt Creek	8.16	7.87	7.97	7.94	7.75	8.00	7.83	7.91	7.52	7.85	7.65
18	Devon Avenue, Salt Creek	8.03	7.85	7.87	7.82	7.73	7.89	7.35	7.56	7.52	7.78	7.59
24	Wolf Road, Salt Creek	7.78	8.05	7.91	6.77	7.73	8.18	7.92	6.63	7.93	7.57	7.74
21	First Avenue, Salt Creek	7.40	7.68	7.65	7.65	7.87	7.64	7.64	6.94	7.33	7.28	7.63
77	Elmhurst Road, Higgins Creek	7.81	8.02	7.75	6.87	7.84	8.07	7.63	7.08	7.78	7.82	7.93
78	Wille Road, Higgins Creek	7.60	7.77	7.75	6.66	7.81	8.13	7.77	6.96	7.68	7.64	7.72
12	Lake-Cook Road, Buffalo Creek	7.85	7.75	7.87	7.81	7.63	7.85	7.02	7.71	7.21	7.85	7.95
13	Lake-Cook Road, Des Plaines River	7.92	7.80	7.93	7.92	8.02	7.73	7.36	7.71	7.19	7.45	7.81
17	Oakton Street, Des Plaines River	7.75	7.89	7.78	7.92	8.00	8.18	8.09	6.96	7.68	7.44	7.95
19	Belmont Avenue, Des Plaines River	7.64	7.78	7.74	8.05	8.09	7.91	7.81	6.93	7.58	7.46	7.89
20	Roosevelt Road, Des Plaines River	7.68	7.77	7.70	7.78	7.93	7.92	7.61	7.03	7.53	7.54	7.73
22	Ogden Avenue, Des Plaines River	7.12	7.43	7.65	7.95	7.88	7.43	7.52	7.23	7.02	7.18	7.63
23	Willow Springs Road, Des Plaines River	7.83	8.13	7.87	6.47	7.95	8.26	8.07	6.63	7.78	7.61	8.00
29	Stephen Street, Des Plaines River	7.82	8.12	7.96	6.74	8.02	8.41	8.17	6.72	7.52	7.77	7.75
91	Material Service Road, Des Plaines River	7.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-37

CHLORIDE MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	847	ND	ND	ND	198	182	116	247	152	156	170
31 Lake-Cook Road, Middle Fork North Branch	217	177	180	211	198	199	164	133	136	113	132
32 Lake-Cook Road, Skokie River	242	185	183	250	215	172	167	165	163	138	179
34 Dempster Street, North Branch Chicago River	269	199	182	263	260	184	228	163	168	186	164
96 Albany Avenue, North Branch Chicago River	163	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	60	43	34	23	49	22	14	76	13	11	33
36 Touhy Avenue, North Shore Channel	150	154	110	116	115	149	125	84	66	87	84
37 Wilson Avenue, North Branch Chicago River	202	193	133	178	139	178	130	203	81	100	89
73 Diversey Parkway, North Branch Chicago River	190	188	129	184	143	149	126	150	84	116	91
46 Grand Avenue, North Branch Chicago River	148	153	150	133	161	167	121	110	92	107	89
74 Lake Shore Drive, Chicago River	81	53	64	28	27	31	23	82	24	21	26
39 Madison Street, South Branch Chicago River	126	113	108	78	86	88	69	88	60	78	82
40 Damen Avenue, Chicago Sanitary & Ship Canal	134	107	136	98	122	84	99	94	83	79	83
75 Cicero Avenue, Chicago Sanitary & Ship Canal	124	106	149	105	114	114	98	120	58	82	89
41 Harlem Avenue, Chicago Sanitary & Ship Canal	166	155	143	137	130	136	116	107	75	108	97
42 Route 83, Chicago Sanitary & Ship Canal	139	171	147	157	145	138	137	107	84	146	95
48 Stephen Street, Chicago Sanitary & Ship Canal	126	139	149	155	158	132	137	130	98	152	100
82 Lockport Trebler, Chicago Sanitary & Ship Canal	225	151	134	153	124	155	152	153	122	149	127
92 Lockport Forebay, Chicago Sanitary & Ship Canal	179	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	51	42	31	23	24	27	27	35	62	ND	109
50 Burnham Avenue, Wolf Lake	32	30	30	35	31	34	40	38	34	44	34
55 130th Street, Calumet River	74	67	53	57	57	58	55	74	66	89	80
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	177	198	192	190	267	259	222	178	203	181	176
56 Indiana Avenue, Little Calumet River	103	95	99	100	86	92	96	117	105	114	100
76 Halsted Street, Little Calumet River	150	139	122	136	163	132	127	138	105	137	139
52 Wentworth Avenue, Little Calumet River	155	143	109	136	119	128	151	136	163	114	120
54 Joe Orr Road, Thorn Creek	162	156	152	171	187	168	175	154	156	149	147
57 Ashland Avenue, Little Calumet River	190	171	139	185	151	164	132	131	150	128	129
58 Ashland Avenue, Cal-Sag Channel	164	131	101	191	135	131	129	155	109	114	135
59 Cicero Avenue, Cal-Sag Channel	168	136	136	166	139	132	129	145	114	101	138
43 Route 83, Cal-Sag Channel	168	130	135	143	145	126	153	166	117	103	136
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	143	157	199	197	209	175	156	139	147	132	141
63 Longmeadow Lane, West Branch Du Page River	189	257	220	321	388	315	217	586	249	185	245
89 Walnut Lane, West Branch Du Page River	153	127	131	142	199	167	157	188	154	151	154
64 Lake Street, West Branch Du Page River	160	133	152	166	198	191	160	231	162	157	166
79 Higgins Road, Salt Creek	278	218	201	290	323	288	289	244	236	182	158
80 Arlington Heights Road, Salt Creek	219	177	178	235	256	195	212	198	197	198	174
18 Devon Avenue, Salt Creek	223	178	188	271	250	200	192	216	201	197	174
24 Wolf Road, Salt Creek	220	186	267	231	263	239	210	221	228	243	232
21 First Avenue, Salt Creek	213	184	216	214	253	241	204	221	244	241	232
77 Elmhurst Road, Higgins Creek	336	294	364	348	378	354	515	255	363	182	222
78 Wille Road, Higgins Creek	191	168	193	234	215	190	161	153	172	159	192
12 Lake-Cook Road, Buffalo Creek	194	153	174	207	240	197	206	223	205	185	160
13 Lake-Cook Road, Des Plaines River	152	184	151	154	171	145	148	105	124	131	125
17 Oakton Street, Des Plaines River	141	137	151	167	194	155	147	128	134	147	127
19 Belmont Avenue, Des Plaines River	153	146	160	187	203	182	207	161	166	150	133
20 Roosevelt Road, Des Plaines River	157	146	160	193	200	180	184	159	242	157	139
22 Ogden Avenue, Des Plaines River	170	153	172	214	206	197	162	157	202	178	162
23 Willow Springs Road, Des Plaines River	177	160	178	191	201	178	166	149	182	186	167
29 Stephen Street, Des Plaines River	175	157	183	232	222	193	166	155	166	186	172
91 Material Service Road, Des Plaines River	202	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-38

TURBIDITY MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (NTU)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	81.0	ND	ND	ND	47.0	27.8	24.5	31.0	32.8	74.3	51.7
31 Lake-Cook Road, Middle Fork North Branch	16.8	19.7	14.6	18.3	24.6	24.7	19.4	35.7	27.5	50.2	35.0
32 Lake-Cook Road, Skokie River	13.0	17.6	13.4	12.2	18.5	22.7	14.3	26.6	22.5	33.3	27.3
34 Dempster Street, North Branch Chicago River	18.5	20.2	21.2	20.2	18.3	23.3	17.3	25.8	28.3	20.7	30.3
96 Albany Avenue, North Branch Chicago River	11.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	11.8	9.1	8.7	10.3	10.8	12.6	9.5	13.0	13.0	17.2	25.2
36 Touhy Avenue, North Shore Channel	8.1	7.5	6.8	7.0	8.4	9.1	8.7	5.8	9.3	8.5	9.5
37 Wilson Avenue, North Branch Chicago River	9.7	10.1	8.7	9.5	10.2	10.3	10.2	8.1	9.2	12.4	14.9
73 Diversley Parkway, North Branch Chicago River	10.1	11.7	11.3	9.1	13.8	12.0	9.3	10.8	9.2	8.6	14.4
46 Grand Avenue, North Branch Chicago River	12.6	12.7	10.8	9.9	12.7	11.9	10.2	10.9	10.3	10.0	12.8
74 Lake Shore Drive, Chicago River	8.3	7.0	6.8	8.5	8.7	8.8	8.6	12.1	7.2	8.7	8.9
39 Madison Street, South Branch Chicago River	10.5	11.2	10.3	10.5	10.1	12.6	11.0	10.3	8.2	10.3	10.3
40 Damen Avenue, Chicago Sanitary & Ship Canal	12.7	11.2	10.6	11.2	11.4	18.1	9.8	10.3	12.5	13.5	11.3
75 Cicero Avenue, Chicago Sanitary & Ship Canal	12.8	13.8	10.8	11.8	11.1	11.8	11.0	10.1	12.2	12.8	13.8
41 Harlem Avenue, Chicago Sanitary & Ship Canal	9.3	9.7	7.2	8.9	8.8	9.5	12.2	7.3	6.9	7.8	7.6
42 Route 83, Chicago Sanitary & Ship Canal	8.2	7.8	9.5	8.3	7.7	10.2	10.1	6.3	7.4	7.3	7.9
48 Stephen Street, Chicago Sanitary & Ship Canal	11.1	9.4	11.7	11.9	13.2	16.8	11.8	10.3	15.7	12.4	19.6
82 Lockport Trebley, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	11.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	10.6	9.8	9.8	9.5	10.5	10.5	9.1	7.3	8.0	ND	12.0
50 Burnham Avenue, Wolf Lake	6.4	5.8	7.4	5.8	6.7	7.0	12.1	6.8	6.1	7.3	9.0
55 130th Street, Calumet River	13.5	8.0	9.4	10.7	9.7	10.5	12.1	7.4	5.7	13.5	14.7
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	12.5	11.1	8.4	10.5	35.5	18.5	14.6	16.1	7.8	10.8	13.6
56 Indiana Avenue, Little Calumet River	15.8	14.7	13.0	17.5	27.1	25.0	27.5	24.9	19.8	28.5	23.5
76 Halsted Street, Little Calumet River	10.3	8.8	11.2	15.2	16.0	14.8	18.8	14.0	13.2	15.4	13.8
52 Wentworth Avenue, Little Calumet River	33.0	30.1	30.6	43.8	41.9	18.1	50.1	46.6	28.9	119.7	41.9
54 Joe Orr Road, Thorn Creek	22.0	10.4	14.8	14.5	12.8	9.5	16.0	36.5	5.2	24.7	24.4
57 Ashland Avenue, Little Calumet River	21.3	22.5	37.8	34.3	24.1	19.2	27.7	37.5	19.7	109.3	30.2
58 Ashland Avenue, Cal-Sag Channel	13.3	13.8	12.9	26.2	20.6	18.3	19.4	23.8	13.5	72.3	25.9
59 Cicero Avenue, Cal-Sag Channel	13.3	14.8	16.4	21.1	25.8	22.8	22.0	22.7	18.6	76.3	27.2
43 Route 83, Cal-Sag Channel	18.5	15.4	17.1	26.4	29.8	21.3	23.9	31.9	19.6	62.2	30.2
<u>Des Plaines River System</u>											
90 Route 18, Poplar Creek	18.6	16.2	11.8	40.0	105.5	20.2	17.4	16.1	16.4	24.7	16.2
63 Longmeadow Lane, West Branch Du Page River	21.8	17.7	14.6	21.3	39.5	43.9	17.9	25.0	16.1	22.5	23.1
89 Walnut Lane, West Branch Du Page River	13.5	12.4	7.0	11.4	26.8	29.8	12.7	16.5	13.8	15.6	10.2
64 Lake Street, West Branch Du Page River	27.6	22.0	19.7	25.8	38.5	30.2	24.4	27.4	30.3	28.8	19.8
79 Higgins Road, Salt Creek	29.4	23.7	21.1	33.5	61.8	25.2	22.0	32.8	15.5	39.8	27.0
80 Arlington Heights Road, Salt Creek	10.8	11.2	7.0	12.3	8.8	9.7	11.1	9.9	7.7	8.8	13.8
18 Devon Avenue, Salt Creek	15.6	15.7	9.7	18.2	14.5	11.1	14.4	11.9	9.0	10.3	13.8
24 Wolf Road, Salt Creek	22.6	20.7	13.7	31.5	25.9	27.2	28.6	24.3	37.8	52.3	34.3
21 First Avenue, Salt Creek	23.0	22.0	14.9	29.8	24.5	18.8	28.3	29.2	22.1	44.6	33.9
77 Elmhurst Road, Higgins Creek	27.7	22.1	17.3	23.5	77.4	80.8	69.6	37.6	21.7	49.3	21.5
78 Wille Road, Higgins Creek	7.2	5.4	7.9	7.8	17.5	22.4	18.6	7.8	3.7	9.9	5.2
12 Lake-Cook Road, Buffalo Creek	45.9	25.8	18.9	28.3	36.8	21.8	31.6	27.3	29.1	45.1	51.8
13 Lake-Cook Road, Des Plaines River	23.9	22.0	18.6	30.1	32.1	18.8	20.3	25.7	29.0	30.0	27.8
17 Oakton Street, Des Plaines River	27.5	24.5	23.6	39.9	24.2	25.9	33.3	26.5	22.2	16.1	26.5
19 Belmont Avenue, Des Plaines River	20.4	19.3	16.7	34.8	25.5	25.8	29.5	27.2	22.3	34.7	30.1
20 Roosevelt Road, Des Plaines River	22.3	19.8	17.3	32.2	23.3	22.8	24.7	32.8	21.8	35.2	27.4
22 Ogden Avenue, Des Plaines River	23.6	19.7	17.6	33.7	23.5	20.6	32.9	35.0	23.4	38.1	30.3
23 Willow Springs Road, Des Plaines River	26.0	22.5	23.7	30.6	29.4	26.2	34.1	29.6	27.5	35.1	34.4
29 Stephen Street, Des Plaines River	26.6	24.4	24.3	30.1	31.8	25.3	36.3	32.9	29.8	40.0	36.7
91 Material Service Road, Des Plaines River	24.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-39

CONDUCTIVITY MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means ( $\mu$ mhos)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	1235	935	930	1109	1172	1034	982	993	821	871	917
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Willa Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-40

ALKALINITY (TOTAL) MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	170	ND	ND	ND	152	148	106	278	174	145	171
31	Lake-Cook Road, Middle Fork North Branch	189	205	209	183	206	197	202	209	218	204	187
32	Lake-Cook Road, Skokie River	200	191	231	200	237	199	200	223	228	200	205
34	Dempster Street, North Branch Chicago River	163	171	194	180	177	184	184	183	184	189	177
96	Albany Avenue, North Branch Chicago River	161	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	126	129	126	119	140	121	119	118	114	113	140
36	Touhy Avenue, North Shore Channel	137	142	152	144	151	171	159	154	150	147	152
37	Wilson Avenue, North Branch Chicago River	141	152	161	162	157	174	151	168	160	154	157
73	Diversey Parkway, North Branch Chicago River	138	150	161	149	156	165	157	158	158	149	153
46	Grand Avenue, North Branch Chicago River	143	151	167	149	160	178	158	155	158	156	149
74	Lake Shore Drive, Chicago River	123	117	120	115	114	122	122	114	114	113	114
39	Madison Street, South Branch Chicago River	137	144	148	131	136	140	133	140	136	139	149
40	Damen Avenue, Chicago Sanitary & Ship Canal	136	149	152	132	139	133	143	143	138	136	145
75	Cicero Avenue, Chicago Sanitary & Ship Canal	135	140	144	133	134	148	144	142	138	143	146
41	Harlem Avenue, Chicago Sanitary & Ship Canal	121	129	137	131	122	142	138	142	136	138	149
42	Route 81, Chicago Sanitary & Ship Canal	126	131	140	137	133	145	148	147	140	146	144
48	Stephen Street, Chicago Sanitary & Ship Canal	158	139	142	143	137	152	156	157	147	137	150
82	Lockport Trehler, Chicago Sanitary & Ship Canal	143	135	149	244	480	212	179	182	154	162	175
92	Lockport Forebay, Chicago Sanitary & Ship Canal	137	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	115	115	111	116	111	120	119	114	114	ND	112
50	Burnham Avenue, Wolf Lake	101	98	102	106	102	109	156	104	111	99	91
55	130th Street, Calumet River	116	117	114	118	129	119	127	119	115	112	123
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	168	155	141	158	212	221	219	185	183	201	198
56	Indiana Avenue, Little Calumet River	127	129	129	130	133	146	145	151	138	143	126
76	Halsted Street, Little Calumet River	154	158	153	153	154	170	165	170	166	194	156
52	Wentworth Avenue, Little Calumet River	195	193	200	215	215	214	203	220	241	189	200
54	Joe Orr Road, Thorn Creek	172	175	203	216	223	238	202	215	204	231	185
57	Ashland Avenue, Little Calumet River	190	184	179	199	201	215	187	196	216	187	186
58	Ashland Avenue, Cal-Sag Channel	159	156	142	164	162	180	168	191	178	171	161
59	Cicero Avenue, Cal-Sag Channel	161	156	156	159	160	187	165	179	177	164	157
43	Route 83, Cal-Sag Channel	162	159	156	161	161	173	176	183	175	162	150
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	196	239	230	182	213	230	211	191	213	199	213
63	Longmeadow Lane, West Branch Du Page River	156	192	184	160	137	192	163	177	189	149	184
89	Walnut Lane, West Branch Du Page River	155	163	154	140	138	157	153	178	172	155	174
64	Lake Street, West Branch Du Page River	146	153	152	141	133	156	145	163	174	166	184
79	Higgins Road, Salt Creek	161	158	171	142	159	180	161	166	184	149	165
80	Arlington Heights Road, Salt Creek	136	166	145	140	150	160	254	160	162	188	153
18	Devon Avenue, Salt Creek	132	139	144	145	144	160	144	154	162	161	154
24	Wolf Road, Salt Creek	144	153	178	139	155	173	155	156	175	178	184
21	First Avenue, Salt Creek	150	150	161	140	148	178	162	150	181	182	185
77	Elmhurst Road, Higgins Creek	140	172	196	144	140	175	139	145	190	146	172
78	Willie Road, Higgins Creek	171	190	173	168	168	191	173	178	209	186	195
12	Lake-Cook Road, Buffalo Creek	174	188	206	189	191	219	195	214	217	202	210
13	Lake-Cook Road, Des Plaines River	191	253	207	184	196	221	197	198	209	196	208
17	Oakton Street, Des Plaines River	175	180	205	169	192	212	165	189	204	186	194
19	Belmont Avenue, Des Plaines River	172	177	199	176	188	211	192	195	208	178	201
20	Roosevelt Road, Des Plaines River	171	173	195	178	191	211	182	176	201	181	193
22	Ogden Avenue, Des Plaines River	160	164	185	167	179	200	168	165	198	177	192
23	Willow Springs Road, Des Plaines River	157	165	185	169	180	205	170	166	194	184	189
29	Stephen Street, Des Plaines River	165	166	184	176	180	192	175	187	191	192	192
91	Material Service Road, Des Plaines River	172	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-41

TOTAL KJELDAHL NITROGEN MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	2.18	ND	ND	ND	1.94	1.61	1.34	2.58	1.92	2.09	1.82
31 Lake-Cook Road, Middle Fork North Branch	1.67	1.13	0.98	1.22	1.05	1.10	1.29	1.02	1.33	1.30	1.24
32 Lake-Cook Road, Skokie River	1.09	1.02	0.80	1.16	1.10	1.11	1.14	0.99	1.17	1.60	1.35
34 Dempster Street, North Branch Chicago River	1.45	1.21	1.03	1.47	1.43	1.16	1.45	1.32	1.47	1.60	1.45
96 Albany Avenue, North Branch Chicago River	1.60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	1.05	1.27	0.76	0.38	2.25	0.52	0.38	0.79	0.38	0.41	1.12
36 Touhy Avenue, North Shore Channel	2.65	2.48	2.08	2.83	4.17	2.87	3.28	2.29	2.84	2.34	2.58
37 Wilson Avenue, North Branch Chicago River	3.10	3.34	2.20	2.93	4.17	3.03	3.36	3.07	3.19	2.50	2.57
73 Diversey Parkway, North Branch Chicago River	2.52	2.20	1.58	2.44	3.37	2.04	2.35	2.32	2.93	2.90	2.55
46 Grand Avenue, North Branch Chicago River	2.40	2.18	1.94	2.27	3.06	2.93	2.83	2.43	2.64	2.15	2.20
74 Lake Shore Drive, Chicago River	1.10	0.63	0.43	0.50	0.43	0.34	0.36	0.42	0.36	0.52	0.63
39 Madison Street, South Branch Chicago River	2.36	1.75	1.67	1.36	1.72	1.27	1.38	1.56	1.30	1.40	1.92
40 Damen Avenue, Chicago Sanitary & Ship Canal	2.31	1.80	1.31	1.85	2.03	1.44	2.01	1.62	1.75	1.47	1.70
75 Cicero Avenue, Chicago Sanitary & Ship Canal	1.99	1.64	1.48	1.51	2.31	2.07	2.00	1.72	1.83	1.61	2.05
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.72	1.43	1.50	2.05	2.86	2.44	2.14	1.86	1.81	1.84	2.59
42 Route 83, Chicago Sanitary & Ship Canal	1.65	1.70	1.86	2.48	2.80	2.40	2.80	1.98	2.26	1.85	2.14
48 Stephen Street, Chicago Sanitary & Ship Canal	1.93	1.71	1.49	2.05	2.49	2.75	3.07	2.12	2.63	2.89	2.49
82 Lockport Trebler, Chicago Sanitary & Ship Canal	1.96	1.77	1.71	1.90	2.26	2.30	2.32	2.55	2.40	2.13	2.76
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.51	0.59	0.48	0.37	0.76	0.43	0.52	0.37	0.41	ND	0.62
50 Burnham Avenue, Wolf Lake	0.73	0.47	0.55	0.72	0.68	0.61	0.89	0.64	0.79	0.80	0.80
55 130th Street, Calumet River	0.66	0.69	0.49	0.51	0.67	0.62	0.67	0.82	0.77	1.02	1.16
51 IEB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	4.32	3.34	2.10	1.98	6.36	6.16	8.14	3.77	5.67	5.23	6.57
56 Indiana Avenue, Little Calumet River	1.01	1.10	1.00	1.20	1.74	1.78	2.99	2.59	2.87	2.83	2.45
76 Halsted Street, Little Calumet River	1.50	1.38	1.27	1.66	2.66	3.11	4.06	3.55	4.79	5.02	6.03
52 Wentworth Avenue, Little Calumet River	2.03	2.39	2.65	1.53	1.76	1.27	1.80	1.49	1.75	1.91	1.66
54 Joe Orr Road, Thorn Creek	1.92	1.43	1.23	1.38	2.02	1.60	2.77	2.33	1.49	1.51	2.14
57 Ashland Avenue, Little Calumet River	1.46	1.44	1.42	1.40	1.42	1.74	2.15	1.79	1.38	1.49	1.85
58 Ashland Avenue, Cal-Sag Channel	1.50	1.37	1.11	1.62	1.83	2.78	3.08	2.42	4.56	4.02	5.06
59 Cicero Avenue, Cal-Sag Channel	2.22	1.46	1.37	1.83	2.27	3.74	3.89	3.50	4.77	4.22	5.04
43 Route 83, Cal-Sag Channel	1.45	1.42	1.25	1.92	2.49	3.18	3.86	3.27	3.74	4.39	4.35
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	1.31	1.78	0.74	1.22	1.14	1.10	1.09	1.16	0.93	0.95	0.83
63 Longmeadow Lane, West Branch Du Page River	1.66	1.81	1.66	1.82	2.19	1.92	1.78	1.35	1.67	1.47	1.47
89 Walnut Lane, West Branch Du Page River	2.37	2.64	2.34	2.12	2.12	1.97	2.00	2.25	2.07	2.14	1.92
64 Lake Street, West Branch Du Page River	2.70	2.25	2.52	2.42	2.24	2.10	2.10	2.25	2.69	3.50	2.50
79 Higgins Road, Salt Creek	1.82	1.17	1.31	1.36	1.27	1.52	1.38	1.32	1.00	1.15	1.26
80 Arlington Heights Road, Salt Creek	1.74	1.46	1.45	1.58	1.55	1.66	1.49	1.13	1.43	1.60	1.47
18 Devon Avenue, Salt Creek	1.73	1.47	1.33	1.51	1.86	1.91	1.60	1.17	1.38	1.53	1.52
24 Wolf Road, Salt Creek	1.61	1.23	1.12	1.56	1.84	1.67	1.69	1.37	1.37	1.54	1.53
21 First Avenue, Salt Creek	1.62	1.42	1.05	1.50	1.47	1.43	1.58	1.46	1.27	1.65	1.44
77 Elmhurst Road, Higgins Creek	1.41	1.29	0.82	0.92	1.23	1.21	1.49	1.00	1.04	1.20	1.24
78 Wille Road, Higgins Creek	2.35	1.74	1.37	2.10	1.44	1.66	1.75	1.56	1.54	1.43	1.31
12 Lake-Cook Road, Buffalo Creek	1.49	1.22	0.98	1.23	1.29	1.10	1.40	1.64	1.24	1.49	1.84
13 Lake-Cook Road, Des Plaines River	1.82	1.22	1.26	1.33	1.12	1.25	1.72	1.47	1.35	1.68	1.66
17 Oakton Steet, Des Plaines River	1.58	1.18	1.24	1.36	1.49	1.66	1.26	1.28	1.40	1.65	1.47
19 Belmont Avenue, Des Plaines River	2.27	1.13	1.26	1.54	1.58	1.72	1.96	1.36	1.48	1.78	1.54
20 Roosevelt Road, Des Plaines River	1.57	1.24	1.29	1.58	1.58	1.51	1.70	1.32	1.50	1.66	1.49
22 Ogden Avenue, Des Plaines River	1.49	1.11	1.48	1.75	1.52	1.49	1.68	1.49	1.33	1.62	1.45
23 Willow Springs Road, Des Plaines River	1.67	1.08	1.39	1.39	1.57	1.48	1.76	1.35	1.43	1.62	1.43
29 Stephen Street, Des Plaines River	1.35	1.15	1.52	1.67	1.62	1.85	1.95	1.43	1.52	1.68	2.27
91 Material Service Road, Des Plaines River	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-42

AMMONIUM NITROGEN MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	0.470	ND	ND	ND	0.238	0.209	0.165	1.358	0.375	0.183	0.345
31	Lake-Cook Road, Middle Fork North Branch	0.169	0.038	0.048	0.109	0.074	0.134	0.165	0.109	0.228	0.157	0.185
32	Lake-Cook Road, Skokie River	0.187	0.077	0.083	0.091	0.184	0.189	0.129	0.150	0.209	0.167	0.211
34	Dempster Street, North Branch Chicago River	0.158	0.039	0.064	0.099	0.224	0.135	0.201	0.275	0.220	0.217	0.239
96	Albany Avenue, North Branch Chicago River	0.413	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0.301	0.348	0.413	0.020	1.197	0.127	0.073	0.375	0.050	0.035	0.317
36	Touhy Avenue, North Shore Channel	1.273	0.921	0.911	1.470	2.474	1.576	1.660	1.199	1.603	0.757	1.141
37	Wilson Avenue, North Branch Chicago River	1.653	1.772	1.158	1.701	2.609	1.663	2.014	2.156	1.970	1.196	1.349
73	Diversey Parkway, North Branch Chicago River	1.227	0.883	0.583	1.368	1.923	1.016	1.078	1.287	1.579	1.243	1.172
46	Grand Avenue, North Branch Chicago River	1.201	0.954	0.992	1.272	1.799	1.706	1.626	1.578	1.523	1.102	1.178
74	Lake Shore Drive, Chicago River	0.372	0.215	0.137	0.067	0.153	0.109	0.080	0.114	0.099	0.048	0.171
39	Madison Street, South Branch Chicago River	0.906	0.822	0.538	0.607	0.837	0.642	0.753	0.994	0.707	0.578	0.910
40	Damen Avenue, Chicago Sanitary & Ship Canal	1.116	0.847	0.524	0.920	1.090	0.585	1.183	0.984	1.041	0.573	0.824
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.843	0.793	0.403	0.721	1.256	1.036	1.128	0.983	1.100	0.683	1.055
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.438	0.357	0.495	0.716	1.318	1.217	0.925	0.893	0.766	0.595	1.405
42	Route 83, Chicago Sanitary & Ship Canal	0.630	0.604	0.636	1.184	1.416	1.193	1.460	1.183	1.132	0.597	0.912
48	Stephen Street, Chicago Sanitary & Ship Canal	0.692	0.601	0.486	0.858	1.281	1.352	1.606	1.161	1.495	1.358	1.379
82	Lockport Trebler, Chicago Sanitary & Ship Canal	0.619	0.449	0.343	0.444	0.614	0.809	0.731	1.031	1.112	1.119	1.407
92	Lockport Forsbay, Chicago Sanitary & Ship Canal	0.595	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	0.113	0.056	0.044	0.010	0.051	0.077	0.050	0.082	0.076	ND	0.120
50	Burnham Avenue, Wolf Lake	0.092	0.056	0.018	0.003	0.045	0.045	0.072	0.051	0.039	0.088	0.091
55	130th Street, Calumet River	0.195	0.124	0.114	0.083	0.162	0.135	0.184	0.323	0.315	0.365	0.448
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	1.586	1.059	0.417	0.632	3.459	3.950	4.840	1.738	2.745	2.284	2.778
56	Indiana Avenue, Little Calumet River	0.307	0.276	0.307	0.396	0.755	0.919	1.889	1.507	1.677	1.503	1.142
76	Halsted Street, Little Calumet River	0.332	0.332	0.348	0.488	2.410	1.917	2.503	2.339	3.423	3.381	4.388
52	Wentworth Avenue, Little Calumet River	0.278	0.297	0.161	0.181	0.201	0.197	0.287	0.368	0.438	0.512	0.453
54	Joe Orr Road, Thorn Creek	0.380	0.057	0.034	0.124	0.734	0.324	1.084	1.017	0.209	0.283	0.694
57	Ashland Avenue, Little Calumet River	0.295	0.232	0.183	0.204	0.212	0.629	0.798	0.756	0.343	0.275	0.710
58	Ashland Avenue, Cal-Sag Channel	0.374	0.346	0.291	0.484	0.962	1.601	1.668	1.363	2.955	2.452	3.519
59	Cicero Avenue, Cal-Sag Channel	0.490	0.406	0.336	0.526	1.011	2.458	2.418	2.353	3.233	2.606	3.582
43	Route 83, Cal-Sag Channel	0.336	0.375	0.309	0.659	0.892	2.032	2.311	2.033	2.474	2.918	3.093
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	0.106	0.067	0.075	0.074	0.073	0.047	0.079	0.054	0.061	0.079	0.052
63	Longmeadow Lane, West Branch Du Page River	0.154	0.131	0.135	0.225	0.368	0.196	0.160	0.151	0.365	0.143	0.204
89	Walnut Lane, West Branch Du Page River	0.341	0.367	0.192	0.191	0.258	0.145	0.104	0.653	0.377	0.748	0.388
64	Lake Street, West Branch Du Page River	0.645	0.421	0.601	0.415	0.387	0.228	0.232	0.643	0.996	1.409	0.744
79	Higgins Road, Salt Creek	0.172	0.067	0.118	0.076	0.156	0.226	0.075	0.107	0.074	0.112	0.079
80	Arlington Heights Road, Salt Creek	0.145	0.090	0.178	0.137	0.285	0.246	0.195	0.106	0.348	0.355	0.282
18	Devon Avenue, Salt Creek	0.161	0.093	0.243	0.132	0.358	0.206	0.199	0.113	0.203	0.367	0.302
24	Wolf Road, Salt Creek	0.196	0.127	0.155	0.131	0.208	0.160	0.153	0.106	0.153	0.162	0.345
21	First Avenue, Salt Creek	0.192	0.105	0.134	0.121	0.207	0.120	0.145	0.196	0.145	0.137	0.273
77	Elmhurst Road, Higgins Creek	0.134	0.116	0.158	0.107	0.186	0.192	0.238	0.147	0.200	0.170	0.076
78	Wille Road, Higgins Creek	0.396	0.245	0.297	0.515	0.151	0.259	0.355	0.370	0.311	0.232	0.226
12	Lake-Cook Road, Buffalo Creek	0.134	0.071	0.088	0.056	0.092	0.067	0.097	0.087	0.120	0.167	0.250
13	Lake-Cook Road, Des Plaines River	0.143	0.108	0.177	0.083	0.127	0.436	0.198	0.236	0.175	0.286	0.296
17	Oakton Street, Des Plaines River	0.107	0.075	0.100	0.075	0.108	0.103	0.210	0.150	0.125	0.224	0.164
19	Belmont Avenue, Des Plaines River	0.177	0.116	0.223	0.171	0.184	0.276	0.300	0.199	0.177	0.275	0.210
20	Roosevelt Road, Des Plaines River	0.145	0.093	0.183	0.205	0.136	0.135	0.219	0.208	0.209	0.353	0.233
22	Ogden Avenue, Des Plaines River	0.150	0.089	0.128	0.190	0.142	0.092	0.158	0.210	0.152	0.299	0.248
23	Willow Springs Road, Des Plaines River	0.160	0.089	0.175	0.080	0.101	0.090	0.168	0.196	0.127	0.178	0.258
29	Stephen Street, Des Plaines River	0.146	0.077	0.151	0.128	0.150	0.330	0.182	0.172	0.141	0.187	0.343
91	Material Service Road, Des Plaines River	0.140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-43

UN-IONIZED AMMONIA MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.004	ND	ND	ND	0.007	0.009	0.020	0.007	0.007	0.006	0.006
31 Lake-Cook Road, Middle Fork North Branch	0.006	0.001	0.002	0.002	0.003	0.005	0.002	0.003	0.004	0.004	0.007
32 Lake-Cook Road, Skokie River	0.007	0.002	0.001	0.002	0.016	0.014	0.003	0.002	0.004	0.005	0.006
34 Dempster Street, North Branch Chicago River	0.005	0.001	0.001	0.003	0.003	0.003	0.001	0.003	0.003	0.010	0.003
96 Albany Avenue, North Branch Chicago River	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.020	0.008	0.030	0.002	0.022	0.009	0.011	0.004	0.003	0.004	0.008
36 Touhy Avenue, North Shore Channel	0.051	0.021	0.035	0.027	0.035	0.017	0.029	0.017	0.034	0.027	0.011
37 Wilson Avenue, North Branch Chicago River	0.058	0.033	0.052	0.050	0.045	0.015	0.030	0.012	0.041	0.040	0.016
73 Diversey Parkway, North Branch Chicago River	0.037	0.015	0.082	0.053	0.095	0.012	0.009	0.035	0.032	0.031	0.031
46 Grand Avenue, North Branch Chicago River	0.017	0.023	0.049	0.009	0.017	0.017	0.029	0.017	0.009	0.014	0.018
74 Lake Shore Drive, Chicago River	0.005	0.005	0.007	0.003	0.002	0.001	0.004	0.003	0.001	0.002	0.003
39 Madison Street, South Branch Chicago River	0.011	0.051	0.023	0.007	0.010	0.007	0.006	0.017	0.005	0.030	0.008
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.012	0.026	0.081	0.013	0.015	0.006	0.035	0.009	0.011	0.007	0.015
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.007	0.031	0.051	0.051	0.022	0.005	0.029	0.007	0.025	0.005	0.020
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.006	0.006	0.021	0.010	0.016	0.004	0.010	0.009	0.009	0.006	0.011
42 Route 83, Chicago Sanitary & Ship Canal	0.006	0.019	0.031	0.016	0.016	0.008	0.021	0.013	0.039	0.012	0.011
48 Stephen Street, Chicago Sanitary & Ship Canal	0.008	0.015	0.020	0.009	0.017	0.028	0.060	0.033	0.059	0.025	0.018
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.005	0.003	0.003	0.000	0.006	0.001	0.001	0.001	0.001	ND	0.001
50 Burnham Avenue, Wolf Lake	0.005	0.003	0.001	0.000	0.004	0.001	0.001	0.000	0.002	0.002	0.004
55 130th Street, Calumet River	0.004	0.005	0.005	0.001	0.032	0.009	0.005	0.002	0.004	0.004	0.006
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.048	0.028	0.009	0.003	0.120	0.028	0.031	0.019	0.018	0.021	0.017
56 Indiana Avenue, Little Calumet River	0.024	0.012	0.014	0.006	0.062	0.033	0.012	0.008	0.006	0.022	0.010
76 Halsted Street, Little Calumet River	0.005	0.009	0.007	0.017	0.011	0.032	0.025	0.025	0.045	0.051	0.034
52 Wentworth Avenue, Little Calumet River	0.011	0.007	0.010	0.003	0.052	0.010	0.005	0.006	0.007	0.017	0.003
54 Joe Orr Road, Thorn Creek	0.006	0.005	0.001	0.010	0.006	0.006	0.032	0.047	0.003	0.004	0.002
57 Ashland Avenue, Little Calumet River	0.003	0.012	0.007	0.020	0.003	0.007	0.004	0.006	0.003	0.004	0.007
58 Ashland Avenue, Cal-Sag Channel	0.004	0.012	0.021	0.020	0.006	0.024	0.055	0.023	0.051	0.030	0.016
59 Cicero Avenue, Cal-Sag Channel	0.003	0.015	0.012	0.022	0.022	0.030	0.024	0.030	0.025	0.035	0.021
43 Route 83, Cal-Sag Channel	0.003	0.030	0.023	0.043	0.009	0.017	0.019	0.013	0.007	0.056	0.021
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.007	0.004	0.003	0.002	0.002	0.001	0.001	0.002	0.002	0.007	0.001
63 Longmeadow Lane, West Branch Du Page River	0.011	0.003	0.014	0.003	0.036	0.007	0.003	0.008	0.004	0.004	0.004
89 Walnut Lane, West Branch Du Page River	0.038	0.018	0.006	0.002	0.015	0.004	0.002	0.003	0.004	0.006	0.004
64 Lake Street, West Branch Du Page River	0.148	0.018	0.035	0.008	0.020	0.005	0.006	0.007	0.015	0.034	0.007
79 Higgins Road, Salt Creek	0.024	0.007	0.011	0.002	0.005	0.046	0.003	0.005	0.002	0.010	0.002
80 Arlington Heights Road, Salt Creek	0.024	0.003	0.008	0.010	0.005	0.014	0.006	0.002	0.003	0.016	0.018
18 Devon Avenue, Salt Creek	0.029	0.003	0.011	0.003	0.004	0.007	0.002	0.002	0.012	0.010	0.043
24 Wolf Road, Salt Creek	0.004	0.012	0.003	0.003	0.008	0.005	0.015	0.002	0.018	0.003	0.007
21 First Avenue, Salt Creek	0.002	0.013	0.003	0.002	0.006	0.001	0.003	0.002	0.001	0.001	0.005
77 Elmhurst Road, Higgins Creek	0.004	0.016	0.005	0.003	0.006	0.012	0.007	0.003	0.004	0.004	0.005
78 Wille Road, Higgins Creek	0.006	0.022	0.007	0.059	0.006	0.014	0.011	0.007	0.005	0.006	0.007
12 Lake-Cook Road, Buffalo Creek	0.012	0.004	0.007	0.001	0.003	0.004	0.001	0.006	0.001	0.003	0.015
13 Lake-Cook Road, Des Plaines River	0.014	0.007	0.011	0.002	0.012	0.009	0.009	0.014	0.001	0.005	0.008
17 Oakton Steet, Des Plaines River	0.002	0.016	0.002	0.002	0.005	0.008	0.013	0.002	0.003	0.002	0.006
19 Belmont Avenue, Des Plaines River	0.002	0.017	0.005	0.005	0.007	0.007	0.009	0.001	0.004	0.004	0.005
20 Roosevelt Road, Des Plaines River	0.004	0.014	0.003	0.002	0.005	0.004	0.006	0.001	0.003	0.005	0.005
22 Ogden Avenue, Des Plaines River	0.001	0.011	0.003	0.027	0.004	0.001	0.008	0.004	0.001	0.002	0.005
23 Willow Springs Road, Des Plaines River	0.004	0.010	0.004	0.003	0.007	0.006	0.014	0.004	0.007	0.003	0.008
29 Stephen Street, Des Plaines River	0.005	0.010	0.005	0.004	0.011	0.022	0.016	0.003	0.006	0.005	0.005
91 Material Service Road, Des Plaines River	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-44

ORGANIC NITROGEN MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	1.71	ND	ND	ND	1.70	1.40	1.17	1.22	1.54	1.91	1.47
31 Lake-Cook Road, Middle Fork North Branch	1.50	1.09	0.93	1.11	0.98	0.97	1.12	0.91	1.10	1.14	1.05
32 Lake-Cook Road, Skokie River	0.91	0.95	0.72	1.07	0.92	0.92	1.01	0.84	0.96	1.45	1.13
34 Dempster Street, North Branch Chicago River	1.29	1.17	0.97	1.37	1.20	1.04	1.25	1.05	1.25	1.37	1.20
96 Albany Avenue, North Branch Chicago River	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.75	0.92	0.42	0.36	1.06	0.39	0.31	0.41	0.33	0.38	0.80
36 Touhy Avenue, North Shore Channel	1.37	1.56	1.17	1.36	1.70	1.29	1.62	1.09	1.34	1.59	1.44
37 Wilson Avenue, North Branch Chicago River	1.45	1.56	1.04	1.23	1.56	1.37	1.35	0.92	1.22	1.30	1.21
73 Diversey Parkway, North Branch Chicago River	1.30	1.31	1.00	1.07	1.45	1.02	1.27	1.04	1.35	1.67	1.38
46 Grand Avenue, North Branch Chicago River	1.20	1.23	0.95	0.99	1.26	1.23	1.21	0.85	1.12	1.04	1.03
74 Lake Shore Drive, Chicago River	0.73	0.41	0.31	0.44	0.28	0.23	0.28	0.30	0.26	0.47	0.46
39 Madison Street, South Branch Chicago River	1.46	0.93	1.13	0.76	0.88	0.63	0.59	0.57	0.60	0.82	1.01
40 Damen Avenue, Chicago Sanitary & Ship Canal	1.20	0.95	0.79	0.93	0.94	0.85	0.83	0.64	0.71	0.90	0.89
75 Cicero Avenue, Chicago Sanitary & Ship Canal	1.14	0.85	1.07	0.87	1.05	1.04	0.88	0.74	0.73	0.92	0.98
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.28	1.07	1.01	1.33	1.54	1.22	1.21	0.97	1.19	1.35	1.18
42 Route 41, Chicago Sanitary & Ship Canal	1.02	1.09	1.22	1.30	1.38	1.21	1.34	0.80	1.11	1.25	1.23
48 Stephen Street, Chicago Sanitary & Ship Canal	1.24	1.11	1.00	1.19	1.21	1.40	1.36	0.96	1.12	1.53	1.11
82 Lockport Trebler, Chicago Sanitary & Ship Canal	1.35	1.33	1.37	1.45	1.64	0.63	1.62	ND	1.28	1.01	1.35
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.40	0.57	0.44	0.36	0.71	0.35	0.47	0.29	0.34	ND	0.50
50 Burnham Avenue, Wolf Lake	0.64	0.46	0.53	0.72	0.63	0.56	0.82	0.58	0.69	0.72	0.71
55 130th Street, Calumet River	0.46	0.56	0.38	0.43	0.51	0.49	0.48	0.49	0.46	0.66	0.72
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	2.73	2.29	1.69	1.35	2.90	2.21	3.30	2.04	2.92	2.95	3.78
56 Indiana Avenue, Little Calumet River	0.70	0.82	0.69	0.80	0.99	0.86	1.10	1.09	1.19	1.33	1.31
76 Kalsted Street, Little Calumet River	1.17	1.05	0.92	1.17	1.41	1.20	1.55	1.21	1.37	1.64	1.64
52 Wentworth Avenue, Little Calumet River	1.75	2.09	2.49	1.35	1.55	1.08	1.51	1.13	1.31	1.40	1.20
54 Joe Orr Road, Thorn Creek	1.54	1.37	1.19	1.25	1.43	1.27	1.69	1.31	1.26	1.23	1.44
57 Ashland Avenue, Little Calumet River	1.16	1.21	1.24	1.20	1.21	1.12	1.36	1.03	1.04	1.21	1.14
58 Ashland Avenue, Cal-Sag Channel	1.12	1.03	0.82	1.13	1.18	1.30	1.41	1.06	1.60	1.57	1.54
59 Cicero Avenue, Cal-Sag Channel	1.73	1.06	1.04	1.31	1.26	1.28	1.47	1.14	1.94	1.62	1.47
43 Route 83, Cal-Sag Channel	1.12	1.05	0.94	1.26	1.60	1.15	1.55	1.24	1.27	1.47	1.26
<u>Des Plaines River System</u>											
90 Route 28, Poplar Creek	1.20	1.71	0.66	1.14	1.07	1.05	1.01	1.11	0.87	0.87	0.77
63 Longmeadow Lane, West Branch Du Page River	1.50	1.68	1.52	1.60	1.82	1.72	1.62	1.20	1.30	1.33	1.24
89 Walnut Lane, West Branch Du Page River	2.03	2.27	2.15	1.93	1.86	1.83	1.90	1.60	1.69	1.59	1.54
64 Lake Street, West Branch Du Page River	2.06	1.83	1.92	2.01	1.85	1.87	1.86	1.60	1.69	2.09	1.77
79 Higgins Road, Salt Creek	1.65	1.11	1.19	1.29	1.11	1.44	1.30	1.21	0.92	1.04	1.19
80 Arlington Heights Road, Salt Creek	1.60	1.37	1.27	1.44	1.38	1.41	1.29	1.02	1.08	1.24	1.18
18 Devon Avenue, Salt Creek	1.57	1.38	1.09	1.37	1.66	1.70	1.40	1.06	1.27	1.27	1.21
24 Wolf Road, Salt Creek	1.41	1.10	0.97	1.43	1.81	1.51	1.54	1.26	1.32	1.37	1.19
21 First Avenue, Salt Creek	1.43	1.32	0.92	1.38	1.39	1.31	1.41	1.27	1.12	1.50	1.16
77 Elmhurst Road, Higgins Creek	1.28	1.17	0.66	0.81	1.04	1.12	1.25	0.85	0.84	1.04	1.17
78 Wille Road, Higgins Creek	1.95	1.50	1.07	1.58	1.29	1.40	1.40	1.15	1.23	1.20	1.09
12 Lake-Cook Road, Buffalo Creek	1.36	1.04	0.90	1.18	1.20	1.04	1.30	1.56	1.12	1.31	1.60
13 Lake-Cook Road, Des Plaines River	1.68	1.12	1.08	1.25	1.00	1.17	1.52	1.24	1.17	1.39	1.35
17 Oakton Street, Des Plaines River	1.48	1.11	1.14	1.28	1.38	1.56	1.05	1.13	1.38	1.43	1.30
19 Belmont Avenue, Des Plaines River	2.09	1.01	1.03	1.37	1.40	1.45	1.66	1.16	1.31	1.90	1.32
20 Roosevelt Road, Des Plaines River	1.43	1.04	1.10	1.38	1.44	1.37	1.48	1.11	1.29	1.30	1.26
22 Ogden Avenue, Des Plaines River	1.34	1.02	1.35	1.56	1.37	1.40	1.52	1.28	1.18	1.32	1.21
23 Willow Springs Road, Des Plaines River	1.51	0.99	1.22	1.31	1.47	1.40	1.59	1.16	1.30	1.44	1.18
29 Stephen Street, Des Plaines River	1.20	1.08	1.36	1.54	1.47	1.52	1.77	1.26	1.38	1.49	1.94
91 Material Service Road, Des Plaines River	1.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-45

NITRITE PLUS NITRATE NITROGEN MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	7.57	ND	ND	ND	9.14	7.84	13.94	4.30	9.22	9.57	7.95
31 Lake-Cook Road, Middle Fork North Branch	0.35	0.41	0.51	0.43	0.37	0.47	0.38	0.42	0.51	0.61	2.41
32 Lake-Cook Road, Skokie River	0.52	0.55	0.58	0.80	0.50	0.68	1.03	0.86	1.53	0.71	1.80
34 Dempster Street, North Branch Chicago River	4.51	4.93	3.85	5.13	5.01	3.39	4.44	3.44	4.69	4.33	3.55
96 Albany Avenue, North Branch Chicago River	5.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.29	0.32	0.22	0.25	0.20	0.24	0.25	0.55	0.26	0.24	0.56
36 Touhy Avenue, North Shore Channel	5.59	5.67	5.74	5.56	4.85	4.16	4.39	5.02	4.01	4.73	3.96
37 Wilson Avenue, North Branch Chicago River	6.17	6.28	6.38	5.87	5.61	4.99	4.51	4.91	3.86	3.72	3.25
73 Diversey Parkway, North Branch Chicago River	5.49	6.23	5.46	5.16	5.44	4.51	5.17	4.42	4.98	5.34	4.27
46 Grand Avenue, North Branch Chicago River	5.63	5.51	5.27	4.74	4.92	4.71	4.03	3.60	3.99	4.36	3.68
74 Lake Shore Drive, Chicago River	1.84	1.08	0.96	0.39	0.42	0.31	0.35	0.40	0.36	0.38	1.45
39 Madison Street, South Branch Chicago River	4.28	4.33	3.41	2.39	2.58	2.19	2.04	2.40	2.17	2.32	2.90
40 Damen Avenue, Chicago Sanitary & Ship Canal	4.42	3.42	3.21	2.84	2.75	2.47	2.56	2.46	2.03	2.23	2.38
75 Cicero Avenue, Chicago Sanitary & Ship Canal	4.30	3.58	3.04	2.89	2.54	2.52	2.34	2.37	2.05	2.55	2.23
41 Harlem Avenue, Chicago Sanitary & Ship Canal	7.00	7.01	6.97	6.18	6.83	5.52	5.51	4.95	5.08	4.97	4.54
42 Route 83, Chicago Sanitary & Ship Canal	5.84	5.80	5.64	5.57	6.37	4.90	4.11	4.19	4.29	4.73	4.15
48 Stephen Street, Chicago Sanitary & Ship Canal	5.15	5.10	5.10	5.07	5.20	4.43	3.84	3.86	3.61	3.95	3.48
82 Lockport Trebley, Chicago Sanitary & Ship Canal	6.13	4.87	4.48	4.59	5.11	4.66	4.00	4.03	4.17	4.38	3.20
92 Lockport Forebay, Chicago Sanitary & Ship Canal	5.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.38	0.36	0.34	0.31	0.33	0.28	0.28	0.33	0.53	ND	0.62
50 Burnham Avenue, Wolf Lake	0.09	0.78	0.12	0.23	0.16	0.10	0.09	0.15	0.83	0.09	0.11
55 130th Street, Calumet River	0.56	0.53	0.48	0.52	0.48	0.39	0.48	0.64	0.55	0.68	1.35
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	8.48	8.48	12.32	11.89	8.16	6.74	3.72	6.23	12.69	4.49	4.55
56 Indiana Avenue, Little Calumet River	1.86	1.79	3.18	4.04	1.64	1.04	1.04	2.19	1.53	1.19	1.01
76 Halsted Street, Little Calumet River	4.32	4.27	4.14	4.55	3.55	2.55	2.55	3.15	2.51	2.71	2.74
52 Wentworth Avenue, Little Calumet River	4.18	4.53	3.82	3.75	4.20	3.89	3.76	2.62	2.97	2.14	2.57
54 Joe Orr Road, Thorn Creek	7.92	7.68	6.80	6.79	7.59	8.58	8.76	6.95	8.50	5.92	5.75
57 Ashland Avenue, Little Calumet River	4.31	3.71	2.82	3.64	3.56	3.65	3.61	2.56	3.13	2.78	2.95
58 Ashland Avenue, Cal-Sag Channel	4.22	3.32	3.59	3.78	3.34	2.53	2.39	2.60	2.75	2.43	2.60
59 Cicero Avenue, Cal-Sag Channel	4.26	3.40	3.78	3.91	3.26	2.39	2.32	2.62	2.42	2.40	2.53
43 Route 83, Cal-Sag Channel	4.20	3.37	3.50	3.97	3.33	2.76	2.48	2.56	2.52	2.05	2.47
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.39	0.46	0.44	1.81	0.47	0.34	0.45	0.44	0.43	0.48	0.60
63 Longmeadow Lane, West Branch Du Page River	0.63	2.88	2.57	2.13	1.84	1.73	3.56	1.02	3.73	2.94	1.92
89 Walnut Lane, West Branch Du Page River	6.98	8.01	8.34	8.89	7.91	8.58	10.73	5.71	8.76	8.00	8.43
64 Lake Street, West Branch Du Page River	5.78	6.86	8.52	7.87	8.24	8.72	9.83	5.33	8.16	7.53	8.16
79 Higgins Road, Salt Creek	0.47	0.26	0.51	0.29	0.33	0.29	0.25	0.35	1.27	0.68	0.62
80 Arlington Heights Road, Salt Creek	6.27	7.07	7.46	5.18	5.13	5.81	6.11	3.56	5.98	4.65	4.95
18 Devon Avenue, Salt Creek	6.40	7.31	7.24	4.70	5.32	5.53	6.17	3.77	6.12	5.05	5.29
24 Wolf Road, Salt Creek	5.27	6.67	6.97	5.84	6.49	6.51	6.73	5.24	7.01	5.84	5.79
21 First Avenue, Salt Creek	4.80	6.35	6.94	6.57	5.75	6.14	6.27	5.08	6.37	5.73	5.65
77 Elmhurst Road, Higgins Creek	0.46	0.34	0.34	0.45	0.73	0.32	0.58	0.75	0.52	0.52	0.86
78 Wille Road, Higgins Creek	4.25	4.99	6.96	5.85	4.41	5.02	5.42	4.04	5.18	3.86	3.81
12 Lake-Cook Road, Buffalo Creek	0.51	0.41	0.44	0.33	0.51	0.39	0.32	1.25	1.01	0.88	1.13
13 Lake-Cook Road, Des Plaines River	5.24	5.02	4.92	4.35	5.14	4.30	6.80	3.58	5.77	5.43	4.27
17 Oakton Street, Des Plaines River	3.80	5.32	4.23	3.66	4.56	4.16	3.42	3.04	5.02	4.41	3.84
19 Belmont Avenue, Des Plaines River	3.54	4.54	4.00	3.87	4.16	3.98	4.52	3.06	4.38	3.71	3.85
20 Roosevelt Road, Des Plaines River	3.42	4.26	3.83	3.75	4.03	3.88	4.41	2.85	4.06	3.60	3.80
22 Ogden Avenue, Des Plaines River	3.78	5.02	4.75	4.45	4.40	4.35	4.61	3.44	4.66	3.83	4.19
23 Willow Springs Road, Des Plaines River	3.89	4.77	4.58	4.44	4.29	4.16	4.25	3.49	4.25	3.82	4.06
29 Stephen Street, Des Plaines River	3.91	4.61	4.64	4.55	4.27	4.51	4.26	3.59	4.16	3.76	3.97
91 Material Service Road, Des Plaines River	4.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-46

TOTAL SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	1948	ND	ND	ND	811	696	567	800	714	737	780
31	Lake-Cook Road, Middle Fork North Branch	770	693	749	727	763	689	670	718	648	638	650
32	Lake-Cook Road, Skokie River	828	704	772	840	819	693	758	699	718	667	765
34	Dempster Street, North Branch Chicago River	863	726	729	859	860	692	760	673	707	706	660
96	Albany Avenue, North Branch Chicago River	616	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
15	Central Street, North Shore Channel	363	299	276	246	320	240	207	355	229	205	325
36	Touhy Avenue, North Shore Channel	574	573	529	512	511	552	488	435	567	441	462
37	Wilson Avenue, North Branch Chicago River	654	663	596	585	557	611	522	665	428	469	470
73	Diversey Parkway, North Branch Chicago River	654	655	592	622	590	565	514	577	446	514	490
46	Grand Avenue, North Branch Chicago River	587	596	620	547	618	617	506	496	453	492	473
74	Lake Shore Drive, Chicago River	402	397	320	335	237	230	216	320	326	252	251
39	Madison Street, South Branch Chicago River	517	484	492	370	418	391	355	405	346	388	441
40	Damen Avenue, Chicago Sanitary & Ship Canal	552	486	536	435	500	391	429	439	388	378	436
75	Cicero Avenue, Chicago Sanitary & Ship Canal	517	478	547	435	525	499	424	432	338	421	466
41	Harlem Avenue, Chicago Sanitary & Ship Canal	619	613	608	555	569	544	503	522	439	493	510
42	Route 83, Chicago Sanitary & Ship Canal	566	608	595	580	585	554	566	486	437	555	498
48	Stephen Street, Chicago Sanitary & Ship Canal	633	581	623	617	628	580	596	608	507	630	546
82	Lockport Trebler, Chicago Sanitary & Ship Canal	812	634	632	658	638	623	584	603	522	531	572
92	Lockport Forebay, Chicago Sanitary & Ship Canal	680	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	282	260	327	222	262	240	257	247	398	ND	353
50	Burnham Avenue, Wolf Lake	255	231	286	265	272	245	270	261	258	353	242
55	130th Street, Calumet River	364	342	341	328	344	349	306	369	384	390	410
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	934	913	990	940	1364	1183	1113	968	1063	1027	904
56	Indiana Avenue, Little Calumet River	489	461	514	523	516	459	571	607	494	554	499
76	Halsted Street, Little Calumet River	697	664	589	647	734	649	673	714	625	667	694
52	Wentworth Avenue, Little Calumet River	835	772	740	814	818	662	887	780	825	738	773
54	Joe Orr Road, Thom Creek	1140	1096	1182	1273	1090	943	844	834	876	860	813
57	Ashland Avenue, Little Calumet River	965	905	782	918	923	817	774	724	814	771	765
58	Ashland Avenue, Cal-Sag Channel	753	641	605	739	748	646	643	716	674	667	700
59	Cicero Avenue, Cal-Sag Channel	775	663	639	734	721	686	641	697	658	618	700
43	Route 83, Cal-Sag Channel	760	664	673	717	733	643	691	781	760	569	682
<u>Des Plaines River System</u>												
90	Route 18, Poplar Creek	657	672	810	776	845	709	648	625	694	653	653
63	Longmeadow Lane, West Branch Du Page River	698	869	827	1020	963	1027	770	1372	871	677	848
89	Walnut Lane, West Branch Du Page River	651	622	615	628	755	692	660	700	659	632	673
64	Lake Street, West Branch Du Page River	658	630	684	709	772	742	681	771	698	686	731
79	Higgins Road, Salt Creek	895	734	776	852	959	906	909	803	821	670	650
80	Arlington Heights Road, Salt Creek	749	670	709	781	828	721	746	675	726	715	683
18	Devon Avenue, Salt Creek	771	693	734	861	846	719	639	724	742	736	690
24	Wolf Road, Salt Creek	821	757	955	833	943	846	790	826	883	934	886
21	First Avenue, Salt Creek	806	731	854	816	872	827	783	744	868	918	881
77	Elmhurst Road, Higgins Creek	879	858	1015	930	1081	992	1297	922	1024	653	726
78	Wille Road, Higgins Creek	733	700	786	833	828	758	675	752	719	657	729
12	Lake-Cook Road, Buffalo Creek	810	716	753	802	842	777	778	819	817	779	772
13	Lake-Cook Road, Des Plaines River	709	627	714	713	731	695	740	606	684	739	691
17	Oakton Street, Des Plaines River	679	642	738	717	808	698	607	614	684	721	659
19	Belmont Avenue, Des Plaines River	675	637	720	765	802	747	762	657	727	715	675
20	Roosevelt Road, Des Plaines River	681	639	724	775	793	750	750	638	743	715	683
22	Ogden Avenue, Des Plaines River	713	665	745	804	805	779	705	637	769	762	717
23	Willow Springs Road, Des Plaines River	732	673	761	772	815	742	703	629	764	794	730
29	Stephen Street, Des Plaines River	734	671	768	846	850	789	718	678	748	791	746
91	Material Service Road, Des Plaines River	798	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-47

TOTAL VOLATILE SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	11.7	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	4.3	6.6	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	3.9	6.7	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	5.8	5.0	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	2.8	4.5	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	4.6	5.0	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	3.6	4.4	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	3.3	4.5	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	3.3	4.7	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	ND	ND	ND	2.2	3.9	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	2.3	3.5	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	3.1	3.5	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	3.2	5.8	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	3.7	4.8	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	3.0	3.5	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	3.6	3.8	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	138.9	112.8	135.8	15.2	14.0	ND	ND	135.0	129.9	126.0	133.1
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	2.0	2.6	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	4.3	4.7	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	2.8	2.7	ND	ND	ND	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	6.1	63.1	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	4.4	5.8	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	6.3	3.0	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	9.3	9.0	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	3.1	3.3	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	7.8	5.0	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	6.2	4.9	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	5.0	6.3	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	ND	ND	ND	9.2	6.9	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	9.1	15.9	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	7.0	14.9	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	5.9	15.8	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	ND	ND	ND	8.7	17.3	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	9.4	14.0	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	4.4	7.2	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	6.6	15.8	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	ND	ND	8.6	13.8	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	9.5	16.3	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	5.9	16.4	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	ND	ND	4.5	10.0	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	7.1	13.4	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	7.3	9.4	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	ND	ND	ND	8.6	12.8	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	9.2	11.8	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	9.3	10.4	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	9.6	10.8	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	7.5	13.8	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	8.4	13.8	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-48

TOTAL SUSPENDED SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	120.0	ND	ND	ND	97.0	40.6	41.0	42.7	43.8	93.4	61.2
31 Lake-Cook Road, Middle Fork North Branch	22.6	24.7	36.2	22.7	32.0	30.9	20.3	47.7	32.0	63.2	39.7
32 Lake-Cook Road, Skokie River	14.3	24.0	15.2	13.2	23.9	32.6	13.9	47.9	35.9	44.2	32.4
34 Dempster Street, North Branch Chicago River	28.6	29.6	31.8	27.4	22.5	31.0	20.8	38.5	40.3	25.0	30.3
96 Albany Avenue, North Branch Chicago River	15.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	13.6	9.9	8.9	10.8	11.6	15.3	8.1	15.8	15.2	20.3	30.4
36 Touhy Avenue, North Shore Channel	10.8	10.3	10.3	9.4	11.5	13.7	12.2	12.0	17.7	13.3	11.5
37 Wilson Avenue, North Branch Chicago River	15.0	13.0	10.6	12.3	13.1	14.8	9.6	13.8	13.9	17.9	15.3
73 Diversey Parkway, North Branch Chicago River	15.3	16.5	14.9	11.8	18.7	16.3	10.0	21.8	16.2	11.5	35.7
46 Grand Avenue, North Branch Chicago River	15.2	17.2	12.0	13.4	18.6	15.7	11.3	16.1	38.6	12.9	13.8
74 Lake Shore Drive, Chicago River	12.8	6.0	5.3	8.6	14.9	11.2	6.3	19.1	10.2	8.8	10.4
39 Madison Street, South Branch Chicago River	15.2	16.3	12.3	11.1	14.8	21.1	11.4	18.2	17.0	14.0	12.5
40 Damen Avenue, Chicago Sanitary & Ship Canal	19.1	14.0	13.4	13.8	13.6	28.8	12.0	14.8	17.1	16.7	13.4
75 Cicero Avenue, Chicago Sanitary & Ship Canal	16.5	18.5	13.7	14.2	16.8	18.5	16.1	19.7	17.9	15.2	19.4
41 Harlem Avenue, Chicago Sanitary & Ship Canal	11.5	13.2	10.0	12.2	14.3	11.8	15.7	10.2	21.6	11.2	13.4
42 Route 83, Chicago Sanitary & Ship Canal	8.8	8.3	10.5	11.2	9.0	15.3	15.5	17.1	18.3	11.7	10.7
48 Stephen Street, Chicago Sanitary & Ship Canal	16.8	11.5	15.3	15.9	17.5	29.3	18.5	29.3	79.8	19.2	22.4
82 Lockport Trebley, Chicago Sanitary & Ship Canal	19.2	37.0	57.4	64.3	38.3	12.1	15.3	15.5	16.2	18.6	20.5
92 Lockport Forebay, Chicago Sanitary & Ship Canal	15.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	12.6	12.3	15.3	10.8	14.5	27.7	17.8	10.5	17.6	ND	14.0
50 Burnham Avenue, Wolf Lake	4.7	5.4	10.7	6.2	14.3	14.2	22.3	8.1	12.9	8.1	9.8
55 130th Street, Calumet River	14.0	8.6	10.4	12.3	12.8	10.7	15.8	11.3	7.3	13.9	14.4
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	23.5	16.4	18.2	14.6	182.6	30.9	38.1	38.8	64.2	17.5	26.6
56 Indiana Avenue, Little Calumet River	22.2	26.4	18.0	24.5	37.3	53.4	43.2	40.1	33.7	34.0	25.3
76 Halsted Street, Little Calumet River	11.6	12.7	20.7	26.3	17.3	26.6	29.7	24.0	22.1	18.4	18.2
52 Wentworth Avenue, Little Calumet River	55.4	67.3	94.4	67.2	64.1	33.6	74.3	55.3	43.5	111.8	40.9
54 Joe Orr Road, Thorn Creek	24.1	16.6	15.2	14.6	9.8	19.5	26.5	38.4	12.0	17.2	33.3
57 Ashland Avenue, Little Calumet River	28.5	34.9	57.3	42.0	31.9	32.0	54.2	44.7	38.1	93.7	27.0
58 Ashland Avenue, Cal-Sag Channel	17.9	18.2	18.9	35.4	29.7	29.2	35.5	38.2	19.3	76.2	23.5
59 Cicero Avenue, Cal-Sag Channel	19.8	22.3	27.6	28.5	39.7	48.2	44.7	39.4	27.4	75.3	31.0
43 Route 83, Cal-Sag Channel	28.2	23.7	24.3	40.0	46.6	39.9	45.4	66.2	32.6	61.0	32.7
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	36.4	23.1	17.7	49.6	122.1	25.8	21.7	36.2	26.9	27.3	14.7
63 Longmeadow Lane, West Branch Du Page River	40.0	21.1	22.6	25.6	83.0	85.0	29.9	35.8	23.7	23.4	30.0
89 Walnut Lane, West Branch Du Page River	23.5	19.6	13.5	16.8	74.1	55.0	27.3	28.3	18.9	19.3	11.8
64 Lake Street, West Branch Du Page River	45.9	35.5	32.8	37.7	86.5	48.7	42.3	44.1	32.4	40.6	36.7
79 Higgins Road, Salt Creek	41.2	33.7	29.0	41.0	77.5	37.4	34.9	43.1	27.5	42.6	31.7
80 Arlington Heights Road, Salt Creek	11.7	14.4	8.5	14.8	17.5	16.4	12.1	14.5	11.3	10.3	13.4
18 Devon Avenue, Salt Creek	27.4	31.3	13.8	35.8	47.1	18.2	18.9	20.8	12.5	14.5	14.1
24 Wolf Road, Salt Creek	37.6	33.0	24.7	48.4	66.6	51.5	47.8	58.6	54.9	76.2	42.5
21 First Avenue, Salt Creek	40.6	33.6	26.3	52.9	83.0	28.6	50.5	78.3	39.3	69.9	43.7
77 Elmhurst Road, Higgins Creek	39.3	43.9	22.8	30.1	105.9	83.5	113.1	48.1	46.9	52.0	24.6
78 Wille Road, Higgins Creek	12.4	5.0	11.9	12.8	42.3	34.7	26.0	18.1	12.6	13.4	5.3
12 Lake-Cook Road, Buffalo Creek	74.6	54.2	27.4	36.7	72.3	30.5	46.6	48.2	28.3	54.1	76.0
13 Lake-Cook Road, Des Plaines River	33.8	32.8	32.3	42.4	45.2	28.3	36.2	41.1	29.7	41.8	36.7
17 Oakton Street, Des Plaines River	45.9	36.2	40.5	50.3	60.9	44.8	40.3	43.3	40.2	52.8	33.8
19 Belmont Avenue, Des Plaines River	32.2	27.7	24.0	53.3	60.3	44.8	50.6	45.4	35.8	56.4	35.3
20 Roosevelt Road, Des Plaines River	31.0	27.3	25.0	50.1	51.1	37.1	41.1	49.3	35.0	44.2	34.4
22 Ogden Avenue, Des Plaines River	34.3	29.7	27.6	56.9	52.2	36.0	45.9	61.1	35.3	51.2	36.3
23 Willow Springs Road, Des Plaines River	43.9	30.5	37.9	44.1	59.9	39.3	46.3	41.3	38.4	44.3	44.3
29 Stephen Street, Des Plaines River	42.5	39.4	38.6	46.1	70.0	42.6	56.4	57.4	49.8	55.8	47.5
91 Material Service Road, Des Plaines River	38.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-49

VOLATILE SUSPENDED SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	19.00	ND	ND	ND	ND	ND	ND	7.22	9.50	15.83	11.08
31 Lake-Cook Road, Middle Fork North Branch	4.60	5.09	6.25	ND	ND	ND	ND	8.83	6.36	14.90	6.09
32 Lake-Cook Road, Skokie River	3.50	4.64	3.50	ND	ND	ND	ND	8.75	8.09	9.90	5.83
34 Dempster Street, North Branch Chicago River	6.45	5.82	6.42	ND	ND	ND	ND	7.50	8.33	6.58	5.42
96 Albany Avenue, North Branch Chicago River	4.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	3.56	2.80	2.33	ND	ND	ND	ND	2.83	2.73	3.55	4.91
36 Touhy Avenue, North Shore Channel	4.50	4.08	4.08	ND	ND	ND	ND	5.36	5.67	4.67	4.33
37 Wilson Avenue, North Branch Chicago River	4.83	3.58	3.00	ND	ND	ND	ND	4.50	5.25	5.42	4.42
73 Diversey Parkway, North Branch Chicago River	3.75	3.75	3.33	ND	ND	ND	ND	5.58	4.08	4.25	10.17
46 Grand Avenue, North Branch Chicago River	3.75	3.67	2.83	ND	ND	ND	ND	4.58	4.67	4.08	3.67
74 Lake Shore Drive, Chicago River	4.67	1.64	1.50	ND	ND	ND	ND	4.25	2.67	2.25	2.00
39 Madison Street, South Branch Chicago River	3.75	3.83	3.25	ND	ND	ND	ND	4.08	4.42	3.92	3.00
40 Damen Avenue, Chicago Sanitary & Ship Canal	4.11	3.18	3.17	ND	ND	ND	ND	3.67	4.08	3.50	3.42
75 Cicero Avenue, Chicago Sanitary & Ship Canal	3.67	3.83	3.17	ND	ND	ND	ND	4.25	3.58	4.25	4.08
41 Harlem Avenue, Chicago Sanitary & Ship Canal	3.58	3.64	3.17	ND	ND	ND	ND	3.42	5.25	3.58	4.00
42 Route 83, Chicago Sanitary & Ship Canal	2.36	2.75	3.08	ND	ND	ND	ND	4.67	5.67	3.42	3.08
48 Stephen Street, Chicago Sanitary & Ship Canal	3.82	2.73	3.42	ND	ND	ND	ND	5.92	6.00	5.42	4.83
82 Lockport Trebler, Chicago Sanitary & Ship Canal	4.71	7.39	12.08	ND	ND	5.34	6.29	6.43	6.06	5.49	5.62
92 Lockport Forebay, Chicago Sanitary & Ship Canal	3.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	2.00	2.05	2.21	ND	ND	ND	ND	2.33	3.00	ND	2.00
50 Burnham Avenue, Wolf Lake	2.08	2.25	4.33	ND	ND	ND	ND	4.50	5.42	4.92	5.42
55 130th Street, Calumet River	2.73	1.94	1.96	ND	ND	ND	ND	3.67	2.00	2.64	2.75
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	10.00	5.55	7.83	ND	ND	ND	ND	13.75	9.42	8.58	12.33
56 Indiana Avenue, Little Calumet River	3.92	4.74	3.39	ND	ND	ND	ND	7.67	5.08	6.08	4.36
76 Halsted Street, Little Calumet River	2.75	3.00	7.46	ND	ND	ND	ND	5.83	4.83	5.33	6.42
52 Wentworth Avenue, Little Calumet River	9.91	19.73	17.00	ND	ND	ND	ND	8.00	6.58	13.75	6.42
54 Joe Orr Road, Thorz Creek	4.83	3.25	4.17	ND	ND	ND	ND	5.42	3.33	4.25	6.67
57 Ashland Avenue, Little Calumet River	4.91	5.91	9.33	ND	ND	ND	ND	6.27	6.08	12.55	4.73
58 Ashland Avenue, Cal-Sag Channel	3.50	3.63	3.44	ND	ND	ND	ND	7.33	4.00	10.92	5.25
59 Cicero Avenue, Cal-Sag Channel	3.25	4.00	5.00	ND	ND	ND	ND	6.42	5.83	10.75	6.33
43 Route 83, Cal-Sag Channel	5.00	4.00	4.33	ND	ND	ND	ND	8.42	5.75	9.25	5.83
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	6.29	4.70	4.00	ND	ND	ND	ND	7.00	5.91	6.36	3.33
63 Longmeadow Lane, West Branch Du Page River	9.00	5.22	6.25	ND	ND	ND	ND	8.92	7.27	6.00	5.55
89 Walnut Lane, West Branch Du Page River	6.42	5.91	5.50	ND	ND	ND	ND	6.83	4.58	6.25	2.92
64 Lake Street, West Branch Du Page River	10.55	7.82	8.17	ND	ND	ND	ND	9.58	7.50	10.58	6.00
79 Higgins Road, Salt Creek	10.20	10.30	8.70	ND	ND	ND	ND	9.36	6.45	8.40	7.27
80 Arlington Heights Road, Salt Creek	3.67	3.73	3.67	ND	ND	ND	ND	4.42	3.83	3.75	3.58
18 Devon Avenue, Salt Creek	5.33	5.27	3.42	ND	ND	ND	ND	6.42	4.17	4.42	3.42
24 Wolf Road, Salt Creek	6.60	5.55	5.17	ND	ND	ND	ND	10.08	8.58	11.17	6.33
21 First Avenue, Salt Creek	6.80	5.91	4.50	ND	ND	ND	ND	12.33	7.27	10.67	6.92
77 Elmhurst Road, Higgins Creek	8.60	9.55	4.92	ND	ND	ND	ND	8.42	7.64	9.00	5.50
78 Wille Road, Higgins Creek	4.00	2.55	3.83	ND	ND	ND	ND	4.67	3.92	3.55	2.08
12 Lake-Cook Road, Buffalo Creek	11.40	8.64	5.64	ND	ND	ND	ND	10.67	6.42	9.42	10.17
13 Lake-Cook Road, Des Plaines River	6.50	5.64	6.50	ND	ND	ND	ND	7.42	5.67	8.00	6.67
17 Oakton Steet, Des Plaines River	8.80	6.45	8.33	ND	ND	ND	ND	8.75	7.73	9.42	5.67
19 Belmont Avenue, Des Plaines River	5.60	4.82	5.08	ND	ND	ND	ND	8.25	6.83	9.50	6.25
20 Roosevelt Road, Des Plaines River	5.70	5.00	4.50	ND	ND	ND	ND	8.67	6.67	7.75	5.75
22 Ogden Avenue, Des Plaines River	6.10	5.09	5.42	ND	ND	ND	ND	11.00	6.50	8.83	6.33
23 Willow Springs Road, Des Plaines River	7.80	5.64	7.25	ND	ND	ND	ND	8.25	8.83	9.25	8.08
29 Stephen Street, Des Plaines River	7.30	7.45	8.42	ND	ND	ND	ND	11.08	10.50	10.92	8.25
91 Material Service Road, Des Plaines River	8.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-50

TOTAL DISSOLVED SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	1828	ND	ND	ND	719	655	526	757	661	644	718
31	Lake-Cook Road, Middle Fork North Branch	747	669	713	705	715	658	650	671	617	575	610
32	Lake-Cook Road, Skokie River	814	680	757	827	795	661	744	651	685	623	733
34	Dempster Street, North Branch Chicago River	835	697	697	832	858	661	739	635	667	681	630
96	Albany Avenue, North Branch Chicago River	601	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	350	289	267	235	316	225	198	339	210	185	294
36	Touhy Avenue, North Shore Channel	563	563	519	502	503	539	475	423	548	427	451
37	Wilson Avenue, North Branch Chicago River	639	650	585	572	551	597	512	651	414	451	454
73	Diversey Parkway, North Branch Chicago River	639	639	577	610	578	549	504	555	428	502	454
46	Grand Avenue, North Branch Chicago River	572	579	608	533	610	601	495	480	434	479	459
74	Lake Shore Drive, Chicago River	389	291	315	227	221	219	209	300	216	243	241
39	Madison Street, South Branch Chicago River	502	467	480	359	410	370	344	387	339	374	428
40	Damen Avenue, Chicago Sanitary & Ship Canal	533	472	522	421	501	362	417	424	176	161	422
75	Cicero Avenue, Chicago Sanitary & Ship Canal	501	459	533	421	510	480	408	413	320	405	447
41	Harlem Avenue, Chicago Sanitary & Ship Canal	607	600	598	543	557	532	488	512	417	481	497
42	Route 83, Chicago Sanitary & Ship Canal	558	600	585	569	578	538	550	468	419	544	487
48	Stephen Street, Chicago Sanitary & Ship Canal	616	570	607	601	624	551	577	579	476	611	524
82	Lockport Treblier, Chicago Sanitary & Ship Canal	792	597	574	594	599	611	568	ND	505	533	552
92	Lockport Forebay, Chicago Sanitary & Ship Canal	665	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	269	247	313	311	249	213	239	236	882	ND	339
50	Burnham Avenue, Wolf Lake	250	226	275	257	258	231	248	253	245	245	232
55	130th Street, Calumet River	350	334	329	318	333	338	291	357	376	376	395
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	911	897	972	925	1181	1152	1075	930	999	1019	877
56	Indiana Avenue, Little Calumet River	466	440	496	503	479	405	527	567	460	520	474
76	Maleted Street, Little Calumet River	685	651	564	626	717	622	643	690	503	648	676
52	Wentworth Avenue, Little Calumet River	780	705	645	747	754	628	812	725	781	626	732
54	Joe Orr Road, Thorn Creek	1116	1080	1167	1258	1080	923	818	795	863	843	780
57	Ashland Avenue, Little Calumet River	937	870	725	876	891	785	720	679	783	677	738
58	Ashland Avenue, Cal-Sag Channel	735	622	588	708	719	617	607	671	655	591	677
59	Cicero Avenue, Cal-Sag Channel	756	639	614	706	682	636	596	658	636	543	669
43	Route 83, Cal-Sag Channel	732	638	649	675	688	604	646	715	737	568	649
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	620	649	792	726	723	683	626	588	467	626	638
63	Longmeadow Lane, West Branch Du Page River	658	848	804	994	880	942	740	1336	847	654	818
89	Walnut Lane, West Branch Du Page River	628	603	602	611	681	637	632	672	640	612	661
64	Lake Street, West Branch Du Page River	612	595	651	671	685	693	639	727	568	546	694
79	Higgins Road, Salt Creek	854	700	747	811	882	869	874	760	793	627	619
80	Arlington Heights Road, Salt Creek	738	655	701	766	811	704	734	660	715	704	669
18	Devon Avenue, Salt Creek	743	662	721	825	799	701	620	703	731	721	676
24	Wolf Road, Salt Creek	784	724	931	785	877	794	742	767	828	558	844
21	First Avenue, Salt Creek	765	697	828	763	789	798	733	666	347	848	837
77	Elmhurst Road, Higgins Creek	840	814	992	900	975	909	1184	874	943	601	701
78	Wille Road, Higgins Creek	721	695	774	821	786	723	649	734	786	644	724
12	Lake-Cook Road, Buffalo Creek	735	662	726	765	769	747	731	771	788	724	696
13	Lake-Cook Road, Des Plaines River	675	594	682	670	685	666	704	565	654	697	654
17	Oakton Street, Des Plaines River	633	606	697	667	747	653	567	571	644	668	625
19	Belmont Avenue, Des Plaines River	643	609	696	712	742	703	711	612	692	658	639
20	Roosevelt Road, Des Plaines River	650	611	699	725	742	713	709	589	708	671	648
22	Ogden Avenue, Des Plaines River	679	635	718	747	753	743	659	576	714	711	680
23	Willow Springs Road, Des Plaines River	688	642	723	728	755	703	657	588	724	750	686
29	Stephen Street, Des Plaines River	692	632	729	800	780	747	662	621	695	736	699
91	Material Service Road, Des Plaines River	759	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-51

TOTAL DISSOLVED VOLATILE SOLIDS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversay Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	124	121	127
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Swing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
51 IHS Hail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-52

PHENOLS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (µg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	10.0	ND	ND	ND	10.5	11.6	7.0	15.4	7.4	15.5	16.1
31 Lake-Cook Road, Middle Fork North Branch	24.5	26.0	14.8	17.3	19.3	12.0	18.8	16.8	7.4	23.8	22.1
32 Lake-Cook Road, Skokie River	19.6	21.0	13.4	15.8	14.8	13.1	13.9	19.9	7.5	24.6	15.9
34 Dempster Street, North Branch Chicago River	18.0	16.0	9.6	11.2	11.8	9.6	11.8	14.0	6.6	15.8	18.0
96 Albany Avenue, North Branch Chicago River	14.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	13.3	12.4	10.3	8.8	15.1	10.0	8.9	6.6	1.3	4.8	8.6
36 Touhy Avenue, North Shore Channel	22.2	20.4	13.4	13.5	12.3	9.3	12.9	14.3	7.8	10.9	8.6
37 Wilson Avenue, North Branch Chicago River	20.6	18.7	11.4	12.6	13.0	9.5	13.9	13.0	7.8	12.5	12.9
73 Diversey Parkway, North Branch Chicago River	20.8	17.8	12.1	13.2	11.3	9.3	11.1	14.2	7.6	11.9	13.4
46 Grand Avenue, North Branch Chicago River	21.4	18.8	14.1	13.1	11.8	9.9	12.3	14.3	10.8	11.4	9.6
74 Lake Shore Drive, Chicago River	15.6	9.2	9.3	7.0	7.2	5.5	9.9	6.5	5.9	4.7	7.3
39 Madison Street, South Branch Chicago River	23.0	15.8	12.7	9.3	8.0	6.8	7.0	11.6	6.5	9.2	12.1
40 Damen Avenue, Chicago Sanitary & Ship Canal	23.0	15.6	11.3	12.1	8.8	9.7	11.7	10.8	8.4	11.5	13.3
75 Cicero Avenue, Chicago Sanitary & Ship Canal	17.5	16.0	13.6	11.1	10.4	11.8	9.8	9.8	7.6	11.6	12.3
41 Harlem Avenue, Chicago Sanitary & Ship Canal	18.5	15.3	12.5	14.1	12.4	8.4	16.8	15.2	7.5	14.3	22.1
42 Route 83, Chicago Sanitary & Ship Canal	19.1	17.4	13.4	10.4	10.8	10.7	13.3	15.1	6.7	13.0	14.5
48 Stephen Street, Chicago Sanitary & Ship Canal	21.8	17.9	14.9	12.7	11.6	13.5	14.8	17.8	9.4	17.3	20.1
82 Lockport Trawler, Chicago Sanitary & Ship Canal	15.3	10.5	12.6	10.9	10.2	8.2	10.3	13.5	9.6	19.1	24.6
92 Lockport Forebay, Chicago Sanitary & Ship Canal	18.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	7.3	7.2	5.7	8.0	6.8	5.6	8.8	8.4	4.0	ND	5.0
50 Burnham Avenue, Wolf Lake	11.6	10.0	10.8	8.6	9.3	7.5	10.1	10.8	4.8	11.8	8.5
55 130th Street, Calumet River	10.5	8.2	6.9	8.0	7.5	7.5	13.1	10.0	4.8	18.2	9.4
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	22.8	20.0	14.4	10.4	34.5	12.0	20.6	19.2	13.3	18.8	23.9
56 Indiana Avenue, Little Calumet River	13.1	15.3	7.4	7.6	6.2	8.0	9.5	13.0	19.3	14.2	11.5
76 Halsted Street, Little Calumet River	24.1	46.6	13.8	12.8	13.3	12.1	17.4	53.0	12.7	26.3	31.0
52 Wentworth Avenue, Little Calumet River	21.5	23.1	13.4	12.5	12.9	14.8	13.3	17.7	8.8	21.8	24.0
54 Joe Orr Road, Thorn Creek	19.7	18.8	11.2	15.2	14.4	10.4	14.3	18.7	7.8	16.2	15.9
57 Ashland Avenue, Little Calumet River	19.9	21.1	15.8	14.0	14.4	11.4	15.4	21.7	8.3	23.3	22.5
58 Ashland Avenue, Cal-Sag Channel	21.1	22.6	17.5	15.3	13.7	13.1	14.8	20.1	13.1	28.9	28.3
59 Cicero Avenue, Cal-Sag Channel	20.6	26.3	15.4	14.2	20.0	13.1	15.7	23.9	14.8	27.7	30.4
43 Route 83, Cal-Sag Channel	19.1	21.5	16.1	13.7	13.8	12.3	14.6	22.9	13.7	28.3	26.5
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	17.3	16.3	14.2	16.1	11.1	8.8	10.1	13.7	7.0	21.3	25.3
63 Longmeadow Lane, West Branch Du Page River	20.1	18.8	14.3	14.4	17.9	9.6	19.6	14.3	9.2	19.6	23.7
89 Walnut Lane, West Branch Du Page River	19.7	20.1	16.9	13.0	14.7	9.2	10.7	15.9	6.8	18.1	15.6
64 Lake Street, West Branch Du Page River	22.5	19.3	15.3	13.6	14.7	10.5	15.7	15.0	9.0	18.3	17.5
79 Higgins Road, Salt Creek	17.1	16.6	15.3	12.8	12.1	8.1	10.1	13.0	9.6	20.6	20.7
80 Arlington Heights Road, Salt Creek	18.2	20.3	13.2	12.8	12.0	8.9	11.1	14.8	7.0	16.7	16.5
18 Devon Avenue, Salt Creek	17.6	19.5	13.7	13.3	22.0	9.8	10.3	14.2	7.3	16.0	19.0
24 Wolf Road, Salt Creek	17.1	16.3	9.5	12.7	10.2	9.6	11.6	14.8	7.1	16.5	16.3
21 First Avenue, Salt Creek	20.1	16.3	11.9	11.5	10.5	9.6	11.0	14.3	7.2	17.2	17.8
77 Elmhurst Road, Higgins Creek	28.4	21.6	14.4	17.0	12.8	9.1	9.2	13.8	5.2	19.1	21.8
78 Wille Road, Higgins Creek	26.6	25.0	14.8	16.7	12.1	9.1	11.3	17.2	9.9	13.4	15.8
12 Lake-Cook Road, Buffalo Creek	21.7	20.1	15.0	12.9	13.2	7.9	12.2	13.2	7.7	19.6	23.3
13 Lake-Cook Road, Des Plaines River	18.3	16.7	12.4	12.6	10.2	7.2	8.9	16.2	8.1	15.6	22.7
17 Oakton Street, Des Plaines River	19.6	17.0	12.6	12.9	10.2	9.3	3.7	17.2	7.5	14.3	20.2
19 Belmont Avenue, Des Plaines River	20.3	17.9	13.5	13.3	10.4	8.7	12.4	16.5	9.3	18.0	19.3
20 Roosevelt Road, Des Plaines River	19.7	18.7	13.2	13.6	10.0	9.7	10.8	15.7	8.0	18.7	21.9
22 Ogden Avenue, Des Plaines River	19.6	16.9	11.5	13.9	11.3	8.4	14.0	14.7	8.3	18.0	20.7
23 Willow Springs Road, Des Plaines River	16.9	16.1	12.2	13.8	10.9	9.3	12.2	15.6	8.8	16.1	21.0
29 Stephen Street, Des Plaines River	16.3	18.1	13.6	13.0	9.9	10.3	14.1	15.3	9.8	15.8	20.9
91 Material Service Road, Des Plaines River	18.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-53

SULFATE MEAN HISTORY THROUGH 2000

<u>Sampling Station</u>		Annual Means (mg/L)										
No.	Name	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	77.0	ND	ND	ND	63.6	70.3	57.0	90.9	82.3	80.0	87.8
31	Lake-Cook Road, Middle Fork North Branch	72.0	71.9	77.9	62.9	72.5	81.2	82.0	82.7	98.6	96.6	89.2
32	Lake-Cook Road, Skokie River	74.4	79.2	87.6	78.6	89.2	78.0	90.1	90.8	106.8	106.1	101.3
34	Dempster Street, North Branch Chicago River	76.1	72.4	77.9	79.4	81.7	88.5	96.4	79.8	97.5	95.5	92.6
96	Albany Avenue, North Branch Chicago River	59.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	32.5	34.3	34.1	32.1	34.3	39.4	36.8	42.8	38.8	41.2	44.4
36	Touhy Avenue, North Shore Channel	53.8	51.3	54.2	45.0	51.4	55.1	56.9	57.5	54.9	66.0	63.7
37	Wilson Avenue, North Branch Chicago River	53.8	55.7	56.9	52.2	56.7	61.8	57.6	68.5	62.5	67.0	64.5
73	Diversey Parkway, North Branch Chicago River	55.8	68.5	56.5	48.8	61.1	64.7	56.5	65.2	68.1	67.9	64.3
46	Grand Avenue, North Branch Chicago River	55.4	59.2	60.1	53.1	60.2	76.6	58.7	65.3	62.9	69.3	60.4
74	Lake Shore Drive, Chicago River	39.3	32.6	29.9	24.8	28.1	40.2	34.9	40.9	37.4	41.2	36.7
39	Madison Street, South Branch Chicago River	50.4	51.3	47.2	37.1	39.7	50.1	46.6	57.4	47.8	60.9	59.8
40	Damen Avenue, Chicago Sanitary & Ship Canal	51.9	51.1	50.5	45.0	47.5	46.1	48.0	55.8	54.9	61.9	59.7
75	Cicero Avenue, Chicago Sanitary & Ship Canal	51.6	50.0	45.5	39.0	47.1	60.9	50.6	55.3	54.7	68.1	60.8
41	Harlem Avenue, Chicago Sanitary & Ship Canal	72.3	75.6	75.7	64.5	74.0	71.6	66.8	72.3	69.6	74.4	78.0
42	Route 83, Chicago Sanitary & Ship Canal	70.8	71.2	69.6	68.8	70.6	73.9	75.4	78.5	69.2	81.4	77.7
48	Stephen Street, Chicago Sanitary & Ship Canal	92.3	91.5	80.7	84.9	89.4	95.7	95.2	103.8	98.9	110.3	102.9
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	100.9	89.5	97.1	85.0	101.3	103.3
92	Lockport Forebay, Chicago Sanitary & Ship Canal	96.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	29.8	29.8	25.1	23.9	27.5	50.8	43.0	44.2	35.7	ND	56.0
50	Burnham Avenue, Wolf Lake	38.6	35.3	32.2	33.0	31.5	63.2	44.9	48.1	42.2	55.3	42.5
55	130th Street, Calumet River	49.8	50.6	43.4	52.2	46.1	72.4	53.1	70.8	84.9	86.3	81.5
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	177.2	157.5	195.7	173.8	229.5	247.4	299.3	225.0	278.4	277.4	221.2
56	Indiana Avenue, Little Calumet River	77.8	72.4	88.2	83.9	76.4	103.6	98.7	108.8	96.2	122.0	103.8
76	Halsted Street, Little Calumet River	143.1	125.0	119.0	112.8	154.5	163.2	142.3	153.5	165.3	159.8	169.1
52	Wentworth Avenue, Little Calumet River	145.1	131.2	122.0	128.8	143.7	144.9	162.5	150.0	178.7	160.8	171.9
54	Joe Orr Road, Thorn Creek	342.4	380.1	355.8	391.1	312.9	205.8	173.5	162.8	178.0	218.0	182.3
57	Ashland Avenue, Little Calumet River	190.1	229.8	158.0	179.7	216.8	174.1	161.0	138.7	177.1	180.9	179.5
58	Ashland Avenue, Cal-Sag Channel	163.6	133.2	133.6	94.2	139.6	147.1	139.3	144.8	145.5	154.8	166.0
59	Cicero Avenue, Cal-Sag Channel	151.8	133.9	139.3	130.7	143.1	156.8	137.8	146.2	149.2	151.2	161.3
43	Route 83, Cal-Sag Channel	144.1	132.4	135.7	126.7	134.4	127.0	141.5	146.4	151.7	152.7	153.4
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	60.4	58.0	71.2	54.6	58.9	85.6	82.4	81.0	114.8	106.8	112.8
63	Longmeadow Lane, West Branch Du Page River	71.7	87.1	79.9	76.9	60.2	90.7	89.4	90.4	137.4	98.5	125.8
89	Walnut Lane, West Branch Du Page River	69.3	68.7	67.9	61.0	61.0	79.2	75.1	76.4	87.8	86.9	96.7
64	Lake Street, West Branch Du Page River	68.5	70.5	71.3	64.7	65.8	122.5	78.7	77.5	101.3	100.8	102.8
79	Higgins Road, Salt Creek	79.5	74.9	78.4	67.0	73.8	91.6	97.6	90.5	127.7	105.0	109.1
80	Arlington Heights Road, Salt Creek	73.9	83.6	81.3	72.7	79.2	88.5	91.0	85.6	119.3	99.5	114.3
18	Devon Avenue, Salt Creek	74.0	74.5	76.3	77.0	68.9	97.4	92.9	86.8	114.8	106.3	113.8
24	Wolf Road, Salt Creek	89.4	94.5	108.9	87.4	100.9	107.1	103.8	100.4	126.7	120.8	134.7
21	First Avenue, Salt Creek	86.2	90.1	104.4	87.2	81.2	112.5	102.5	92.7	124.1	121.6	132.3
77	Elmhurst Road, Higgins Creek	47.0	55.4	66.4	48.9	81.9	84.8	68.4	72.3	92.1	87.8	90.1
78	Wille Road, Higgins Creek	94.5	99.3	96.5	88.7	96.3	103.0	101.6	97.0	116.0	101.5	102.8
12	Lake-Cook Road, Buffalo Creek	106.5	103.8	92.9	83.9	87.5	117.3	101.2	98.2	135.2	120.4	132.8
13	Lake-Cook Road, Des Plaines River	81.0	71.1	87.9	80.6	89.1	119.2	117.6	92.7	130.8	136.4	131.9
17	Oakton Street, Des Plaines River	75.5	73.4	83.4	75.3	88.2	114.0	80.5	84.2	121.5	124.8	121.8
19	Belmont Avenue, Des Plaines River	78.1	78.3	86.3	76.1	88.2	120.5	107.5	85.3	124.8	114.2	124.7
20	Roosevelt Road, Des Plaines River	78.5	75.6	84.3	75.4	91.0	105.4	105.5	85.8	120.1	116.1	112.4
22	Ogden Avenue, Des Plaines River	79.2	77.7	87.7	78.2	84.2	112.5	94.0	86.3	122.5	121.3	125.6
23	Willow Springs Road, Des Plaines River	85.5	82.2	90.6	81.6	97.2	105.3	105.5	87.3	125.8	123.2	125.1
29	Stephen Street, Des Plaines River	83.4	79.6	90.0	87.2	95.1	106.6	104.4	95.3	129.3	122.4	122.4
91	Material Service Road, Des Plaines River	89.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-54

FATS, OILS, AND GREASES MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	4.50	7.44	4.00	9.89	6.73	6.50	10.83
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	11.63	5.49	3.13	5.50	10.40	13.25	10.45	5.00	7.09
32 Lake-Cook Road, Skokie River	ND	ND	4.37	5.74	1.88	8.33	7.11	12.17	8.00	7.90	8.92
34 Dempster Street, North Branch Chicago River	ND	ND	3.63	6.06	2.42	8.20	5.82	12.50	7.33	6.38	6.67
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	ND	ND	ND	6.01	2.00	5.38	5.00	13.83	8.09	9.09	6.27
36 Touhy Avenue, North Shore Channel	ND	ND	3.97	6.50	1.92	9.33	9.27	12.00	7.42	8.50	7.17
37 Wilson Avenue, North Branch Chicago River	ND	ND	4.27	8.40	5.08	6.67	8.00	13.88	7.33	6.33	6.33
73 Diversey Parkway, North Branch Chicago River	ND	ND	2.45	7.27	3.08	6.00	6.75	12.42	11.08	10.17	6.42
46 Grand Avenue, North Branch Chicago River	ND	ND	2.75	9.51	4.25	13.14	7.67	13.17	15.67	10.58	9.50
74 Lake Shore Drive, Chicago River	ND	ND	2.00	2.91	2.91	8.30	6.70	11.75	7.00	7.83	6.17
39 Madison Street, South Branch Chicago River	ND	ND	4.85	3.65	2.17	7.36	4.40	10.58	6.92	8.17	8.25
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	5.25	3.87	2.67	8.67	8.42	13.67	7.00	11.58	5.58
75 Cicero Avenue, Chicago Sanitary & Ship Canal	ND	ND	2.55	7.41	3.42	9.92	6.17	11.83	7.33	11.50	6.50
41 Harlem Avenue, Chicago Sanitary & Ship Canal	ND	ND	2.65	6.26	1.92	7.67	6.67	9.67	6.42	10.33	6.73
42 Route 83, Chicago Sanitary & Ship Canal	ND	ND	3.00	6.58	3.83	7.42	7.64	10.67	6.25	12.92	13.17
48 Stephen Street, Chicago Sanitary & Ship Canal	ND	ND	1.85	8.13	2.00	11.17	8.33	10.25	7.33	6.50	7.08
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	3.00	4.70	3.56	4.91	9.18	12.83	5.87	ND	8.00
50 Burnham Avenue, Wolf Lake	ND	ND	4.63	7.42	2.25	5.82	6.83	10.58	6.80	9.25	8.25
55 130th Street, Calumet River	ND	ND	2.33	5.42	3.80	5.18	6.91	11.00	5.08	7.73	14.67
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	3.20	11.05	8.91	7.00	6.92	10.67	7.00	9.75	11.17
56 Indiana Avenue, Little Calumet River	ND	ND	3.97	4.98	3.78	6.90	6.27	11.00	6.42	12.75	8.09
76 Halsted Street, Little Calumet River	ND	ND	3.80	7.47	1.50	5.91	5.83	11.50	5.08	9.42	8.17
52 Wentworth Avenue, Little Calumet River	ND	ND	3.60	6.83	1.67	5.00	5.45	12.92	5.75	11.17	8.58
54 Joe Orr Road, Thoma Creek	ND	ND	12.80	8.18	2.73	7.91	5.58	10.50	8.75	6.58	9.50
57 Ashland Avenue, Little Calumet River	ND	ND	3.00	5.43	4.11	6.82	4.50	12.00	6.08	13.00	6.55
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	7.50	2.91	6.00	5.42	10.42	4.87	11.00	6.58
59 Cicero Avenue, Cal-Sag Channel	ND	ND	5.07	4.83	5.73	5.36	6.17	13.42	4.42	10.67	7.92
43 Route 83, Cal-Sag Channel	ND	ND	5.53	4.58	5.00	6.60	5.45	12.00	4.08	12.75	5.75
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	2.55	7.27	7.91	4.70	10.09	10.91	9.73	8.55	5.92
63 Longmeadow Lane, West Branch Du Page River	ND	ND	3.50	8.50	4.55	7.00	7.30	12.55	7.73	8.18	8.73
89 Walnut Lane, West Branch Du Page River	ND	ND	5.35	4.60	6.58	6.33	8.33	9.83	8.33	10.00	9.75
64 Lake Street, West Branch Du Page River	ND	ND	5.30	7.49	7.55	5.92	7.00	10.83	6.42	10.42	14.25
79 Higgins Road, Salt Creek	ND	ND	2.50	7.07	6.10	5.50	8.20	9.55	7.45	10.40	5.55
80 Arlington Heights Road, Salt Creek	ND	ND	14.20	6.21	8.42	5.18	6.90	9.83	8.25	10.25	4.00
18 Devon Avenue, Salt Creek	ND	ND	9.20	7.16	9.18	7.09	7.25	9.73	8.57	9.00	6.58
24 Wolf Road, Salt Creek	ND	ND	5.55	5.30	5.58	6.08	5.73	10.92	9.25	9.58	5.83
21 First Avenue, Salt Creek	ND	ND	5.45	6.70	5.92	7.18	6.27	11.67	6.64	9.58	3.50
77 Elmhurst Road, Higgins Creek	ND	ND	3.35	4.25	10.58	11.42	7.18	11.33	6.73	13.64	2.50
78 Wille Road, Higgins Creek	ND	ND	4.05	4.67	9.83	7.08	7.09	13.42	9.17	9.45	3.25
12 Lake-Cook Road, Buffalo Creek	ND	ND	3.05	8.94	7.92	7.08	6.40	10.67	8.42	11.83	20.83
13 Lake-Cook Road, Des Plaines River	ND	ND	4.15	6.26	7.25	7.73	6.89	9.75	8.42	10.25	7.00
17 Oakton Street, Des Plaines River	ND	ND	3.70	6.23	6.67	5.10	6.00	12.33	8.09	8.83	4.82
19 Belmont Avenue, Des Plaines River	ND	ND	5.45	4.75	6.50	5.58	6.17	10.00	7.33	9.25	4.33
20 Roosevelt Road, Des Plaines River	ND	ND	6.40	4.65	5.58	6.58	7.42	10.42	7.50	8.83	3.42
22 Ogden Avenue, Des Plaines River	ND	ND	5.45	5.20	6.54	6.58	5.73	12.75	6.58	11.08	4.17
23 Willow Springs Road, Des Plaines River	ND	ND	4.80	6.09	5.18	6.18	6.00	12.25	6.08	13.00	6.75
29 Stephen Street, Des Plaines River	ND	ND	3.00	4.56	6.67	5.92	6.09	12.58	4.92	11.50	5.00
91 Material Service Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-55

TOTAL PHOSPHORUS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	2.200	ND	ND	ND	2.365	2.019	3.165	1.067	2.251	2.588	2.081
31 Lake-Cook Road, Middle Fork North Branch	0.185	0.245	0.183	0.198	0.186	0.174	0.204	0.170	0.123	0.203	0.579
32 Lake-Cook Road, Skokie River	0.224	0.196	0.152	0.219	0.191	0.206	0.347	0.228	0.401	0.180	0.456
34 Dempster Street, North Branch Chicago River	1.147	1.208	0.777	1.237	1.093	0.889	1.235	0.819	1.069	0.867	0.848
96 Albany Avenue, North Branch Chicago River	1.312	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.183	0.215	0.129	0.067	0.392	0.140	0.035	0.108	0.085	0.065	0.212
36 Touhy Avenue, North Shore Channel	1.214	1.351	1.185	1.189	1.132	0.838	0.958	0.814	0.765	0.939	0.936
37 Wilson Avenue, North Branch Chicago River	1.301	1.388	1.086	1.033	1.039	0.839	0.998	0.831	0.863	0.896	0.934
73 Diversy Parkway, North Branch Chicago River	1.102	1.116	0.843	0.943	0.814	0.623	0.749	0.649	0.796	0.894	0.992
46 Grand Avenue, North Branch Chicago River	1.130	1.120	0.863	0.870	0.938	0.761	0.798	0.717	0.778	0.862	0.668
74 Lake Shore Drive, Chicago River	0.373	0.206	0.202	0.099	0.120	0.100	0.050	0.118	0.087	0.118	0.092
39 Madison Street, South Branch Chicago River	1.130	0.839	0.605	0.465	0.393	0.380	0.346	0.461	0.381	0.487	0.558
40 Damen Avenue, Chicago Sanitary & Ship Canal	1.046	0.727	0.528	0.570	0.406	0.375	0.542	0.402	0.479	0.502	0.442
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.965	0.690	0.550	0.573	0.458	0.443	0.549	0.390	0.557	0.542	0.524
41 Harlem Avenue, Chicago Sanitary & Ship Canal	1.120	1.044	0.853	0.888	0.757	0.731	0.798	0.533	0.583	0.730	0.555
42 Route 83, Chicago Sanitary & Ship Canal	0.755	0.643	0.661	0.678	0.548	0.552	0.771	0.488	0.510	0.648	0.439
48 Stephen Street, Chicago Sanitary & Ship Canal	1.355	1.098	0.859	1.063	0.873	0.828	0.991	0.693	0.950	0.962	0.601
82 Lockport Trebler, Chicago Sanitary & Ship Canal	1.485	1.545	1.211	1.236	1.165	1.088	1.099	0.898	0.984	0.963	0.944
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.414	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Swing Avenue, Calumet River	0.131	0.145	0.081	0.088	0.155	0.143	0.054	0.030	0.020	ND	0.000
50 Burnham Avenue, Wolf Lake	0.075	0.234	0.056	0.095	0.094	0.074	0.061	0.054	0.069	0.033	0.025
55 130th Street, Calumet River	0.088	0.197	0.151	0.094	0.092	0.074	0.066	0.069	0.037	0.595	0.401
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.537	0.857	0.704	0.465	1.038	0.513	0.662	0.768	1.649	0.591	0.533
56 Indiana Avenue, Little Calumet River	0.373	0.324	0.214	0.152	0.143	0.156	0.230	0.262	0.215	0.205	0.119
76 Halsted Street, Little Calumet River	3.193	2.595	1.885	1.758	1.243	1.623	1.455	1.249	1.640	1.331	1.154
52 Wentworth Avenue, Little Calumet River	0.752	1.168	0.815	0.553	0.528	0.478	0.565	0.376	0.556	0.538	0.253
54 Joe Orr Road, Thorn Creek	5.208	3.000	8.043	8.065	6.090	5.159	4.173	4.538	5.296	5.333	3.938
57 Ashland Avenue, Little Calumet River	2.170	1.522	1.619	1.992	1.736	1.409	1.626	0.946	1.428	1.477	1.223
58 Ashland Avenue, Cal-Sag Channel	3.038	2.190	1.948	1.445	1.470	1.587	1.389	0.946	1.884	1.203	1.104
59 Cicero Avenue, Cal-Sag Channel	3.119	2.396	2.118	1.930	1.623	1.771	1.604	1.278	2.018	1.279	1.257
43 Route 83, Cal-Sag Channel	2.642	2.453	1.832	2.012	1.631	1.521	1.596	1.300	1.623	1.501	1.049
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.181	0.430	0.101	0.424	0.165	0.142	0.102	0.114	0.093	0.114	0.089
63 Longmeadow Lane, West Branch Du Page River	0.184	0.952	0.770	0.547	0.535	0.555	0.811	0.250	0.909	0.757	0.542
89 Walnut Lane, West Branch Du Page River	2.109	2.742	2.903	2.453	2.163	2.271	2.318	1.399	2.420	2.180	2.224
64 Lake Street, West Branch Du Page River	1.649	2.205	2.385	2.007	1.811	1.979	2.025	1.318	2.142	2.108	2.137
79 Higgins Road, Salt Creek	0.249	0.128	0.176	0.169	0.148	0.139	0.109	0.114	0.324	0.191	0.187
80 Arlington Heights Road, Salt Creek	1.688	2.224	1.974	1.575	1.583	1.994	1.802	0.883	1.628	1.479	1.310
18 Devon Avenue, Salt Creek	1.710	2.231	1.855	1.410	1.752	2.052	1.795	0.913	1.548	1.579	1.384
24 Wolf Road, Salt Creek	1.407	1.745	1.497	1.441	1.513	1.502	1.628	1.051	1.411	1.358	1.195
21 First Avenue, Salt Creek	1.239	1.595	1.517	1.469	1.198	1.255	1.443	1.033	1.225	1.259	1.040
77 Elmhurst Road, Higgins Creek	0.184	0.221	0.111	0.115	0.152	0.181	0.215	0.151	0.115	0.258	0.123
78 Wille Road, Higgins Creek	0.578	0.671	1.058	0.988	0.525	0.592	0.551	0.393	0.726	0.544	0.382
12 Lake-Cook Road, Buffalo Creek	0.222	0.235	0.150	0.156	0.158	0.125	0.154	0.258	0.203	0.227	0.178
13 Lake-Cook Road, Des Plaines River	0.984	1.261	0.916	0.736	0.700	0.701	1.179	0.780	0.805	0.853	0.496
17 Oakton Steet, Des Plaines River	0.705	0.971	0.764	0.615	0.644	0.671	0.527	0.515	0.742	0.708	0.375
19 Belmont Avenue, Des Plaines River	0.914	0.780	0.684	0.630	0.525	0.578	0.795	0.466	0.576	0.575	0.374
20 Roosevelt Road, Des Plaines River	0.583	0.701	0.660	0.667	0.598	0.553	0.751	0.450	0.568	0.553	0.380
22 Ogden Avenue, Des Plaines River	0.732	0.963	0.849	0.885	0.702	0.738	0.935	0.653	0.792	0.713	0.545
23 Willow Springs Road, Des Plaines River	0.762	0.887	0.797	0.816	0.718	0.688	0.858	0.584	0.696	0.689	0.516
29 Stephen Street, Des Plaines River	0.742	0.940	0.788	0.862	0.763	0.828	0.893	0.626	0.737	0.703	0.614
91 Material Service Road, Des Plaines River	0.914	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-56

SOLUBLE PHOSPHORUS MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	1.610	ND	ND	ND	2.010	1.847	3.065	0.938	2.806	2.304	1.863
31 Lake-Cook Road, Middle Fork North Branch	0.082	0.109	0.116	0.127	0.163	0.100	0.106	0.058	0.853	0.101	0.457
32 Lake-Cook Road, Skokie River	0.111	0.108	0.095	0.158	0.118	0.104	0.251	0.112	0.311	0.088	0.323
34 Dempster Street, North Branch Chicago River	0.889	0.920	0.705	0.994	0.857	0.795	1.129	0.676	0.897	0.737	0.601
96 Albany Avenue, North Branch Chicago River	1.103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.044	0.098	0.103	0.038	0.271	0.058	0.011	0.073	0.915	0.024	0.109
36 Touhy Avenue, North Shore Channel	0.989	1.066	1.058	0.955	0.872	0.687	0.833	0.741	0.647	0.747	0.728
37 Wilson Avenue, North Branch Chicago River	0.904	1.160	0.977	0.888	0.801	0.738	0.913	0.709	0.761	0.769	0.760
73 Diversey Parkway, North Branch Chicago River	0.814	0.917	0.743	0.761	0.606	0.559	0.678	0.530	0.697	0.755	0.817
46 Grand Avenue, North Branch Chicago River	0.865	0.853	0.873	0.707	0.658	0.692	0.686	0.606	0.649	0.726	0.536
74 Lake Shore Drive, Chicago River	0.270	0.157	0.150	0.057	0.089	0.065	0.020	0.031	0.046	0.098	0.065
39 Madison Street, South Branch Chicago River	0.730	0.646	0.501	0.345	0.273	0.270	0.298	0.388	0.103	0.398	0.388
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.703	0.492	0.423	0.426	0.289	0.278	0.467	0.331	0.390	0.371	0.334
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.672	0.459	0.378	0.402	0.320	0.348	0.421	0.283	0.451	0.428	0.366
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.834	0.754	0.737	0.636	0.528	0.634	0.707	0.433	0.482	0.564	0.425
42 Route 83, Chicago Sanitary & Ship Canal	0.571	0.478	0.502	0.512	0.418	0.451	0.664	0.400	0.409	0.498	0.332
48 Stephen Street, Chicago Sanitary & Ship Canal	1.071	0.798	0.717	0.888	0.647	0.689	0.876	0.590	0.790	0.767	0.485
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	1.156	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.053	0.060	0.041	0.059	0.156	0.090	0.025	0.014	0.009	ND	0.000
50 Burnham Avenue, Wolf Lake	0.040	0.064	0.041	0.063	0.075	0.047	0.029	0.035	0.032	0.013	0.008
55 130th Street, Calumet River	0.045	0.080	0.062	0.058	0.093	0.062	0.031	0.021	0.013	0.539	0.350
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.121	0.191	0.329	0.222	0.258	0.127	0.201	0.219	0.448	0.206	0.139
56 Indiana Avenue, Little Calumet River	0.277	0.110	0.161	0.076	0.110	0.061	0.122	0.141	0.123	0.082	0.044
76 Halsted Street, Little Calumet River	2.923	2.684	1.533	1.276	1.033	1.457	1.338	1.103	1.803	1.043	0.967
52 Wentworth Avenue, Little Calumet River	0.384	0.398	0.296	0.313	0.312	0.269	0.346	0.171	0.328	0.348	0.098
54 Joe Orr Road, Thom Creek	4.875	2.556	7.365	6.853	5.017	4.926	4.028	4.358	5.121	4.889	3.732
57 Ashland Avenue, Little Calumet River	1.882	1.229	1.275	1.697	1.467	1.231	1.424	0.792	1.272	1.193	1.096
58 Ashland Avenue, Cal-Sag Channel	1.720	2.077	1.736	1.045	0.906	1.391	1.217	0.797	1.704	0.856	0.922
59 Cicero Avenue, Cal-Sag Channel	2.794	2.314	1.888	1.586	1.124	1.511	1.393	1.091	1.818	0.925	0.999
43 Route 83, Cal-Sag Channel	2.306	2.348	1.834	1.738	1.186	1.315	1.388	1.088	1.448	1.204	0.860
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.064	0.070	0.074	0.330	0.117	0.070	0.048	0.029	0.028	0.043	0.013
63 Longmeadow Lane, West Branch Du Page River	0.060	0.729	0.684	0.608	0.401	0.360	0.725	0.173	0.843	0.674	0.444
89 Walnut Lane, West Branch Du Page River	1.910	2.243	2.198	2.120	1.728	2.031	2.163	1.272	2.214	2.051	2.085
64 Lake Street, West Branch Du Page River	1.383	1.712	2.048	1.772	1.461	1.708	1.849	1.143	1.894	1.807	1.972
79 Higgins Road, Salt Creek	0.039	0.074	0.109	0.068	0.086	0.056	0.039	0.021	0.271	0.098	0.121
80 Arlington Heights Road, Salt Creek	1.488	1.843	1.751	1.227	1.294	1.743	1.744	0.800	1.254	1.361	1.222
18 Devon Avenue, Salt Creek	1.447	1.868	1.686	1.098	1.440	1.778	1.706	0.830	1.438	1.478	1.303
24 Wolf Road, Salt Creek	1.094	1.369	1.240	1.150	1.058	1.241	1.445	0.861	1.227	1.090	1.049
21 First Avenue, Salt Creek	0.945	1.275	1.300	1.187	0.848	1.066	1.259	0.801	1.045	0.989	0.938
77 Elmhurst Road, Higgins Creek	0.044	0.071	0.073	0.104	0.078	0.068	0.047	0.068	0.012	0.138	0.044
78 Wille Road, Higgins Creek	0.385	0.506	0.823	0.713	0.363	0.480	0.495	0.328	0.640	0.441	0.337
12 Lake-Cook Road, Buffalo Creek	0.037	0.081	0.062	0.075	0.083	0.066	0.048	0.113	0.051	0.072	0.092
13 Lake-Cook Road, Des Plaines River	0.716	1.047	0.736	0.575	0.552	0.603	1.066	0.492	0.690	0.724	0.386
17 Oakton Street, Des Plaines River	0.480	0.741	0.563	0.440	0.458	0.505	0.440	0.390	0.578	0.480	0.265
19 Belmont Avenue, Des Plaines River	0.420	0.609	0.503	0.448	0.387	0.420	0.622	0.331	0.438	0.388	0.266
20 Roosevelt Road, Des Plaines River	0.416	0.562	0.523	0.462	0.387	0.407	0.615	0.308	0.421	0.408	0.282
22 Ogden Avenue, Des Plaines River	0.557	0.769	0.688	0.634	0.459	0.596	0.759	0.469	0.596	0.541	0.428
23 Willow Springs Road, Des Plaines River	0.544	0.679	0.629	0.621	0.459	0.511	0.671	0.432	0.518	0.487	0.394
29 Stephen Street, Des Plaines River	0.575	0.664	0.588	0.641	0.484	0.644	0.698	0.438	0.511	0.490	0.450
91 Material Service Road, Des Plaines River	0.711	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-57

TOTAL CYANIDE MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	0.009	ND	ND	ND	0.007	0.008	0.011	0.006	0.012	0.014	0.018
31	Lake-Cook Road, Middle Fork North Branch	0.002	0.002	0.002	0.002	0.006	0.002	0.004	0.003	0.002	0.002	0.008
32	Lake-Cook Road, Skokie River	0.003	0.003	0.001	0.002	0.001	0.002	0.003	0.003	0.004	0.003	0.007
34	Dempster Street, North Branch Chicago River	0.006	0.005	0.004	0.005	0.004	0.003	0.005	0.005	0.005	0.005	0.006
96	Albany Avenue, North Branch Chicago River	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.001	0.002
36	Touhy Avenue, North Shore Channel	0.006	0.005	0.006	0.007	0.006	0.004	0.006	0.006	0.006	0.006	0.010
37	Wilson Avenue, North Branch Chicago River	0.006	0.007	0.006	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.007
73	Diversey Parkway, North Branch Chicago River	0.012	0.008	0.005	0.008	0.005	0.004	0.006	0.007	0.006	0.006	0.007
46	Grand Avenue, North Branch Chicago River	0.006	0.007	0.007	0.005	0.005	0.004	0.008	0.009	0.007	0.007	0.008
74	Lake Shore Drive, Chicago River	0.003	0.001	0.002	0.000	0.001	0.000	0.002	0.002	0.001	0.001	0.002
39	Madison Street, South Branch Chicago River	0.005	0.005	0.004	0.003	0.002	0.002	0.004	0.006	0.006	0.005	0.006
40	Damen Avenue, Chicago Sanitary & Ship Canal	0.005	0.005	0.004	0.004	0.004	0.003	0.004	0.005	0.005	0.005	0.006
75	Cicero Avenue, Chicago Sanitary & Ship Canal	0.004	0.005	0.004	0.003	0.004	0.003	0.004	0.006	0.004	0.005	0.006
41	Harlem Avenue, Chicago Sanitary & Ship Canal	0.007	0.006	0.007	0.006	0.007	0.005	0.008	0.008	0.007	0.007	0.009
42	Route 83, Chicago Sanitary & Ship Canal	0.007	0.007	0.007	0.007	0.006	0.007	0.007	0.007	0.007	0.008	0.008
48	Stephen Street, Chicago Sanitary & Ship Canal	0.007	0.007	0.009	0.007	0.008	0.008	0.008	0.007	0.008	0.010	0.011
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	0.007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	0.001	0.001	0.001	0.003	0.001	0.002	0.003	0.002	0.002	ND	0.003
50	Burnham Avenue, Wolf Lake	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.002	0.002	0.002	0.004
55	130th Street, Calumet River	0.001	0.001	0.001	0.002	0.001	0.001	0.003	0.003	0.002	0.002	0.004
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	0.009	0.008	0.011	0.010	0.009	0.013	0.010	0.009	0.013	0.020	0.023
56	Indiana Avenue, Little Calumet River	0.003	0.003	0.003	0.003	0.003	0.002	0.005	0.005	0.004	0.007	0.005
76	Halsted Street, Little Calumet River	0.010	0.010	0.008	0.006	0.013	0.013	0.014	0.019	0.016	0.019	0.020
52	Wentworth Avenue, Little Calumet River	0.061	0.040	0.027	0.005	0.015	0.014	0.015	0.009	0.011	0.007	0.009
54	Joe Orr Road, Thorn Creek	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.008	0.010	0.011	0.016
57	Ashland Avenue, Little Calumet River	0.008	0.009	0.008	0.005	0.007	0.009	0.009	0.007	0.006	0.007	0.012
58	Ashland Avenue, Cal-Sag Channel	0.009	0.009	0.008	0.006	0.010	0.012	0.011	0.010	0.014	0.015	0.016
59	Cicero Avenue, Cal-Sag Channel	0.008	0.008	0.009	0.006	0.009	0.013	0.012	0.011	0.015	0.015	0.014
43	Route 83, Cal-Sag Channel	0.007	0.007	0.009	0.006	0.008	0.010	0.010	0.010	0.012	0.021	0.012
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.003
63	Longmeadow Lane, West Branch Du Page River	0.002	0.007	0.005	0.004	0.005	0.006	0.007	0.008	0.007	0.007	0.006
89	Walnut Lane, West Branch Du Page River	0.008	0.012	0.011	0.010	0.008	0.011	0.011	0.008	0.011	0.013	0.015
64	Lake Street, West Branch Du Page River	0.007	0.009	0.009	0.008	0.008	0.010	0.011	0.010	0.010	0.010	0.012
79	Higgins Road, Salt Creek	0.002	0.004	0.002	0.002	0.003	0.004	0.002	0.005	0.003	0.003	0.003
80	Arlington Heights Road, Salt Creek	0.007	0.010	0.009	0.006	0.007	0.007	0.007	0.006	0.007	0.008	0.008
18	Devon Avenue, Salt Creek	0.006	0.009	0.008	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.008
24	Wolf Road, Salt Creek	0.004	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.008	0.007	0.007
21	First Avenue, Salt Creek	0.004	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.007	0.006	0.007
77	Elmhurst Road, Higgins Creek	0.004	0.003	0.003	0.003	0.004	0.003	0.004	0.005	0.003	0.003	0.004
78	Wille Road, Higgins Creek	0.006	0.011	0.008	0.008	0.006	0.008	0.010	0.007	0.010	0.010	0.009
12	Lake-Cook Road, Buffalo Creek	0.002	0.003	0.002	0.001	0.002	0.002	0.002	0.004	0.003	0.003	0.003
13	Lake-Cook Road, Des Plaines River	0.005	0.010	0.005	0.005	0.005	0.005	0.007	0.011	0.007	0.008	0.006
17	Oakton Street, Des Plaines River	0.004	0.009	0.005	0.004	0.005	0.006	0.003	0.006	0.009	0.006	0.006
19	Belmont Avenue, Des Plaines River	0.004	0.005	0.004	0.005	0.005	0.006	0.006	0.005	0.007	0.006	0.006
20	Roosevelt Road, Des Plaines River	0.004	0.005	0.004	0.005	0.004	0.005	0.006	0.005	0.008	0.006	0.006
22	Ogden Avenue, Des Plaines River	0.003	0.006	0.005	0.005	0.004	0.005	0.006	0.006	0.006	0.006	0.006
23	Willow Springs Road, Des Plaines River	0.004	0.005	0.005	0.005	0.005	0.005	0.008	0.005	0.006	0.006	0.006
29	Stephen Street, Des Plaines River	0.004	0.005	0.006	0.005	0.005	0.006	0.005	0.006	0.006	0.005	0.006
91	Material Service Road, Des Plaines River	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-58

WEAK ACID DISSOCIABLE CYANIDE MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.001	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	0.000	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	0.001	0.001	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
73 Diverser Parkway, North Branch Chicago River	0.003	0.001	0.000	0.002	0.001	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000	0.000	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.001	0.000	0.000	0.000	0.001	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.000	0.000	0.001	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	0.000	0.000	0.000	0.000	0.001	ND	ND	ND	ND	ND	ND
51 IHS Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	0.001	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	0.002	0.003	0.001	0.001	0.003	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0.009	0.008	0.004	0.001	0.004	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0.001	0.002	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0.002	0.003	0.001	0.001	0.002	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	0.001	0.001	0.001	0.001	0.002	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	0.002	0.001	0.001	0.001	0.002	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	0.002	0.001	0.001	0.001	0.002	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0.001	0.002	0.001	0.002	0.001	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.000	0.002	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	0.001	0.002	0.002	0.001	0.002	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	0.001	0.001	0.001	0.001	0.002	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0.001	0.001	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	0.001	0.000	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0.001	0.000	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	0.001	0.005	0.001	0.002	0.001	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0.000	0.001	0.000	0.000	0.001	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.000	0.004	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	0.000	0.006	0.000	0.000	0.001	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0.001	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0.001	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0.001	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0.001	0.000	0.000	0.001	0.001	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	0.001	0.000	0.001	0.001	0.001	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-59

FLUORIDE MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.710	ND	ND	ND	0.572	0.609	0.820	0.470	0.626	0.682	0.635
31 Lake-Cook Road, Middle Fork North Branch	0.310	0.312	0.306	0.430	0.337	0.277	0.373	0.328	0.355	0.336	0.361
32 Lake-Cook Road, Skokie River	0.315	0.373	0.286	0.391	0.342	0.331	0.359	0.355	0.340	0.342	0.350
34 Dempster Street, North Branch Chicago River	0.577	0.604	0.488	0.625	0.525	0.469	0.594	0.437	0.513	0.492	0.458
96 Albany Avenue, North Branch Chicago River	0.642	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.187	0.184	0.158	0.200	0.187	0.134	0.110	0.215	0.165	0.145	0.211
36 Touhy Avenue, North Shore Channel	0.812	0.781	0.778	0.705	0.760	0.562	0.767	0.570	0.625	0.618	0.589
37 Wilson Avenue, North Branch Chicago River	0.779	0.758	0.748	0.728	0.725	0.604	0.683	0.709	0.620	0.608	0.599
73 Diversey Parkway, North Branch Chicago River	0.765	0.765	0.740	0.634	0.730	0.601	0.704	0.613	0.603	0.633	0.589
46 Grand Avenue, North Branch Chicago River	0.783	0.768	0.697	0.752	0.713	0.621	0.744	0.665	0.656	0.651	0.613
74 Lake Shore Drive, Chicago River	0.358	0.235	0.195	0.260	0.136	0.122	0.124	0.247	0.197	0.168	0.246
39 Madison Street, South Branch Chicago River	0.645	0.607	0.475	0.372	0.380	0.380	0.426	0.388	0.402	0.404	0.515
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.667	0.537	0.468	0.456	0.427	0.408	0.526	0.423	0.412	0.409	0.457
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.617	0.513	0.434	0.437	0.448	0.401	0.478	0.446	0.417	0.459	0.479
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.781	0.743	0.705	0.701	0.667	0.594	0.691	0.592	0.623	0.613	0.678
42 Route 83, Chicago Sanitary & Ship Canal	0.806	0.778	0.742	0.726	0.724	0.635	0.726	0.647	0.658	0.670	0.671
48 Stephen Street, Chicago Sanitary & Ship Canal	0.799	0.729	0.697	0.742	0.682	0.633	0.750	0.650	0.648	0.673	0.640
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.914	0.865	0.791	0.725	0.744	0.789	0.765	0.699	0.627	0.624	0.748
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.810	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Swing Avenue, Calumet River	0.148	0.135	0.216	0.187	0.136	0.125	0.153	0.236	0.174	ND	0.300
50 Burnham Avenue, Wolf Lake	0.200	0.237	0.198	0.267	0.177	0.213	0.401	0.272	0.295	0.328	0.305
55 130th Street, Calumet River	0.230	0.301	0.243	0.238	0.199	0.207	0.223	0.343	0.272	0.273	0.319
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.823	0.711	0.845	0.940	0.927	0.935	0.851	0.697	0.760	0.713	0.744
56 Indiana Avenue, Little Calumet River	0.382	0.317	0.422	0.439	0.314	0.281	0.446	0.437	0.383	0.354	0.349
76 Halsted Street, Little Calumet River	0.891	0.759	0.760	0.790	0.752	0.756	0.798	0.713	0.815	0.598	0.747
52 Wentworth Avenue, Little Calumet River	4.255	1.980	1.061	1.534	1.146	1.507	1.912	1.009	0.679	0.641	0.927
54 Joe Orr Road, Thorn Creek	0.737	0.596	0.594	0.747	0.692	0.639	0.663	0.593	0.682	0.530	0.624
57 Ashland Avenue, Little Calumet River	1.609	0.722	0.730	0.784	0.628	0.747	0.772	0.563	0.547	0.537	0.768
58 Ashland Avenue, Cal-Sag Channel	0.935	0.631	0.750	0.810	0.799	0.685	0.705	0.600	0.752	0.558	0.700
59 Cicero Avenue, Cal-Sag Channel	0.916	0.647	0.737	0.678	0.715	0.715	0.733	0.667	0.722	0.533	0.708
43 Route 83, Cal-Sag Channel	0.827	0.650	0.652	0.726	0.681	0.596	0.681	0.609	0.642	0.508	0.647
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.171	0.192	0.191	0.237	0.185	0.190	0.165	0.197	0.222	0.209	0.201
63 Longmeadow Lane, West Branch Du Page River	0.303	0.419	0.453	0.235	0.300	0.375	0.334	0.302	0.474	0.370	0.333
89 Walnut Lane, West Branch Du Page River	0.723	0.719	0.844	0.650	0.572	0.718	0.702	0.533	0.708	0.737	0.627
64 Lake Street, West Branch Du Page River	0.587	0.598	1.061	0.538	0.557	0.657	0.680	0.495	0.720	0.656	0.605
79 Higgins Road, Salt Creek	0.294	0.282	0.328	0.203	0.215	0.217	0.220	0.255	0.370	0.246	0.251
80 Arlington Heights Road, Salt Creek	0.643	0.595	0.851	0.617	0.576	0.597	0.538	0.354	0.491	0.414	0.393
18 Devon Avenue, Salt Creek	0.608	0.628	0.744	0.474	0.576	0.572	0.528	0.356	0.481	0.438	0.416
24 Wolf Road, Salt Creek	0.542	0.600	0.586	0.504	0.583	0.591	0.532	0.411	0.570	0.489	0.431
21 First Avenue, Salt Creek	0.486	0.607	0.753	0.531	0.551	0.600	0.520	0.416	0.522	0.514	0.453
77 Elmhurst Road, Higgins Creek	0.317	0.207	0.257	0.184	0.185	0.211	0.186	0.224	0.319	0.255	0.309
78 Wille Road, Higgins Creek	0.746	0.745	0.773	0.750	0.635	0.813	0.833	0.663	0.769	0.655	0.602
12 Lake-Cook Road, Buffalo Creek	0.259	0.207	0.346	0.180	0.199	0.189	0.182	0.279	0.288	0.264	0.232
13 Lake-Cook Road, Des Plaines River	0.402	0.458	0.560	0.450	0.466	0.427	0.530	0.355	0.428	0.404	0.328
17 Oakton Street, Des Plaines River	0.400	0.472	0.497	0.328	0.397	0.380	0.260	0.355	0.434	0.376	0.328
19 Belmont Avenue, Des Plaines River	0.459	0.506	0.563	0.384	0.435	0.465	0.507	0.371	0.453	0.378	0.347
20 Roosevelt Road, Des Plaines River	0.526	0.455	0.546	0.384	0.451	0.455	0.513	0.339	0.461	0.379	0.338
22 Ogden Avenue, Des Plaines River	0.410	0.514	0.524	0.418	0.446	0.483	0.502	0.363	0.488	0.393	0.388
23 Willow Springs Road, Des Plaines River	0.488	0.488	0.485	0.415	0.478	0.483	0.480	0.379	0.457	0.441	0.361
29 Stephen Street, Des Plaines River	0.486	0.514	0.543	0.429	0.461	0.525	0.498	0.391	0.446	0.419	0.398
91 Material Service Road, Des Plaines River	0.490	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-60

TOTAL ORGANIC CARBON MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	7.00	ND	ND	ND	10.75	8.56	8.00	16.56	11.33	13.17	19.83
31 Lake-Cook Road, Middle Fork North Branch	12.40	13.36	11.67	11.40	15.25	10.70	10.90	10.83	11.73	16.00	22.36
32 Lake-Cook Road, Skokie River	12.30	11.27	13.83	12.80	13.75	10.89	11.00	9.83	10.82	16.30	22.33
34 Dempster Street, North Branch Chicago River	10.73	9.82	11.58	12.82	12.83	8.90	9.27	9.17	9.83	13.17	19.00
96 Albany Avenue, North Branch Chicago River	8.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	5.67	6.30	7.00	7.70	9.11	5.00	4.25	4.33	4.91	6.45	15.45
36 Touhy Avenue, North Shore Channel	10.58	9.92	9.08	14.00	11.92	8.17	8.73	8.18	9.25	10.50	13.25
37 Wilson Avenue, North Branch Chicago River	10.17	9.08	9.25	11.92	13.00	8.25	8.08	9.25	10.37	11.50	13.50
73 Diversey Parkway, North Branch Chicago River	10.33	9.25	9.17	13.25	12.08	8.42	8.33	8.58	9.17	11.83	11.67
46 Grand Avenue, North Branch Chicago River	9.92	8.83	9.00	10.36	12.17	9.00	8.91	11.17	9.25	9.42	14.33
74 Lake Shore Drive, Chicago River	6.58	4.91	5.17	7.91	6.27	4.70	4.20	4.25	5.25	6.67	9.33
39 Madison Street, South Branch Chicago River	9.08	8.00	7.33	7.82	9.92	6.00	8.40	7.42	7.00	10.18	14.42
40 Damen Avenue, Chicago Sanitary & Ship Canal	12.78	8.00	7.83	10.67	10.50	7.00	6.75	7.33	7.75	9.58	13.58
75 Cicero Avenue, Chicago Sanitary & Ship Canal	8.58	7.25	10.33	9.45	10.67	7.00	6.92	7.17	7.42	10.00	13.75
41 Harlem Avenue, Chicago Sanitary & Ship Canal	9.75	8.45	13.67	11.18	12.17	7.67	8.25	8.58	8.83	10.83	14.82
42 Route 83, Chicago Sanitary & Ship Canal	12.55	8.83	11.83	15.00	12.33	7.83	8.80	8.67	8.83	11.58	14.17
48 Stephen Street, Chicago Sanitary & Ship Canal	10.09	9.36	12.08	11.82	12.25	9.00	9.00	9.58	9.58	12.75	12.42
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	9.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	6.67	4.00	4.39	7.32	6.67	4.91	4.36	4.33	5.90	ND	6.00
50 Burnham Avenue, Wolf Lake	6.92	6.42	6.67	8.25	8.67	7.33	8.25	7.42	8.50	8.42	8.83
55 130th Street, Calumet River	6.27	5.61	5.61	7.43	6.87	5.45	5.00	5.58	6.25	6.18	8.50
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	14.18	12.18	11.17	18.25	19.45	14.31	15.33	13.33	15.42	14.17	19.25
56 Indiana Avenue, Little Calumet River	7.67	6.68	6.73	11.24	9.27	6.91	7.73	8.33	7.83	8.25	10.00
76 Halsted Street, Little Calumet River	10.92	9.26	9.13	13.52	13.75	9.42	9.72	10.00	10.92	13.83	13.33
52 Wentworth Avenue, Little Calumet River	12.82	11.64	11.75	18.25	15.44	11.10	11.09	11.42	12.75	12.50	14.58
54 Joe Orr Road, Thorn Creek	12.75	10.25	11.17	13.50	16.17	12.00	11.92	12.08	12.17	11.00	14.58
57 Ashland Avenue, Little Calumet River	12.73	11.09	10.08	13.42	14.44	10.55	11.00	10.91	12.25	12.18	15.00
58 Ashland Avenue, Cal-Sag Channel	11.58	9.42	8.67	14.47	11.94	9.64	9.33	9.75	11.25	11.50	12.83
59 Cicero Avenue, Cal-Sag Channel	11.50	9.74	10.00	13.38	12.75	11.08	10.42	10.25	11.33	11.83	12.83
43 Route 83, Cal-Sag Channel	17.25	9.37	9.65	12.29	11.88	11.08	10.00	10.00	10.75	11.00	12.67
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	12.29	8.70	9.90	10.88	13.73	11.40	10.27	10.82	10.91	15.27	11.83
63 Longmeadow Lane, West Branch Du Page River	13.78	12.67	14.43	14.40	15.18	12.00	13.30	12.83	14.00	12.82	14.82
89 Walnut Lane, West Branch Du Page River	12.75	11.45	14.09	12.36	14.17	11.00	11.75	11.75	11.83	15.08	13.42
64 Lake Street, West Branch Du Page River	12.64	10.73	12.00	12.73	13.36	10.75	11.82	11.58	12.00	15.08	14.00
79 Higgins Road, Salt Creek	11.40	10.50	11.22	12.10	15.60	10.80	10.90	9.73	20.36	12.40	11.64
80 Arlington Heights Road, Salt Creek	10.67	9.82	11.00	12.27	13.58	10.50	9.90	9.92	10.58	12.83	11.58
18 Devon Avenue, Salt Creek	10.58	9.91	10.82	12.55	14.09	10.08	9.92	10.00	10.67	9.92	11.75
24 Wolf Road, Salt Creek	10.80	8.64	10.50	10.09	13.33	9.75	9.55	9.33	10.17	9.92	11.25
21 First Avenue, Salt Creek	10.10	8.27	10.00	9.90	12.67	9.42	9.55	8.83	10.18	11.42	11.50
77 Elmhurst Road, Higgins Creek	11.80	10.82	11.00	11.00	14.50	10.50	11.09	8.58	10.55	11.18	15.00
78 Wille Road, Higgins Creek	12.08	10.18	12.00	12.82	13.00	11.25	10.73	10.17	10.58	12.00	11.50
12 Lake-Cook Road, Buffalo Creek	11.90	10.00	12.30	12.20	15.17	11.92	11.10	11.67	11.50	15.33	13.33
13 Lake-Cook Road, Des Plaines River	11.17	9.73	11.00	12.80	13.33	11.67	10.44	10.50	12.00	13.33	13.17
17 Oakton Street, Des Plaines River	11.40	9.82	10.82	12.80	13.50	11.00	9.67	10.00	11.64	12.58	12.75
19 Belmont Avenue, Des Plaines River	11.10	9.55	11.18	11.73	14.00	10.75	10.83	10.00	11.92	12.42	13.67
20 Roosevelt Road, Des Plaines River	11.20	9.91	11.36	11.91	14.17	11.08	10.92	9.75	13.08	13.42	12.92
22 Ogden Avenue, Des Plaines River	10.80	9.73	10.82	12.36	14.23	10.50	10.18	9.83	11.08	13.00	12.92
23 Willow Springs Road, Des Plaines River	10.40	9.27	10.55	12.10	11.91	9.91	10.64	9.33	10.67	13.42	12.42
29 Stephen Street, Des Plaines River	9.60	9.09	11.36	13.45	13.58	10.55	10.45	9.58	10.42	13.00	11.75
91 Material Service Road, Des Plaines River	11.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-61

FECAL COLIFORM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Geometric Means (#/100 ml)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	4000	ND	ND	ND	2228	2476	3098	3103	670	221	590
31 Lake-Cook Road, Middle Fork North Branch	1050	1697	1210	2139	1556	1815	2089	1799	1433	2756	1312
32 Lake-Cook Road, Skokie River	1131	1919	1718	2903	2578	6993	8480	25862	5746	11391	7493
34 Dempster Street, North Branch Chicago River	1484	1498	878	769	1851	1507	1083	1459	1329	807	948
96 Albany Avenue, North Branch Chicago River	4238	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	270	130	241	88	366	642	107	200	32	116	1374
36 Touhy Avenue, North Shore Channel	9424	7866	6963	10671	12203	11261	12771	7266	10352	10058	15866
37 Wilson Avenue, North Branch Chicago River	7677	7686	7000	7034	7007	10755	10780	7966	12231	11722	17764
73 Diversey Parkway, North Branch Chicago River	5539	4607	3796	4454	4773	5378	8197	8528	8180	10083	15323
46 Grand Avenue, North Branch Chicago River	1715	1522	1636	3288	1711	2413	2986	5927	3029	2039	4257
74 Lake Shore Drive, Chicago River	91	23	62	37	38	59	54	47	34	19	48
39 Madison Street, South Branch Chicago River	1090	642	800	838	380	1491	1110	2188	1279	712	2887
40 Damen Avenue, Chicago Sanitary & Ship Canal	160	282	510	543	441	1444	369	1169	1307	538	1694
75 Cicero Avenue, Chicago Sanitary & Ship Canal	154	327	352	245	481	1037	352	1053	1317	302	901
41 Harlem Avenue, Chicago Sanitary & Ship Canal	5043	4970	5427	5730	5361	3750	3231	8150	5962	4330	5955
42 Route 83, Chicago Sanitary & Ship Canal	1046	886	1300	1941	951	1815	1407	1520	1716	732	888
48 Stephen Street, Chicago Sanitary & Ship Canal	537	781	849	867	948	1160	1154	1197	2379	1022	1021
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	256	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	18	12	27	13	21	49	66	36	12	ND	10
50 Burnham Avenue, Wolf Lake	24	15	13	18	9	13	18	15	16	35	19
55 130th Street, Calumet River	53	23	26	30	47	54	118	40	17	37	58
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	3323	4100	4325	1849	3383	3551	2874	3904	2431	11975	6460
56 Indiana Avenue, Little Calumet River	124	55	130	78	167	120	192	265	75	293	193
76 Halsted Street, Little Calumet River	4774	3792	3747	2927	7302	4806	6861	7964	6254	10473	10326
52 Wentworth Avenue, Little Calumet River	3501	1701	2033	1402	1242	1264	1416	4149	2452	9966	3777
54 Joe Orr Road, Thorn Creek	2617	2173	1132	6513	3287	3992	2555	3651	7213	24375	2580
57 Ashland Avenue, Little Calumet River	3088	5189	1724	2531	1683	1328	2040	3258	759	3678	2406
58 Ashland Avenue, Cal-Sag Channel	3170	2660	2220	4858	4189	6904	4932	5363	4224	7368	8342
59 Cicero Avenue, Cal-Sag Channel	656	673	749	2165	2823	1964	3140	2911	2848	4999	5249
43 Route 83, Cal-Sag Channel	79	87	201	227	654	466	629	1054	437	1852	1059
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	948	146	136	355	388	776	410	417	125	198	126
63 Longmeadow Lane, West Branch Du Page River	2538	386	603	1624	6965	1113	1478	1575	445	604	902
89 Walnut Lane, West Branch Du Page River	1943	590	666	1816	7295	1903	2319	2612	518	881	373
64 Lake Street, West Branch Du Page River	1889	658	1083	1564	6738	1730	3409	3522	973	1696	465
79 Higgins Road, Salt Creek	305	45	52	97	307	69	112	1041	138	298	136
80 Arlington Heights Road, Salt Creek	623	265	260	725	632	1050	552	490	640	465	354
18 Devon Avenue, Salt Creek	807	687	1154	845	2137	1431	2030	1248	894	1235	489
24 Wolf Road, Salt Creek	1109	468	1038	2552	2257	2166	1198	2655	705	1924	574
21 First Avenue, Salt Creek	1459	1320	653	1211	2706	1070	1282	7453	1341	6146	2575
77 Elmhurst Road, Higgins Creek	636	369	267	498	2404	1333	1016	795	120	1142	265
78 Wille Road, Higgins Creek	536	223	181	489	1019	399	804	858	100	437	244
12 Lake-Cook Road, Buffalo Creek	279	230	186	504	722	402	718	301	97	360	147
13 Lake-Cook Road, Des Plaines River	440	350	392	735	945	698	637	780	82	384	260
17 Oakton Steet, Des Plaines River	915	765	360	876	1652	613	894	1377	208	1054	307
19 Belmont Avenue, Des Plaines River	734	1210	574	1780	4059	3442	2511	3047	963	8629	896
20 Roosevelt Road, Des Plaines River	790	1224	725	1979	3175	3101	1762	5012	1178	4915	3309
22 Ogden Avenue, Des Plaines River	1121	609	538	1722	4029	1666	848	5337	1162	3199	2355
23 Willow Springs Road, Des Plaines River	835	367	423	533	1020	458	696	2856	678	1786	1430
29 Stephen Street, Des Plaines River	528	270	241	921	405	305	325	2006	335	633	845
91 Material Service Road, Des Plaines River	295	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-62

TOTAL CALCIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	80.3	ND	ND	ND	71.0	61.3	127.0	82.1	74.8	65.7	71.5
31	Lake-Cook Road, Middle Fork North Branch	66.0	69.1	71.3	65.5	73.1	62.6	76.6	70.6	75.6	69.8	70.8
32	Lake-Cook Road, Skokie River	73.1	70.0	82.2	76.6	83.8	64.9	79.8	79.2	79.5	74.6	78.5
34	Dempster Street, North Branch Chicago River	63.8	64.7	69.0	70.2	71.5	62.2	72.8	65.5	74.8	68.3	66.5
96	Albany Avenue, North Branch Chicago River	56.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	43.4	43.4	45.1	42.6	48.2	39.6	39.0	39.3	37.5	37.2	49.9
36	Touhy Avenue, North Shore Channel	52.9	56.5	58.7	55.3	56.0	55.7	59.0	55.2	53.1	52.1	56.2
37	Wilson Avenue, North Branch Chicago River	55.6	57.8	62.8	58.6	59.8	58.4	60.6	58.9	55.8	53.1	56.0
73	Diversey Parkway, North Branch Chicago River	54.9	58.5	62.5	58.2	61.1	58.0	61.5	57.6	57.4	56.4	57.2
46	Grand Avenue, North Branch Chicago River	55.4	56.5	61.9	57.4	58.2	62.2	61.3	55.9	57.8	53.8	55.7
74	Lake Shore Drive, Chicago River	44.2	39.9	41.1	39.3	40.7	37.2	39.8	37.1	37.5	37.4	40.5
39	Madison Street, South Branch Chicago River	53.3	55.7	54.3	48.5	52.1	45.2	50.2	48.8	47.6	48.0	54.1
40	Damen Avenue, Chicago Sanitary & Ship Canal	53.0	56.5	55.0	51.7	52.4	44.8	53.8	50.5	48.4	48.3	53.4
75	Cicero Avenue, Chicago Sanitary & Ship Canal	53.3	54.4	52.8	52.6	50.7	48.5	54.6	49.8	47.2	50.4	53.3
41	Harlem Avenue, Chicago Sanitary & Ship Canal	54.3	56.8	56.1	56.0	54.0	53.3	59.3	50.2	55.7	52.0	57.9
42	Route 83, Chicago Sanitary & Ship Canal	53.6	54.9	56.1	56.9	56.6	54.3	63.0	55.2	53.4	54.3	56.8
48	Stephen Street, Chicago Sanitary & Ship Canal	58.5	57.4	57.8	61.5	60.2	57.0	63.7	59.0	58.6	60.4	60.4
82	Lockport Trebley, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	65.2	66.5	84.8	68.6	66.1	55.7
92	Lockport Forebay, Chicago Sanitary & Ship Canal	57.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	39.7	39.5	39.0	38.6	40.7	38.9	41.1	37.8	35.1	ND	43.0
50	Burnham Avenue, Wolf Lake	34.3	32.5	35.8	38.2	37.3	33.9	42.8	35.5	38.0	35.3	33.9
55	130th Street, Calumet River	44.9	43.4	43.9	44.8	45.7	43.9	45.8	46.1	44.4	47.5	50.2
51	IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	73.3	71.0	73.4	75.0	96.7	84.1	88.0	82.8	86.4	82.9	78.4
56	Indiana Avenue, Little Calumet River	49.7	50.4	54.2	55.3	53.9	52.2	57.2	62.1	52.4	59.2	54.7
76	Halsted Street, Little Calumet River	63.6	62.1	63.7	66.8	70.3	68.8	71.7	73.7	69.2	71.3	70.9
52	Wentworth Avenue, Little Calumet River	85.9	75.0	80.5	88.5	97.3	82.0	101.1	96.8	103.8	80.3	89.6
54	Joe Orr Road, Thorn Creek	72.8	75.6	76.9	80.0	84.1	81.3	87.8	84.0	83.8	79.4	77.8
57	Ashland Avenue, Little Calumet River	84.5	75.2	72.8	81.9	91.1	86.5	89.2	81.4	92.8	77.3	85.0
58	Ashland Avenue, Cal-Sag Channel	67.1	64.0	61.0	68.7	71.3	70.9	70.9	74.0	76.7	71.3	72.7
59	Cicero Avenue, Cal-Sag Channel	68.1	65.2	66.6	68.8	73.1	73.8	69.2	75.1	74.0	67.6	71.8
43	Route 81, Cal-Sag Channel	70.4	66.1	65.7	70.5	72.1	70.6	73.2	75.8	71.8	67.3	70.8
<u>Des Plaines River System</u>												
90	Route 18, Poplar Creek	64.8	74.1	80.4	70.6	78.2	79.4	80.5	69.8	80.9	72.5	77.7
63	Longmeadow Lane, West Branch Du Page River	63.8	76.9	76.9	79.3	65.6	84.4	76.8	74.6	81.2	61.0	78.6
89	Walnut Lane, West Branch Du Page River	59.3	61.9	61.2	60.0	59.9	67.3	69.4	67.0	67.3	58.2	68.1
64	Lake Street, West Branch Du Page River	59.9	60.9	65.3	63.8	63.1	68.1	69.3	63.7	69.3	63.6	72.0
79	Higgins Road, Salt Creek	65.9	60.0	69.6	65.1	70.8	74.5	77.7	68.6	75.8	60.0	65.1
80	Arlington Heights Road, Salt Creek	59.4	58.4	63.1	63.7	67.6	68.8	69.5	63.8	69.1	65.8	65.3
18	Devon Avenue, Salt Creek	58.8	60.1	63.7	67.2	66.1	68.3	66.8	62.8	69.0	66.2	65.8
24	Wolf Road, Salt Creek	67.7	66.9	85.3	69.0	77.9	76.8	76.5	71.0	80.8	78.5	80.7
21	First Avenue, Salt Creek	65.5	65.1	75.8	68.0	75.3	76.8	74.5	66.5	82.3	77.6	80.9
77	Elmhurst Road, Higgins Creek	62.4	67.5	79.4	66.5	68.8	75.4	74.4	61.6	83.2	57.1	67.6
78	Wills Road, Higgins Creek	67.6	72.3	80.1	73.6	74.3	74.2	70.9	70.7	79.8	67.7	74.1
12	Lake-Cook Road, Buffalo Creek	71.3	70.5	75.2	73.5	75.5	82.1	86.8	76.2	82.7	72.5	81.4
13	Lake-Cook Road, Des Plaines River	67.3	60.5	73.9	70.7	75.5	78.3	83.3	69.5	77.8	77.5	79.3
17	Oakton Street, Des Plaines River	67.1	63.7	76.4	70.0	77.1	75.3	70.3	67.2	76.8	71.7	73.3
19	Belmont Avenue, Des Plaines River	65.5	62.1	73.4	71.4	75.3	79.5	140.5	65.4	79.1	71.0	74.8
20	Roosevelt Road, Des Plaines River	64.2	61.5	73.6	72.0	76.3	76.7	75.0	64.5	79.0	69.8	75.8
22	Ogden Avenue, Des Plaines River	65.2	63.6	74.1	70.8	76.0	79.3	73.2	65.1	75.8	73.3	75.2
23	Willow Springs Road, Des Plaines River	66.0	62.6	74.2	70.9	76.0	76.5	70.6	65.2	78.8	75.3	76.3
29	Stephen Street, Des Plaines River	67.2	63.1	75.1	75.3	77.3	75.4	73.9	70.7	79.8	76.1	75.9
91	Material Service Road, Des Plaines River	69.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-63

TOTAL MAGNESIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	32.8	ND	ND	ND	29.0	24.9	46.0	44.1	32.4	27.2	28.1
31 Lake-Cook Road, Middle Fork North Branch	30.0	31.6	33.3	30.8	33.5	28.1	29.3	30.8	34.5	28.2	29.5
32 Lake-Cook Road, Skokie River	32.8	31.4	37.8	35.2	39.3	26.6	32.4	36.8	36.5	31.8	30.5
34 Dempster Street, North Branch Chicago River	27.9	27.8	31.9	31.7	30.7	26.7	27.9	27.4	33.7	28.5	27.7
96 Albany Avenue, North Branch Chicago River	23.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	15.7	15.4	14.9	14.4	15.9	13.6	11.3	12.0	12.2	11.7	16.6
36 Touhy Avenue, North Shore Channel	19.3	19.9	21.8	20.3	19.8	19.2	18.3	19.3	17.8	17.8	18.8
37 Wilson Avenue, North Branch Chicago River	21.0	21.5	24.9	22.3	22.0	20.9	19.6	21.4	20.3	18.7	19.2
73 Diversey Parkway, North Branch Chicago River	20.8	21.6	24.4	21.7	22.5	20.8	19.5	20.5	21.2	19.5	19.8
46 Grand Avenue, North Branch Chicago River	20.9	20.9	24.2	21.5	21.2	22.1	19.4	20.5	19.6	19.4	19.0
74 Lake Shore Drive, Chicago River	15.7	13.4	14.3	12.9	13.6	11.8	11.7	12.2	12.2	11.6	12.4
39 Madison Street, South Branch Chicago River	19.4	20.5	20.7	17.4	18.3	15.8	14.0	17.8	15.8	16.5	19.1
40 Damen Avenue, Chicago Sanitary & Ship Canal	20.0	21.3	21.4	18.5	18.7	16.0	16.5	18.5	16.8	16.4	18.0
75 Cicero Avenue, Chicago Sanitary & Ship Canal	19.7	20.3	20.0	18.7	17.8	16.8	16.5	18.3	16.5	17.1	18.1
41 Harlem Avenue, Chicago Sanitary & Ship Canal	20.1	21.0	21.8	20.1	19.3	18.7	17.5	18.6	18.8	18.0	19.8
42 Route 83, Chicago Sanitary & Ship Canal	19.8	20.2	21.5	20.4	20.1	19.0	19.8	19.9	18.4	19.2	19.4
48 Stephen Street, Chicago Sanitary & Ship Canal	21.9	21.2	22.4	22.6	21.6	19.7	20.8	23.3	20.4	21.5	20.3
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	24.8	25.1	27.1	21.5	20.1	19.9
92 Lockport Forebay, Chicago Sanitary & Ship Canal	21.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	13.1	13.4	13.4	12.9	13.2	12.1	13.1	11.9	11.4	ND	12.0
50 Burnham Avenue, Wolf Lake	13.0	13.2	13.3	12.9	13.0	11.6	13.0	11.9	12.3	11.8	11.3
55 130th Street, Calumet River	15.5	15.0	14.9	15.4	14.6	13.5	13.5	15.8	14.6	15.5	17.2
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	57.7	54.5	59.8	51.2	69.4	77.3	80.8	52.6	55.3	60.6	48.4
56 Indiana Avenue, Little Calumet River	22.3	21.6	27.8	26.5	24.0	23.1	28.0	29.4	22.4	25.9	20.5
76 Halsted Street, Little Calumet River	23.4	22.4	25.7	25.6	24.0	23.5	25.0	26.8	23.8	25.5	23.3
52 Wentworth Avenue, Little Calumet River	35.3	40.1	34.0	36.8	38.2	32.0	38.5	36.2	42.2	30.8	35.3
54 Joe Orr Road, Thorn Creek	34.2	36.3	36.0	36.8	38.2	36.5	35.8	36.3	37.0	32.8	31.7
57 Ashland Avenue, Little Calumet River	38.8	33.8	32.2	36.5	40.1	36.0	36.0	33.1	41.6	31.9	34.5
58 Ashland Avenue, Cal-Sag Channel	26.0	24.5	24.3	26.5	25.9	25.0	26.6	29.1	25.3	26.2	24.8
59 Cicero Avenue, Cal-Sag Channel	26.4	24.8	26.8	26.8	26.5	25.8	25.3	28.9	27.0	25.0	24.8
43 Route 83, Cal-Sag Channel	26.9	25.4	26.9	28.0	26.4	24.6	26.8	28.8	27.4	24.7	24.3
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	31.3	36.5	37.9	31.8	35.0	35.3	32.0	30.1	37.4	32.2	32.5
63 Longmeadow Lane, West Branch Du Page River	24.1	51.0	31.1	30.9	23.3	31.8	25.7	25.8	33.0	22.2	28.8
89 Walnut Lane, West Branch Du Page River	23.7	24.7	23.2	23.3	22.2	24.9	22.1	24.8	26.3	21.7	25.3
64 Lake Street, West Branch Du Page River	23.6	24.0	25.2	25.6	23.5	25.5	22.1	23.2	26.5	23.7	27.2
79 Higgins Road, Salt Creek	28.9	27.8	30.6	28.9	30.1	31.7	29.5	27.8	33.2	24.4	26.5
80 Arlington Heights Road, Salt Creek	24.1	23.5	25.1	26.1	26.6	26.1	24.2	24.3	27.3	25.1	25.0
18 Devon Avenue, Salt Creek	23.6	24.1	25.8	27.7	25.8	25.8	22.9	24.7	28.1	26.1	25.1
24 Wolf Road, Salt Creek	28.3	28.7	34.2	28.8	30.9	29.9	26.2	28.8	31.9	30.6	31.4
21 First Avenue, Salt Creek	27.7	28.0	32.0	29.2	29.9	30.8	24.5	26.5	33.1	30.1	31.4
77 Elmhurst Road, Higgins Creek	22.9	28.5	33.7	26.8	26.8	30.9	22.5	23.6	31.3	21.9	25.6
78 Wille Road, Higgins Creek	25.8	28.2	29.5	28.6	28.7	27.8	21.8	26.8	28.8	24.4	26.8
12 Lake-Cook Road, Buffalo Creek	33.2	34.5	34.4	34.9	34.0	37.9	33.9	34.2	38.3	33.3	34.8
13 Lake-Cook Road, Des Plaines River	31.6	27.7	33.4	32.8	34.0	35.2	31.6	30.7	36.7	33.5	34.2
17 Oakton Street, Des Plaines River	30.7	28.6	34.8	32.4	33.9	34.1	27.0	30.3	34.9	31.0	31.6
19 Belmont Avenue, Des Plaines River	29.7	27.6	33.1	32.1	32.7	33.8	53.3	28.3	34.1	28.3	31.8
20 Roosevelt Road, Des Plaines River	29.3	27.6	34.2	32.3	33.3	33.1	27.3	27.4	34.5	29.8	32.2
22 Ogden Avenue, Des Plaines River	29.1	28.4	32.7	31.0	32.8	33.3	25.8	27.8	33.4	29.4	31.3
23 Willow Springs Road, Des Plaines River	29.7	28.3	33.4	32.0	33.0	33.5	25.8	27.5	33.8	30.7	31.7
29 Stephen Street, Des Plaines River	30.0	28.0	33.8	33.3	32.9	31.4	27.0	29.7	34.5	31.0	31.3
91 Material Service Road, Des Plaines River	31.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-64

HARDNESS MEAN HISTORY THROUGH 2000

Sampling Station No. Name		Annual Means (mg/L)										
		00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	Lake-Cook Road, West Fork North Branch	335	ND	ND	ND	297	256	507	387	320	276	294
31	Lake-Cook Road, Middle Fork North Branch	288	303	315	290	321	272	312	303	331	290	298
32	Lake-Cook Road, Skokie River	318	304	361	336	371	272	333	349	349	317	322
34	Dempster Street, North Branch Chicago River	274	276	304	306	305	265	297	276	325	288	280
96	Albany Avenue, North Branch Chicago River	237	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	Central Street, North Shore Channel	173	172	174	166	186	155	144	147	144	141	193
36	Touhy Avenue, North Shore Channel	211	223	236	221	222	218	223	217	206	203	218
37	Wilson Avenue, North Branch Chicago River	225	233	260	238	240	232	232	235	223	209	219
73	Diversey Parkway, North Branch Chicago River	223	235	257	234	245	230	234	228	231	221	224
46	Grand Avenue, North Branch Chicago River	224	227	254	232	232	247	233	224	225	219	217
74	Lake Shore Drive, Chicago River	175	155	162	151	158	142	148	143	144	141	152
39	Madison Street, South Branch Chicago River	213	223	221	192	205	178	183	195	184	188	214
40	Damen Avenue, Chicago Sanitary & Ship Canal	214	229	226	205	208	178	202	202	190	168	208
75	Cicero Avenue, Chicago Sanitary & Ship Canal	214	219	214	208	200	190	204	200	186	196	208
41	Harlem Avenue, Chicago Sanitary & Ship Canal	218	228	230	223	214	210	220	202	217	204	226
42	Route 83, Chicago Sanitary & Ship Canal	215	220	229	226	224	214	239	220	209	214	222
48	Stephen Street, Chicago Sanitary & Ship Canal	236	230	237	247	239	223	245	243	230	239	235
82	Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	265	269	323	ND	ND	ND
92	Lockport Forebay, Chicago Sanitary & Ship Canal	233	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>												
49	Ewing Avenue, Calumet River	153	154	153	150	156	147	152	143	135	ND	157
50	Burnham Avenue, Wolf Lake	139	136	144	148	147	132	160	138	145	137	131
55	130th Street, Calumet River	176	170	171	175	174	165	170	180	171	183	196
51	INB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86	Burnham Avenue, Grand Calumet River	421	402	430	398	527	528	553	423	443	457	395
56	Indiana Avenue, Little Calumet River	216	215	250	247	233	225	258	276	253	254	221
76	Halsted Street, Little Calumet River	255	247	265	272	274	269	282	294	271	283	273
52	Wentworth Avenue, Little Calumet River	360	352	341	372	400	337	411	376	433	327	369
54	Joe Orr Road, Thorn Creek	323	338	340	351	367	353	366	359	359	324	325
57	Ashland Avenue, Little Calumet River	371	327	314	355	393	364	371	339	410	324	354
58	Ashland Avenue, Cal-Sag Channel	275	261	252	281	285	280	287	305	281	286	284
59	Cicero Avenue, Cal-Sag Channel	279	265	276	282	292	291	277	307	296	272	281
43	Route 83, Cal-Sag Channel	286	270	275	291	289	277	293	308	292	269	277
<u>Des Plaines River System</u>												
90	Route 19, Poplar Creek	291	335	357	307	339	344	333	298	356	314	328
63	Longmeadow Lane, West Branch Du Page River	258	402	320	325	260	342	298	293	344	344	315
89	Walnut Lane, West Branch Du Page River	246	256	248	246	241	271	264	269	277	234	274
64	Lake Street, West Branch Du Page River	247	251	267	265	254	275	264	254	282	256	192
79	Higgins Road, Salt Creek	284	264	300	282	301	317	315	286	338	250	271
80	Arlington Heights Road, Salt Creek	248	242	261	266	278	279	273	259	285	268	266
18	Devon Avenue, Salt Creek	244	249	265	282	271	277	261	258	288	273	268
24	Wolf Road, Salt Creek	286	285	354	291	322	315	299	296	333	322	331
21	First Avenue, Salt Creek	277	278	321	290	311	318	287	275	342	318	331
77	Elmhurst Road, Higgins Creek	250	286	337	276	282	316	278	251	329	233	274
78	Wille Road, Higgins Creek	275	297	321	301	303	300	267	287	317	269	295
12	Lake-Cook Road, Buffalo Creek	315	318	329	337	329	361	356	331	364	318	346
13	Lake-Cook Road, Des Plaines River	298	265	322	312	329	340	338	300	345	331	319
17	Oakton Street, Des Plaines River	294	277	334	308	332	328	287	293	336	307	313
19	Belmont Avenue, Des Plaines River	286	269	320	310	323	338	570	280	338	294	318
20	Roosevelt Road, Des Plaines River	281	267	324	313	328	328	299	274	339	297	322
22	Ogden Avenue, Des Plaines River	282	276	320	304	325	335	289	277	327	304	316
23	Willow Springs Road, Des Plaines River	287	273	323	309	326	329	283	276	326	314	321
29	Stephen Street, Des Plaines River	291	273	326	325	329	318	296	299	341	318	319
91	Material Service Road, Des Plaines River	301	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-65

GROSS ALPHA RADIOACTIVITY MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (pCi/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	0.93	1.30	1.38
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	1.27	1.27	1.16
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	0.98	1.11	1.04
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.86	0.75	0.95
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	4.23	3.40	ND	2.44	3.55	0.20	0.05	0.24	0.17	0.26	0.65
36 Touhy Avenue, North Shore Channel	4.21	3.49	ND	3.09	3.13	0.28	0.29	0.26	0.14	0.33	0.37
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.43	0.25	0.59
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.34	0.42	0.58
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.37	0.35	0.50
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.17	0.29	0.38
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	0.32	0.36	0.39
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	0.40	0.28	0.51
75 Cicero Avenue, Chicago Sanitary & Ship Canal	4.22	3.96	ND	2.90	2.94	0.31	0.26	0.36	0.37	0.29	0.58
41 Harlem Avenue, Chicago Sanitary & Ship Canal	4.26	3.64	ND	3.07	3.12	0.31	0.32	0.34	0.34	0.27	0.42
42 Route 83, Chicago Sanitary & Ship Canal	4.36	3.57	ND	3.31	3.47	0.22	0.23	0.63	0.38	0.26	0.52
48 Stephen Street, Chicago Sanitary & Ship Canal	4.25	3.53	ND	3.06	3.35	0.49	0.34	0.49	0.45	0.41	0.74
82 Lockport Trebler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	4.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	0.43
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	0.33	0.27	0.76
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.32	0.43	0.30
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.86	0.53	0.33
56 Indiana Avenue, Little Calumet River	4.30	3.51	ND	2.95	3.09	0.36	0.72	0.56	0.32	0.62	0.57
76 Halsted Street, Little Calumet River	4.39	3.70	ND	3.17	2.43	0.36	0.42	0.44	0.37	0.63	0.58
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	2.08	1.84	1.07
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.21	0.68	0.65
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	0.87	1.86	1.03
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	0.49	1.40	0.66
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	0.41	1.45	0.73
43 Route 83, Cal-Sag Channel	4.41	3.62	ND	3.59	3.32	0.38	0.79	1.07	0.53	1.27	1.71
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	0.65	0.86	0.79
63 Longmeadow Lane, West Branch Du Page River	4.21	4.14	ND	4.15	5.07	2.07	0.81	1.96	1.41	1.17	1.55
89 Walnut Lane, West Branch Du Page River	4.13	3.59	ND	3.87	3.53	0.51	0.50	0.72	0.55	0.71	0.53
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	0.94	0.81	0.38
79 Higgins Road, Salt Creek	4.37	3.64	ND	4.00	4.71	1.16	0.91	1.25	1.11	1.43	1.38
80 Arlington Heights Road, Salt Creek	4.19	3.53	ND	4.04	3.55	0.39	0.64	0.64	0.63	0.69	0.87
18 Devon Avenue, Salt Creek	ND	ND	ND	2.79	ND	ND	ND	ND	0.88	0.69	0.81
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	1.25	1.73	1.33
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	1.24	1.76	1.30
77 Elmhurst Road, Higgins Creek	4.42	3.77	ND	4.37	4.85	1.68	3.93	1.18	1.04	0.86	0.73
78 Wille Road, Higgins Creek	4.24	3.69	ND	3.42	3.69	0.72	0.71	0.62	0.35	0.50	0.59
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	1.14	1.46	1.64
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.88	1.02	1.01
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.78	1.14	1.01
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	1.03	0.91	1.02
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	0.96	0.89	1.01
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	1.07	1.20	1.08
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	1.02	1.11	1.19
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	1.42	1.26	1.15
91 Material Service Road, Des Plaines River	4.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-66

GROSS BETA RADIOACTIVITY MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (pCi/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	10.87	13.01	13.09
31 Lake-Cook Road, Middle Fork North Branch	ND	ND	ND	ND	ND	ND	ND	ND	7.64	8.44	8.41
32 Lake-Cook Road, Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	7.95	8.09	8.53
34 Dempster Street, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	9.70	8.09	8.31
96 Albany Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	6.67	5.97	ND	5.03	7.76	3.08	1.61	2.55	2.17	3.15	4.16
36 Touhy Avenue, North Shore Channel	11.30	8.46	ND	8.21	7.23	6.45	7.15	6.53	8.58	5.77	5.88
37 Wilson Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.35	5.94	6.20
73 Diversey Parkway, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.81	6.29	5.82
46 Grand Avenue, North Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	6.53	5.79	5.40
74 Lake Shore Drive, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	2.63	3.13	3.07
39 Madison Street, South Branch Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	4.48	5.09	5.14
40 Damen Avenue, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	5.21	5.11	5.58
75 Cicero Avenue, Chicago Sanitary & Ship Canal	9.05	7.36	ND	6.07	6.34	5.90	6.25	4.98	4.31	5.52	5.96
41 Harlem Avenue, Chicago Sanitary & Ship Canal	9.33	9.18	ND	6.93	6.57	7.16	7.71	6.33	5.52	6.01	5.64
42 Route #3, Chicago Sanitary & Ship Canal	9.04	9.32	ND	7.70	6.64	6.97	7.85	6.31	5.34	6.81	6.17
48 Stephen Street, Chicago Sanitary & Ship Canal	9.65	10.26	ND	7.06	7.22	7.34	8.32	7.83	7.34	7.19	7.73
82 Lockport Trebley, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	9.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	3.49	ND	5.44
50 Burnham Avenue, Wolf Lake	ND	ND	ND	ND	ND	ND	ND	ND	3.67	4.75	5.04
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	5.12	6.35	7.77
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	15.87	13.11	11.90
56 Indiana Avenue, Little Calumet River	7.59	7.07	ND	6.48	6.50	6.78	7.96	9.61	7.16	8.46	9.00
76 Halsted Street, Little Calumet River	10.27	9.25	ND	8.50	9.10	9.21	9.99	10.17	7.98	8.56	8.61
52 Wentworth Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	14.01	14.36	10.62
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND	12.03	11.40	10.53
57 Ashland Avenue, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	10.62	14.84	9.62
58 Ashland Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	8.82	12.25	9.43
59 Cicero Avenue, Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	8.66	12.01	10.25
43 Route #3, Cal-Sag Channel	9.40	8.97	ND	8.74	7.89	9.39	10.21	10.67	8.85	11.57	10.02
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	6.46	6.45	6.63
63 Longmeadow Lane, West Branch Du Page River	7.30	8.49	ND	8.53	8.86	11.98	9.12	7.43	10.43	7.99	9.58
89 Walnut Lane, West Branch Du Page River	9.61	10.64	ND	10.63	9.23	11.10	9.80	9.10	10.79	8.91	8.56
64 Lake Street, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	10.25	11.34	9.37
79 Higgins Road, Salt Creek	7.01	6.06	ND	7.21	8.02	8.41	9.52	7.92	8.67	8.21	7.50
80 Arlington Heights Road, Salt Creek	9.75	11.95	ND	8.84	7.79	9.91	10.02	7.34	9.01	8.36	7.76
18 Devon Avenue, Salt Creek	ND	ND	ND	11.00	ND	ND	ND	ND	10.05	8.60	8.67
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	13.25	15.68	12.19
21 First Avenue, Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	12.05	14.27	11.65
77 Elmhurst Road, Higgins Creek	7.37	7.18	ND	6.88	8.69	12.58	14.53	7.83	8.83	8.07	6.94
78 Willie Road, Higgins Creek	16.49	16.83	ND	13.15	9.28	15.08	14.52	9.82	11.61	10.96	9.41
12 Lake-Cook Road, Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	10.26	10.68	11.43
13 Lake-Cook Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	8.74	10.55	8.02
17 Oakton Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	10.59	10.53	8.70
19 Belmont Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	9.63	9.93	8.98
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	9.74	9.93	9.28
22 Ogden Avenue, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	10.54	12.77	9.33
23 Willow Springs Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	10.72	11.33	9.78
29 Stephen Street, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	10.27	11.79	10.09
91 Material Service Road, Des Plaines River	9.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-67

TOTAL SILVER MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.010	0.000	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.001	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.001	0.000	0.001	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.001	0.002	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.001	0.000	0.003	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.000	0.001	0.000	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.001	0.002	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.000	0.000	0.002	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.001	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.001	0.000	0.002	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.001	0.000	0.001	0.001	0.000	0.007	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.001	0.001	0.002	0.000	0.008	0.000	0.000	0.000	0.000	0.003
48 Stephen Street, Chicago Sanitary & Ship Canal	0.001	0.000	0.001	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.003
82 Lockport Trehler, Chicago Sanitary & Ship Canal	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.001	0.000	0.002	0.005	0.003	0.005	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.000	0.004	0.003	0.002	0.003	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.000	0.000	0.001	0.000	0.002	0.004	0.002	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.002	0.000	0.001	0.003	0.003	0.005	0.000	0.000	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.001	0.000	0.000	0.000	0.003	0.005	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.001	0.000	0.001	0.001	0.003	0.003	0.000	0.000	0.003	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.001	0.000	0.002	0.000	0.003	0.006	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.001	0.000	0.002	0.000	0.003	0.004	0.000	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.002	0.000	0.000	0.001	0.003	0.004	0.002	0.000	0.000	0.003	0.000
58 Ashland Avenue, Cal-Sag Channel	0.000	0.000	0.003	0.002	0.003	0.004	0.001	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.000	0.000	0.002	0.006	0.003	0.004	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.001	0.000	0.002	0.003	0.002	0.004	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.001	0.007	0.000	0.008	0.001	0.000	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.000	0.000	0.006	0.000	0.010	0.000	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.000	0.005	0.000	0.008	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.001	0.000	0.001	0.006	0.001	0.008	0.000	0.000	0.000	0.000	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.001	0.006	0.000	0.009	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.005	0.000	0.008	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.000	0.000	0.006	0.000	0.006	0.001	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	0.001	0.000	0.000	0.002	0.001	0.006	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.006	0.001	0.008	0.001	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.000	0.000	0.000	0.003	0.000	0.008	0.001	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.000	0.000	0.006	0.000	0.008	0.000	0.000	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.001	0.000	0.000	0.005	0.000	0.009	0.000	0.000	0.000	0.000	0.000
17 Oakton Steet, Des Plaines River	0.000	0.000	0.000	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.001	0.000	0.000	0.002	0.000	0.008	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.002	0.000	0.008	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.001	0.000	0.007	0.001	0.008	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.005	0.000	0.006	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.002	0.000	0.008	0.001	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-68

TOTAL ARSENIC MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.007	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversay Parkway, North Branch Chicago River	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82 Lockport Frebler, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.005	0.027	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.007	0.022	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.017	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.005	0.000	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	0.007	0.000	0.000	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.012	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-69

TOTAL BARIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.083	ND	ND	ND	0.038	0.030	0.050	0.067	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.041	0.039	0.040	0.039	0.041	0.043	0.010	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.042	0.040	0.044	0.044	0.046	0.046	0.022	0.000	0.000	0.000	0.025
34 Dempster Street, North Branch Chicago River	0.033	0.032	0.034	0.036	0.036	0.024	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.029	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.023	0.023	0.022	0.024	0.026	0.023	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.017	0.020	0.021	0.022	0.020	0.016	0.000	0.000	0.000	0.000	0.025
37 Wilson Avenue, North Branch Chicago River	0.021	0.022	0.040	0.023	0.023	0.016	0.000	0.000	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.020	0.048	0.023	0.023	0.023	0.017	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.021	0.021	0.023	0.025	0.023	0.013	0.000	0.000	0.000	0.000	0.033
74 Lake Shore Drive, Chicago River	0.023	0.020	0.021	0.022	0.022	0.018	0.000	0.000	0.000	0.000	0.025
39 Madison Street, South Branch Chicago River	0.022	0.024	0.024	0.023	0.023	0.027	0.000	0.000	0.000	0.000	0.033
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.019	0.024	0.025	0.023	0.024	0.024	0.000	0.000	0.000	0.000	0.025
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.023	0.023	0.023	0.023	0.023	0.016	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.018	0.019	0.020	0.022	0.021	0.014	0.000	0.000	0.000	0.000	0.045
42 Route 83, Chicago Sanitary & Ship Canal	0.017	0.018	0.019	0.024	0.021	0.014	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.020	0.018	0.020	0.023	0.024	0.014	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.027	0.032	0.036	0.039	0.032	0.031	0.025	0.034	0.009	0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Swing Avenue, Calumet River	0.022	0.024	0.019	0.022	0.023	0.019	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.024	0.024	0.028	0.028	0.028	0.022	0.008	0.000	0.000	0.000	0.025
55 130th Street, Calumet River	0.028	0.029	0.028	0.028	0.026	0.023	0.000	0.000	0.000	0.000	0.025
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.025	0.026	0.027	0.028	0.116	0.053	0.000	0.000	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.029	0.032	0.028	0.032	0.032	0.027	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.015	0.020	0.018	0.023	0.023	0.017	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.040	0.037	0.045	0.045	0.051	0.036	0.009	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.019	0.023	0.025	0.025	0.023	0.016	0.000	0.000	0.000	0.000	0.038
57 Ashland Avenue, Little Calumet River	0.034	0.033	0.036	0.037	0.038	0.030	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.022	0.023	0.021	0.032	0.027	0.022	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.021	0.023	0.024	0.027	0.028	0.020	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.024	0.024	0.026	0.025	0.031	0.020	0.000	0.000	0.000	0.000	0.025
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.053	0.102	0.063	0.071	0.085	0.067	0.018	0.000	0.000	0.000	0.033
63 Longmeadow Lane, West Branch Du Page River	0.044	0.045	0.049	0.056	0.055	0.061	0.000	0.000	0.000	0.000	0.055
89 Walnut Lane, West Branch Du Page River	0.023	0.025	0.023	0.022	0.031	0.035	0.008	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.035	0.032	0.032	0.035	0.038	0.047	0.000	0.000	0.000	0.000	0.075
79 Higgins Road, Salt Creek	0.040	0.042	0.044	0.045	0.050	0.055	0.020	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.026	0.023	0.023	0.029	0.030	0.021	0.000	0.000	0.000	0.000	0.042
18 Devon Avenue, Salt Creek	0.028	0.026	0.023	0.035	0.030	0.021	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.034	0.030	0.035	0.034	0.037	0.029	0.009	0.000	0.000	0.000	0.092
21 First Avenue, Salt Creek	0.033	0.030	0.033	0.034	0.035	0.030	0.000	0.000	0.000	0.000	0.058
77 Elmhurst Road, Higgins Creek	0.047	0.054	0.060	0.054	0.057	0.055	0.036	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.023	0.021	0.028	0.027	0.036	0.024	0.000	0.000	0.000	0.000	0.042
12 Lake-Cook Road, Buffalo Creek	0.046	0.048	0.046	0.048	0.053	0.054	0.030	0.017	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.036	0.060	0.037	0.036	0.037	0.033	0.011	0.000	0.000	0.000	0.033
17 Oakton Street, Des Plaines River	0.039	0.035	0.040	0.038	0.041	0.045	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.034	0.032	0.037	0.038	0.039	0.043	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.034	0.033	0.038	0.038	0.038	0.032	0.000	0.000	0.000	0.000	0.033
22 Ogden Avenue, Des Plaines River	0.034	0.032	0.035	0.039	0.036	0.033	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.031	0.060	0.036	0.038	0.037	0.034	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.034	0.059	0.038	0.038	0.038	0.029	0.000	0.000	0.000	0.000	0.033
91 Material Service Road, Des Plaines River	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-70

TOTAL BORON MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.208	ND	ND	ND	0.328	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0.134	0.132	0.113	0.133	0.164	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	0.161	0.125	0.155	0.188	0.199	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0.194	0.178	0.167	0.227	0.234	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0.243	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.050	0.015	0.039	0.064	0.117	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	0.233	0.208	0.215	0.274	0.233	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	0.201	0.188	0.180	0.243	0.233	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	0.205	0.193	0.175	0.227	0.233	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	0.214	0.189	0.181	0.223	0.230	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0.091	0.025	0.047	0.055	0.092	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	0.178	0.156	0.120	0.155	0.172	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.162	0.141	0.119	0.193	0.168	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.174	0.133	0.113	0.188	0.169	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.200	0.175	0.173	0.243	0.210	ND	ND	ND	ND	ND	ND
42 Route 93, Chicago Sanitary & Ship Canal	0.219	0.183	0.188	0.262	0.232	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0.247	0.197	0.185	0.280	0.229	ND	ND	ND	ND	ND	ND
82 Lockport Trestler, Chicago Sanitary & Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.224	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.033	0.002	0.053	0.092	0.100	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0.069	0.035	0.096	0.153	0.169	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	0.084	0.061	0.091	0.150	0.140	ND	ND	ND	ND	ND	ND
51 IHE Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.371	0.386	0.338	0.388	0.506	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	0.159	0.133	0.168	0.214	0.189	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	0.286	0.244	0.253	0.293	0.340	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0.276	0.235	0.238	0.345	0.296	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0.430	0.353	0.357	0.428	0.413	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0.321	0.267	0.259	0.421	0.329	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	0.280	0.227	0.260	0.332	0.261	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	0.277	0.230	0.257	0.298	0.279	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	0.250	0.235	0.243	0.298	0.283	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.059	0.012	0.058	0.143	0.158	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0.069	0.128	0.180	0.223	0.197	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0.285	0.311	0.328	0.393	0.339	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	0.203	0.238	0.266	0.309	0.296	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.086	0.071	0.092	0.169	0.186	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	0.207	0.225	0.233	0.278	0.279	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	0.195	0.213	0.218	0.257	0.269	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0.182	0.203	0.195	0.273	0.277	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	0.176	0.200	0.233	0.306	0.267	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0.083	0.124	0.148	0.202	0.237	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	0.367	0.376	0.373	0.436	0.404	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0.101	0.117	0.099	0.173	0.184	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.166	0.166	0.176	0.250	0.297	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	0.146	0.166	0.171	0.235	0.296	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0.176	0.215	0.208	0.271	0.238	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0.181	0.205	0.213	0.285	0.313	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0.178	0.201	0.213	0.321	0.308	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0.185	0.196	0.208	0.317	0.279	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	0.182	0.185	0.201	0.324	0.274	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	0.215	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-71

TOTAL CADMIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.001	0.040	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.001	0.004	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.000	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.000	0.000	0.001	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.000	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.008	0.003
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.001	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.001	0.001	0.001	0.000	0.003	0.002	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.001	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.000	0.000	0.003	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000
17 Oakton Steet, Des Plaines River	0.000	0.000	0.001	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-72

TOTAL COPPER MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
10 Lake-Cook Road, West Fork North Branch	0.035	ND	ND	ND	0.020	0.024	0.245	0.004	0.005	0.003	0.003
31 Lake-Cook Road, Middle Fork North Branch	0.011	0.003	0.007	0.007	0.003	0.012	0.001	0.003	0.001	0.000	0.000
32 Lake-Cook Road, Skokie River	0.011	0.004	0.007	0.005	0.006	0.013	0.001	0.002	0.003	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.011	0.003	0.008	0.008	0.005	0.012	0.002	0.002	0.001	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.007	0.001	0.004	0.004	0.002	0.013	0.000	0.002	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.012	0.003	0.004	0.004	0.005	0.007	0.002	0.003	0.001	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.014	0.002	0.005	0.003	0.005	0.007	0.001	0.001	0.000	0.000	0.000
73 Diversey Parkway, North Branch Chicago River	0.015	0.003	0.008	0.006	0.007	0.008	0.001	0.003	0.001	0.000	0.004
46 Grand Avenue, North Branch Chicago River	0.012	0.006	0.006	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.003
74 Lake Shore Drive, Chicago River	0.011	0.002	0.005	0.005	0.002	0.007	0.000	0.000	0.002	0.000	0.000
39 Madison Street, South Branch Chicago River	0.010	0.001	0.005	0.004	0.006	0.008	0.000	0.000	0.000	0.000	0.003
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.008	0.002	0.005	0.006	0.004	0.011	0.000	0.002	0.002	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.012	0.002	0.004	0.007	0.009	0.008	0.000	0.001	0.001	0.000	0.003
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.012	0.001	0.004	0.003	0.008	0.006	0.001	0.000	0.001	0.000	0.000
42 Route 53, Chicago Sanitary & Ship Canal	0.009	0.001	0.004	0.004	0.008	0.006	0.003	0.002	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.011	0.001	0.003	0.003	0.006	0.006	0.000	0.000	0.000	0.000	0.003
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.027	0.049	0.110	0.051	0.032	0.023	0.006	ND	0.006	0.012	0.016
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.009	0.007	0.008	0.005	0.003	0.015	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.007	0.001	0.005	0.004	0.010	0.007	0.001	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.008	0.001	0.006	0.005	0.002	0.008	0.002	0.001	0.002	0.000	0.000
51 IRIH Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.023	0.013	0.018	0.013	0.020	0.030	0.008	0.003	0.019	0.000	0.008
56 Indiana Avenue, Little Calumet River	0.010	0.003	0.007	0.005	0.005	0.007	0.002	0.001	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.010	0.000	0.004	0.003	0.010	0.007	0.002	0.000	0.000	0.003	0.000
52 Wentworth Avenue, Little Calumet River	0.016	0.004	0.009	0.009	0.008	0.012	0.005	0.003	0.004	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.010	0.001	0.006	0.005	0.004	0.006	0.001	0.000	0.001	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.013	0.003	0.008	0.008	0.002	0.006	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.011	0.001	0.006	0.005	0.003	0.008	0.002	0.002	0.001	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.008	0.002	0.008	0.005	0.004	0.005	0.002	0.002	0.002	0.000	0.000
43 Route 89, Cal-Sag Channel	0.009	0.001	0.008	0.008	0.004	0.007	0.003	0.000	0.001	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.006	0.000	0.005	0.004	0.006	0.011	0.004	0.003	0.006	0.000	0.003
63 Longmeadow Lane, West Branch Du Page River	0.007	0.002	0.005	0.011	0.009	0.020	0.002	0.006	0.001	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.011	0.006	0.008	0.010	0.011	0.015	0.004	0.006	0.007	0.003	0.000
64 Lake Street, West Branch Du Page River	0.008	0.002	0.010	0.008	0.011	0.013	0.004	0.006	0.007	0.003	0.000
79 Higgins Road, Salt Creek	0.008	0.000	0.003	0.005	0.005	0.010	0.002	0.005	0.001	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.011	0.003	0.005	0.006	0.006	0.007	0.004	0.005	0.001	0.000	0.000
18 Devon Avenue, Salt Creek	0.011	0.004	0.004	0.007	0.007	0.008	0.003	0.001	0.001	0.000	0.000
24 Wolf Road, Salt Creek	0.011	0.004	0.005	0.006	0.012	0.009	0.009	0.007	0.001	0.003	0.000
21 First Avenue, Salt Creek	0.011	0.005	0.008	0.006	0.013	0.012	0.007	0.016	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.009	0.003	0.007	0.005	0.011	0.007	0.006	0.007	0.004	0.000	0.000
78 Wille Road, Higgins Creek	0.011	0.000	0.013	0.004	0.007	0.007	0.003	0.003	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.006	0.001	0.005	0.006	0.008	0.008	0.007	0.003	0.001	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.010	0.001	0.006	0.007	0.008	0.010	0.001	0.002	0.001	0.000	0.000
17 Oakton Steer, Des Plaines River	0.010	0.001	0.007	0.002	0.006	0.007	0.010	0.004	0.001	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.012	0.001	0.008	0.005	0.007	0.008	0.004	0.005	0.001	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.010	0.002	0.007	0.005	0.008	0.008	0.006	0.006	0.001	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.012	0.001	0.006	0.009	0.008	0.010	0.005	0.008	0.003	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.010	0.001	0.005	0.005	0.009	0.007	0.007	0.008	0.003	0.000	0.000
29 Stephen Street, Des Plaines River	0.011	0.002	0.005	0.004	0.011	0.009	0.007	0.008	0.003	0.000	0.000
91 Material Service Road, Des Plaines River	0.011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-73

TOTAL CHROMIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.009	ND	ND	ND	0.000	0.018	0.155	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.001	0.001	0.005	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.002	0.001	0.000	0.000	0.000	0.013	0.004	0.000	0.000	0.000	0.003
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.001	0.012	0.007	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.001	0.000	0.000	0.000	0.010	0.005	0.007	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.003	0.000	0.000	0.000	0.000	0.013	0.011	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.001	0.000	0.000	0.000	0.002	0.011	0.000	0.000	0.000	0.000	0.000
73 Diversely Parkway, North Branch Chicago River	0.002	0.000	0.000	0.000	0.001	0.009	0.003	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.002	0.000	0.000	0.002	0.001	0.007	0.003	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.002	0.000	0.000	0.001	0.004	0.011	0.002	0.000	0.003	0.000	0.000
39 Madison Street, South Branch Chicago River	0.003	0.002	0.003	0.000	0.003	0.009	0.010	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.002	0.002	0.002	0.001	0.003	0.011	0.005	0.000	0.003	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.000	0.000	0.003	0.009	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.006	0.001	0.001	0.000	0.004	0.008	0.002	0.000	0.000	0.002	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.007	0.001	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.006	0.001	0.000	0.000	0.004	0.009	0.004	0.000	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.006	0.003	0.002	0.002	0.000	0.000	0.002	0.002	0.004	0.006
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.003	0.002	0.002	0.000	0.002	0.005	0.002	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.001	0.000	0.000	0.000	0.002	0.006	0.001	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.002	0.001	0.000	0.001	0.001	0.005	0.000	0.000	0.000	0.000	0.003
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.006	0.002	0.005	0.003	0.035	0.018	0.001	0.000	0.000	0.000	0.003
56 Indiana Avenue, Little Calumet River	0.003	0.001	0.000	0.000	0.003	0.005	0.001	0.000	0.000	0.000	0.003
76 Halsted Street, Little Calumet River	0.003	0.001	0.000	0.000	0.000	0.005	0.001	0.000	0.003	0.005	0.000
52 Wentworth Avenue, Little Calumet River	0.003	0.001	0.000	0.000	0.003	0.006	0.000	0.000	0.000	0.000	0.003
54 Joe Orr Road, Thorn Creek	0.003	0.001	0.000	0.002	0.002	0.006	0.002	0.000	0.000	0.000	0.003
57 Ashland Avenue, Little Calumet River	0.004	0.001	0.000	0.000	0.001	0.005	0.000	0.002	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.003	0.001	0.004	0.000	0.002	0.004	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.004	0.002	0.000	0.000	0.005	0.006	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.004	0.002	0.000	0.003	0.004	0.008	0.001	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.002	0.000	0.000	0.002	0.000	0.015	0.000	0.000	0.000	0.000	0.003
63 Longmeadow Lane, West Branch Du Page River	0.001	0.002	0.003	0.001	0.002	0.016	0.000	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.001	0.000	0.000	0.002	0.000	0.012	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.001	0.000	0.001	0.001	0.000	0.011	0.000	0.001	0.000	0.000	0.000
79 Higgins Road, Salt Creek	0.001	0.000	0.000	0.000	0.001	0.014	0.001	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.001	0.001	0.002	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.005
18 Devon Avenue, Salt Creek	0.002	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.004
24 Wolf Road, Salt Creek	0.004	0.000	0.000	0.001	0.002	0.009	0.000	0.000	0.000	0.003	0.008
21 First Avenue, Salt Creek	0.003	0.001	0.000	0.000	0.001	0.009	0.000	0.000	0.000	0.000	0.007
77 Elmhurst Road, Higgins Creek	0.002	0.000	0.003	0.001	0.001	0.009	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.003	0.000	0.004	0.001	0.003	0.013	0.000	0.000	0.000	0.000	0.005
12 Lake-Cook Road, Buffalo Creek	0.001	0.000	0.000	0.000	0.001	0.011	0.000	0.000	0.000	0.000	0.004
13 Lake-Cook Road, Des Plaines River	0.001	0.000	0.000	0.001	0.001	0.008	0.000	0.000	0.000	0.000	0.003
17 Oakton Street, Des Plaines River	0.003	0.000	0.001	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.018
19 Belmont Avenue, Des Plaines River	0.003	0.000	0.001	0.001	0.001	0.011	0.000	0.000	0.000	0.004	0.005
20 Roosevelt Road, Des Plaines River	0.003	0.001	0.000	0.000	0.001	0.009	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.005	0.000	0.001	0.002	0.001	0.011	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.003	0.000	0.000	0.001	0.001	0.010	0.000	0.000	0.000	0.003	0.000
29 Stephen Street, Des Plaines River	0.005	0.000	0.000	0.000	0.000	0.008	0.000	0.005	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-74

TOTAL IRON MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	3.350	ND	ND	ND	0.690	0.626	0.500	1.100	0.883	0.750	0.433
31 Lake-Cook Road, Middle Fork North Branch	0.634	0.734	0.526	0.710	0.786	0.782	0.610	0.725	0.655	0.560	0.518
32 Lake-Cook Road, Skokie River	0.565	0.652	0.575	0.492	0.620	0.643	0.500	0.708	0.709	0.680	0.667
34 Dempster Street, North Branch Chicago River	0.502	0.521	0.488	0.431	0.435	0.546	0.382	0.475	0.550	0.100	0.458
96 Albany Avenue, North Branch Chicago River	0.320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.268	0.183	0.180	0.181	0.198	0.249	0.125	0.183	0.173	0.055	0.245
36 Touhy Avenue, North Shore Channel	0.178	0.136	0.107	0.101	0.139	0.137	0.118	0.118	0.075	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.248	0.210	0.178	0.152	0.203	0.233	0.158	0.150	0.150	0.058	0.117
73 Diversey Parkway, North Branch Chicago River	0.305	0.273	0.248	0.208	0.268	0.261	0.183	0.283	0.158	0.075	0.258
46 Grand Avenue, North Branch Chicago River	0.328	0.283	0.223	0.211	0.236	0.290	0.250	0.275	0.300	0.100	0.217
74 Lake Shore Drive, Chicago River	0.192	0.102	0.098	0.133	0.137	0.149	0.080	0.108	0.067	0.033	0.050
39 Madison Street, South Branch Chicago River	0.386	0.238	0.199	0.165	0.222	0.250	0.140	0.258	0.142	0.033	0.158
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.258	0.269	0.212	0.223	0.246	0.447	0.183	0.258	0.250	0.175	0.200
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.379	0.313	0.225	0.243	0.268	0.278	0.225	0.275	0.217	0.117	0.158
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.262	0.210	0.141	0.153	0.161	0.239	0.192	0.167	0.163	0.067	0.100
42 Route 81, Chicago Sanitary & Ship Canal	0.182	0.170	0.132	0.224	0.173	0.274	0.364	0.167	0.158	0.075	0.167
48 Stephen Street, Chicago Sanitary & Ship Canal	0.316	0.222	0.261	0.277	0.333	0.370	0.283	0.350	0.492	0.200	0.300
82 Lockport Trehler, Chicago Sanitary & Ship Canal	0.616	1.125	1.165	1.386	0.778	0.373	0.352	0.622	0.490	0.913	0.774
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.317	0.242	0.213	0.160	0.213	0.213	0.182	0.175	0.186	ND	0.300
50 Burnham Avenue, Wolf Lake	0.123	0.118	0.134	0.081	0.114	0.115	0.183	0.092	0.123	0.075	0.083
55 130th Street, Calumet River	0.365	0.191	0.203	0.195	0.224	0.202	0.182	0.158	0.317	0.200	0.250
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	1.126	0.766	0.963	0.712	4.656	1.579	1.192	1.083	2.808	1.025	1.092
56 Indiana Avenue, Little Calumet River	0.470	0.395	0.334	0.412	0.551	0.564	0.545	0.625	0.433	0.508	0.355
76 Halsted Street, Little Calumet River	0.329	0.251	0.294	0.347	0.413	0.380	0.375	0.917	0.450	0.300	0.317
52 Wentworth Avenue, Little Calumet River	1.156	0.927	1.442	0.983	1.147	0.778	1.173	1.400	1.433	1.208	0.925
54 Joe Orr Road, Thorn Creek	0.433	0.262	0.447	0.368	0.223	0.266	0.242	0.475	0.325	0.567	0.292
57 Ashland Avenue, Little Calumet River	0.642	0.640	0.853	0.669	0.609	0.506	0.630	0.827	0.625	0.382	0.627
58 Ashland Avenue, Cal-Sag Channel	0.439	0.360	0.353	0.718	0.552	0.494	0.467	0.717	0.367	0.817	0.500
59 Cicero Avenue, Cal-Sag Channel	0.478	0.398	0.416	0.510	0.612	0.658	0.575	0.683	0.458	0.792	0.625
43 Route 83, Cal-Sag Channel	0.546	0.388	0.420	0.659	0.690	0.583	0.645	0.767	0.542	0.842	0.600
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.611	0.627	0.508	0.893	0.931	0.645	0.545	0.836	0.600	0.573	0.583
63 Longmeadow Lane, West Branch Du Page River	0.844	0.672	0.749	0.614	0.955	0.944	0.590	0.792	0.627	0.618	0.727
89 Walnut Lane, West Branch Du Page River	0.417	0.285	0.228	0.220	0.408	0.548	0.300	0.342	0.317	0.258	0.125
64 Lake Street, West Branch Du Page River	0.773	0.577	0.536	0.627	0.734	0.666	0.473	0.583	0.433	0.358	0.250
79 Higgins Road, Salt Creek	0.858	0.760	0.737	0.815	0.971	0.668	0.590	0.864	0.864	0.640	0.655
80 Arlington Heights Road, Salt Creek	0.350	0.375	0.220	0.250	0.229	0.213	0.250	0.267	0.208	0.083	0.275
18 Devon Avenue, Salt Creek	0.518	0.583	0.248	0.425	0.298	0.278	0.317	0.300	0.250	0.108	0.300
24 Wolf Road, Salt Creek	0.621	0.557	0.478	0.598	0.602	0.542	0.655	0.658	0.517	0.733	0.625
21 First Avenue, Salt Creek	0.695	0.514	0.457	0.473	0.500	0.439	0.591	0.783	0.491	0.692	0.650
77 Elmhurst Road, Higgins Creek	0.733	0.812	0.748	0.704	1.029	0.956	1.055	0.700	0.645	0.764	0.542
78 Wille Road, Higgins Creek	0.214	0.103	0.415	0.181	0.333	0.337	0.273	0.225	0.050	0.091	0.125
12 Lake-Cook Road, Buffalo Creek	1.027	0.839	0.629	0.599	0.786	0.516	0.780	0.675	0.583	0.700	0.792
13 Lake-Cook Road, Des Plaines River	0.678	0.586	0.537	0.589	0.583	0.431	0.500	0.633	0.483	0.550	0.658
17 Oakton Street, Des Plaines River	0.770	0.577	0.586	0.688	0.504	0.541	0.700	0.667	0.545	0.583	0.575
19 Belmont Avenue, Des Plaines River	0.631	0.490	0.493	0.670	0.507	0.508	0.892	0.600	0.458	0.467	0.583
20 Roosevelt Road, Des Plaines River	0.632	0.514	0.463	0.648	0.483	0.460	0.533	0.667	0.450	0.550	0.567
22 Ogden Avenue, Des Plaines River	0.611	0.510	0.447	0.643	0.479	0.474	0.582	0.800	0.533	0.608	0.517
21 Willow Springs Road, Des Plaines River	0.652	0.557	0.577	0.596	0.550	0.507	0.473	0.617	0.525	0.583	0.517
29 Stephen Street, Des Plaines River	0.707	0.580	0.868	0.572	0.568	0.476	0.618	0.700	0.517	0.667	0.575
91 Material Service Road, Des Plaines River	0.669	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-75

SOLUBLE IRON MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 Lake-Cook Road, Middle Fork North Branch	0.185	0.291	0.177	0.206	ND	ND	ND	ND	ND	ND	ND
32 Lake-Cook Road, Skokie River	0.183	0.212	0.178	0.204	ND	ND	ND	ND	ND	ND	ND
34 Dempster Street, North Branch Chicago River	0.108	0.111	0.108	0.134	ND	ND	ND	ND	ND	ND	ND
96 Albany Avenue, North Branch Chicago River	0.092	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.072	0.074	0.070	0.057	ND	ND	ND	ND	ND	ND	ND
36 Touhy Avenue, North Shore Channel	0.041	0.047	0.031	0.042	ND	ND	ND	ND	ND	ND	ND
37 Wilson Avenue, North Branch Chicago River	0.055	0.068	0.054	0.063	ND	ND	ND	ND	ND	ND	ND
73 Diversey Parkway, North Branch Chicago River	0.067	0.073	0.057	0.068	ND	ND	ND	ND	ND	ND	ND
46 Grand Avenue, North Branch Chicago River	0.058	0.073	0.054	0.072	ND	ND	ND	ND	ND	ND	ND
74 Lake Shore Drive, Chicago River	0.038	0.034	0.025	0.037	ND	ND	ND	ND	ND	ND	ND
39 Madison Street, South Branch Chicago River	0.051	0.079	0.067	0.060	ND	ND	ND	ND	ND	ND	ND
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.061	0.077	0.073	0.056	ND	ND	ND	ND	ND	ND	ND
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.048	0.085	0.064	0.053	ND	ND	ND	ND	ND	ND	ND
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.045	0.053	0.047	0.050	ND	ND	ND	ND	ND	ND	ND
42 Route 83, Chicago Sanitary & Ship Canal	0.043	0.053	0.043	0.053	ND	ND	ND	ND	ND	ND	ND
48 Stephen Street, Chicago Sanitary & Ship Canal	0.056	0.060	0.075	0.063	ND	ND	ND	ND	ND	ND	ND
82 Lockport Treblex, Chicago Sanitary & Ship Canal	0.058	0.062	0.123	0.025	0.019	0.006	0.008	0.049	0.026	0.083	0.053
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.038	0.028	0.067	0.039	ND	ND	ND	ND	ND	ND	ND
50 Burnham Avenue, Wolf Lake	0.028	0.030	0.032	0.026	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	0.041	0.037	0.044	0.050	ND	ND	ND	ND	ND	ND	ND
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.248	0.198	0.273	0.181	ND	ND	ND	ND	ND	ND	ND
56 Indiana Avenue, Little Calumet River	0.053	0.052	0.059	0.084	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Calumet River	0.068	0.065	0.059	0.087	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Avenue, Little Calumet River	0.255	0.232	0.459	0.328	ND	ND	ND	ND	ND	ND	ND
54 Joe Cox Road, Thorn Creek	0.124	0.083	0.268	0.180	ND	ND	ND	ND	ND	ND	ND
57 Ashland Avenue, Little Calumet River	0.110	0.145	0.355	0.238	ND	ND	ND	ND	ND	ND	ND
58 Ashland Avenue, Cal-Sag Channel	0.088	0.090	0.124	0.262	ND	ND	ND	ND	ND	ND	ND
59 Cicero Avenue, Cal-Sag Channel	0.065	0.084	0.165	0.160	ND	ND	ND	ND	ND	ND	ND
43 Route 83, Cal-Sag Channel	0.069	0.081	0.123	0.153	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.127	0.195	0.191	0.403	ND	ND	ND	ND	ND	ND	ND
63 Longmeadow Lane, West Branch Du Page River	0.249	0.217	0.306	0.305	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0.088	0.066	0.059	0.103	ND	ND	ND	ND	ND	ND	ND
64 Lake Street, West Branch Du Page River	0.148	0.119	0.123	0.198	ND	ND	ND	ND	ND	ND	ND
79 Higgins Road, Salt Creek	0.183	0.198	0.192	0.295	ND	ND	ND	ND	ND	ND	ND
80 Arlington Heights Road, Salt Creek	0.116	0.126	0.091	0.119	ND	ND	ND	ND	ND	ND	ND
18 Devon Avenue, Salt Creek	0.133	0.136	0.093	0.137	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0.099	0.125	0.075	0.164	ND	ND	ND	ND	ND	ND	ND
21 First Avenue, Salt Creek	0.116	0.121	0.084	0.139	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Road, Higgins Creek	0.147	0.259	0.226	0.247	ND	ND	ND	ND	ND	ND	ND
78 Wille Road, Higgins Creek	0.057	0.048	0.081	0.073	ND	ND	ND	ND	ND	ND	ND
12 Lake-Cook Road, Buffalo Creek	0.178	0.228	0.179	0.211	ND	ND	ND	ND	ND	ND	ND
13 Lake-Cook Road, Des Plaines River	0.149	0.166	0.108	0.187	ND	ND	ND	ND	ND	ND	ND
17 Oakton Street, Des Plaines River	0.158	0.152	0.110	0.218	ND	ND	ND	ND	ND	ND	ND
19 Belmont Avenue, Des Plaines River	0.126	0.137	0.114	0.185	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0.167	0.126	0.110	0.165	ND	ND	ND	ND	ND	ND	ND
22 Ogden Avenue, Des Plaines River	0.132	0.135	0.098	0.164	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Road, Des Plaines River	0.121	0.139	0.100	0.146	ND	ND	ND	ND	ND	ND	ND
29 Stephen Street, Des Plaines River	0.108	0.135	0.097	0.123	ND	ND	ND	ND	ND	ND	ND
91 Material Service Road, Des Plaines River	0.093	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-76

TOTAL LEAD MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.009	0.830	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.004	0.000	0.000	0.000	0.000	0.024	0.001	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.004	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.005	0.000
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000	0.005	0.027	0.004	0.000	0.000	0.003	0.003
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003
36 Touhy Avenue, North Shore Channel	0.003	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.003	0.003
73 Diverses Parkway, North Branch Chicago River	0.003	0.000	0.000	0.000	0.000	0.015	0.003	0.000	0.000	0.000	0.003
46 Grand Avenue, North Branch Chicago River	0.005	0.000	0.000	0.000	0.000	0.023	0.005	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.003	0.000	0.000	0.000	0.000	0.015	0.003	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.003	0.000	0.000	0.004	0.000	0.005	0.000	0.000	0.000	0.000	0.005
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.009	0.000	0.000	0.003	0.000	0.006	0.002	0.000	0.000	0.004	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.006	0.004	0.000	0.003	0.000	0.031	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.254	0.000	0.003	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.003	0.000	0.000	0.000	0.000	0.019	0.004	0.000	0.000	0.003	0.003
48 Stephen Street, Chicago Sanitary & Ship Canal	0.004	0.000	0.000	0.017	0.008	0.010	0.000	0.000	0.000	0.000	0.003
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.004	0.005	0.007	0.008	0.000	0.001	0.004	0.004	0.003	0.010
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.010	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.005	0.005	0.000	0.003	0.090	0.017	0.000	0.000	0.010	0.004	0.003
56 Indiana Avenue, Little Calumet River	0.003	0.000	0.000	0.009	0.000	0.005	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.003	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Cox Road, Thorn Creek	0.008	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.003	0.000	0.000	0.003	0.559	0.000	0.000	0.000	0.000	0.003	0.000
59 Cicero Avenue, Cal-Sag Channel	0.000	0.007	0.000	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.006	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.022
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.553	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.003	0.000	0.000	0.000	0.004	0.023	0.002	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.003	0.000	0.358	0.000	0.003	0.017	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.004	0.000	0.000	0.000	0.001	0.018	0.005	0.000	0.000	0.004	0.005
79 Higgins Road, Salt Creek	0.004	0.000	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.008	0.000	0.000	0.000	0.002	0.011	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.000	0.000	0.004	0.001	0.019	0.003	0.000	0.000	0.003	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.008	0.001	0.008	0.000	0.000	0.000	0.005	0.003
21 First Avenue, Salt Creek	0.004	0.000	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.000	0.003	0.019	0.000	0.000	0.000	0.000	0.000
78 Wills Road, Higgins Creek	0.000	0.000	0.000	0.000	0.003	0.015	0.000	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.000	0.000	0.000	0.001	0.004	0.001	0.000	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.004	0.000	0.000	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.005
17 Oakton Street, Des Plaines River	0.004	0.000	0.000	0.000	0.001	0.018	0.017	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.012	0.000	0.000	0.000	0.003	0.008	0.001	0.000	0.000	0.003	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.014	0.001	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.002	0.038	0.004	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.004	0.000	0.000	0.005	0.095	0.018	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.003	0.000	0.020	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-77

TOTAL NICKEL MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.020	ND	ND	ND	0.010	0.013	0.200	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.005	0.002	0.003	0.014	0.000	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.000	0.000	0.003	0.003	0.000	0.020	0.000	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.001	0.000	0.003	0.003	0.001	0.016	0.000	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.003	0.001	0.001	0.010	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.004	0.000	0.005	0.008	0.001	0.009	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.007	0.000	0.005	0.005	0.002	0.013	0.000	0.000	0.000	0.000	0.000
73 Diversay Parkway, North Branch Chicago River	0.004	0.000	0.006	0.008	0.006	0.017	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.004	0.000	0.008	0.009	0.004	0.013	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.003	0.000	0.007	0.005	0.002	0.010	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.004	0.003	0.004	0.004	0.004	0.016	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.003	0.000	0.005	0.005	0.002	0.013	0.000	0.000	0.000	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.005	0.001	0.003	0.003	0.003	0.012	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.003	0.000	0.003	0.004	0.006	0.014	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.005	0.003	0.004	0.006	0.005	0.020	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.000	0.005	0.006	0.003	0.018	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.003	0.001	0.001	0.001	0.000	0.000	0.002	0.026	0.000	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.003	0.002	0.004	0.003	0.001	0.006	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.003	0.002	0.001	0.003	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.001	0.002	0.002	0.003	0.000	0.005	0.000	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.002	0.003	0.003	0.006	0.007	0.018	0.000	0.000	0.008	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.003	0.002	0.004	0.007	0.001	0.005	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.004	0.003	0.003	0.008	0.000	0.004	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.000	0.003	0.002	0.006	0.003	0.007	0.009	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.002	0.002	0.002	0.007	0.002	0.008	0.000	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.001	0.002	0.003	0.007	0.001	0.008	0.000	0.009	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.003	0.002	0.005	0.003	0.001	0.006	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.002	0.002	0.003	0.006	0.000	0.013	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.003	0.003	0.004	0.004	0.002	0.006	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.004	0.008	0.001	0.014	0.000	0.000	0.018	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.002	0.011	0.005	0.001	0.018	0.000	0.000	0.009	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.006	0.006	0.001	0.016	0.000	0.000	0.008	0.000	0.000
64 Lake Street, West Branch Du Page River	0.002	0.000	0.006	0.005	0.000	0.018	0.000	0.000	0.008	0.000	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.005	0.006	0.001	0.011	0.020	0.000	0.009	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.006	0.007	0.001	0.014	0.000	0.000	0.008	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.000	0.004	0.010	0.001	0.006	0.000	0.000	0.008	0.000	0.000
24 Wolf Road, Salt Creek	0.002	0.000	0.008	0.006	0.002	0.011	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	0.002	0.000	0.008	0.006	0.003	0.018	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.008	0.008	0.001	0.017	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.003	0.000	0.006	0.006	0.003	0.016	0.009	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.000	0.000	0.005	0.009	0.002	0.017	0.000	0.000	0.008	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.006	0.008	0.001	0.016	0.000	0.000	0.008	0.000	0.000
17 Oakton Street, Des Plaines River	0.000	0.000	0.004	0.003	0.001	0.010	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.005	0.003	0.000	0.016	0.008	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.002	0.000	0.003	0.005	0.002	0.018	0.000	0.000	0.042	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.002	0.008	0.000	0.012	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.002	0.000	0.003	0.005	0.000	0.011	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.002	0.000	0.004	0.004	0.001	0.019	0.009	0.000	0.008	0.000	0.000
91 Material Service Road, Des Plaines River	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-78

TOTAL MANGANESE MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.139	ND	ND	ND	0.088	0.077	1.945	0.089	0.084	0.098	0.142
31 Lake-Cook Road, Middle Fork North Branch	0.080	0.217	0.079	0.177	0.183	0.094	0.132	0.090	0.122	0.111	0.105
32 Lake-Cook Road, Skokie River	0.100	0.162	0.115	0.123	0.163	0.082	0.101	0.103	0.104	0.111	0.123
34 Dempster Street, North Branch Chicago River	0.067	0.059	0.067	0.066	0.130	0.057	0.065	0.073	0.078	0.068	0.157
96 Albany Avenue, North Branch Chicago River	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.021	0.024	0.017	0.026	0.028	0.019	0.008	0.013	0.009	0.000	0.341
36 Touhy Avenue, North Shore Channel	0.029	0.018	0.015	0.031	0.033	0.019	0.014	0.013	0.008	0.008	0.016
37 Wilson Avenue, North Branch Chicago River	0.042	0.048	0.029	0.028	0.034	0.024	0.025	0.025	0.022	0.011	0.189
73 Diversey Parkway, North Branch Chicago River	0.081	0.027	0.045	0.164	0.042	0.024	0.025	0.043	0.017	0.022	0.129
46 Grand Avenue, North Branch Chicago River	0.044	0.028	0.052	0.026	0.026	0.034	0.031	0.033	0.030	0.011	0.117
74 Lake Shore Drive, Chicago River	0.035	0.010	0.009	0.015	0.010	0.017	0.007	0.032	0.009	0.029	0.197
39 Madison Street, South Branch Chicago River	0.039	0.027	0.021	0.019	0.027	0.025	0.022	0.023	0.011	0.005	0.165
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.038	0.028	0.024	0.024	0.023	0.034	0.023	0.011	0.023	0.061	0.054
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.047	0.027	0.022	0.034	0.033	0.029	0.024	0.033	0.014	0.101	0.232
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.046	0.022	0.019	0.018	0.062	0.024	0.029	0.028	0.013	0.019	0.340
42 Route 53, Chicago Sanitary & Ship Canal	0.028	0.025	0.013	0.024	0.025	0.048	0.053	0.032	0.018	0.013	0.144
48 Stephen Street, Chicago Sanitary & Ship Canal	0.049	0.033	0.026	0.040	0.045	0.038	0.053	0.053	0.042	0.043	0.073
82 Lockport Trestle, Chicago Sanitary & Ship Canal	0.049	0.083	0.066	0.093	0.078	0.035	0.039	0.046	0.032	0.048	0.049
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.074	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.024	0.029	0.028	0.014	0.042	0.082	0.021	0.019	0.019	ND	0.030
50 Burnham Avenue, Wolf Lake	0.044	0.058	0.062	0.063	0.070	0.046	0.086	0.082	0.058	0.065	0.056
55 130th Street, Calumet River	0.037	0.031	0.038	0.037	0.082	0.035	0.028	0.029	0.032	0.025	0.032
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.090	0.058	0.044	0.052	0.159	0.118	0.196	0.113	0.165	0.120	0.126
56 Indiana Avenue, Little Calumet River	0.040	0.057	0.038	0.040	0.074	0.053	0.077	0.108	0.061	0.069	0.062
76 Halsted Street, Little Calumet River	0.058	0.056	0.045	0.046	0.070	0.078	0.068	0.087	0.094	0.093	0.072
52 Wentworth Avenue, Little Calumet River	0.138	0.130	0.149	0.109	0.196	0.104	0.172	0.160	0.195	0.149	0.139
54 Joe Orr Road, Thorn Creek	0.065	0.062	0.043	0.146	0.056	0.041	0.058	0.080	0.106	0.041	0.053
57 Ashland Avenue, Little Calumet River	0.093	0.100	0.098	0.089	0.089	0.082	0.098	0.130	0.117	0.113	0.079
58 Ashland Avenue, Cal-Sag Channel	0.069	0.078	0.053	0.048	0.121	0.096	0.073	0.096	0.077	0.243	0.098
59 Cicero Avenue, Cal-Sag Channel	0.064	0.065	0.058	0.060	0.104	0.080	0.078	0.092	0.079	0.094	0.092
43 Route 83, Cal-Sag Channel	0.063	0.061	0.053	0.064	0.077	0.066	0.085	0.093	0.071	0.103	0.123
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.155	0.068	0.164	0.208	0.136	0.113	0.104	0.119	0.120	0.115	0.085
63 Longmeadow Lane, West Branch Du Page River	0.118	0.073	0.174	0.108	0.132	0.128	0.092	0.093	0.115	0.075	0.101
89 Walnut Lane, West Branch Du Page River	0.105	0.038	0.080	0.133	0.053	0.065	0.044	0.050	0.046	0.020	0.024
64 Lake Street, West Branch Du Page River	0.065	0.061	0.068	0.111	0.090	0.067	0.075	0.074	0.056	0.030	0.050
79 Higgins Road, Salt Creek	0.092	0.091	0.092	0.252	0.119	0.093	0.107	0.105	0.117	0.077	0.077
80 Arlington Heights Road, Salt Creek	0.061	0.050	0.064	0.115	0.058	0.051	0.063	0.058	0.048	0.052	0.045
18 Devon Avenue, Salt Creek	0.085	0.069	0.050	0.153	0.061	0.048	0.059	0.063	0.054	0.054	0.076
24 Wolf Road, Salt Creek	0.087	0.065	0.083	0.064	0.087	0.065	0.081	0.068	0.049	0.062	0.062
21 First Avenue, Salt Creek	0.061	0.055	0.068	0.058	0.076	0.063	0.084	0.075	0.056	0.063	0.096
77 Elmhurst Road, Higgins Creek	0.133	0.112	0.136	0.111	0.140	0.135	0.160	0.106	0.165	0.145	0.104
78 Wille Road, Higgins Creek	0.064	0.022	0.093	0.043	0.063	0.038	0.032	0.031	0.023	0.013	0.038
12 Lake-Cook Road, Buffalo Creek	0.148	0.168	0.165	0.195	0.197	0.137	0.178	0.128	0.123	0.134	0.154
13 Lake-Cook Road, Des Plaines River	0.071	0.065	0.111	0.218	0.094	0.069	0.092	0.091	0.073	0.112	0.096
17 Oakton Street, Des Plaines River	0.093	0.071	0.098	0.077	0.088	0.083	0.073	0.094	0.086	0.075	0.070
19 Belmont Avenue, Des Plaines River	0.069	0.059	0.096	0.074	0.094	0.080	0.093	0.080	0.077	0.068	0.068
20 Roosevelt Road, Des Plaines River	0.065	0.061	0.080	0.073	0.080	0.070	0.093	0.089	0.078	0.085	0.070
22 Ogden Avenue, Des Plaines River	0.060	0.056	0.068	0.072	0.072	0.091	0.110	0.093	0.066	0.073	0.063
23 Willow Springs Road, Des Plaines River	0.093	0.062	0.083	0.065	0.250	0.085	0.077	0.063	0.072	0.133	0.173
29 Stephen Street, Des Plaines River	0.081	0.064	0.078	0.072	0.078	0.073	0.086	0.076	0.083	0.078	0.071
91 Maternal Service Road, Des Plaines River	0.061	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-79

TOTAL MERCURY MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (µg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.033	0.100	0.044	0.000	0.000	0.050
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.019	0.044	0.030	0.125	0.030	0.040	0.017	0.000	0.000	0.027
32 Lake-Cook Road, Skokie River	0.024	0.035	0.038	0.050	0.000	0.022	0.044	0.033	0.000	0.000	0.075
34 Dempster Street, North Branch Chicago River	0.022	0.037	0.040	0.036	0.000	0.030	0.036	0.033	0.000	0.000	0.075
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.012	0.028	0.040	0.000	0.000	0.025	0.017	0.000	0.000	0.027
36 Touhy Avenue, North Shore Channel	0.017	0.006	0.033	0.058	0.000	0.042	0.045	0.000	0.000	0.000	0.025
37 Wilson Avenue, North Branch Chicago River	0.008	0.016	0.043	0.075	0.000	0.025	0.033	0.025	0.000	0.000	0.025
73 Diversey Parkway, North Branch Chicago River	0.059	0.036	0.043	0.092	0.000	0.033	0.025	0.017	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.028	0.021	0.043	0.895	0.008	0.086	0.000	0.033	0.000	0.000	0.025
74 Lake Shore Drive, Chicago River	0.015	0.025	0.044	0.009	0.036	0.000	0.010	0.017	0.000	0.000	0.025
39 Madison Street, South Branch Chicago River	0.029	0.028	0.033	0.009	0.000	0.000	0.040	0.000	0.000	0.000	0.075
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.011	0.017	0.031	0.008	0.000	0.022	0.025	0.000	0.000	0.000	0.025
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.028	0.022	0.043	0.067	0.000	0.008	0.000	0.000	0.000	0.000	0.025
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.026	0.018	0.034	0.017	0.025	0.000	0.000	0.033	0.000	0.000	0.027
42 Route 83, Chicago Sanitary & Ship Canal	0.015	0.018	0.033	0.050	0.000	0.025	0.045	0.017	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.005	0.006	0.026	0.017	0.033	0.008	0.008	0.033	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.007	0.021	0.000	0.008	0.004	0.017	0.006	0.000	0.000	0.043	0.071
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.013	0.008	0.030	0.033	0.020	0.050	0.027	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.010	0.021	0.027	0.033	0.017	0.064	0.058	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.000	0.035	0.033	0.067	0.030	0.030	0.045	0.033	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.000	0.051	0.128	0.083	1.518	0.133	0.100	0.042	0.100	0.042	0.067
56 Indiana Avenue, Little Calumet River	0.008	0.029	0.041	0.064	0.020	0.000	0.018	0.017	0.000	0.000	0.027
76 Halsted Street, Little Calumet River	0.005	0.038	0.033	0.375	0.000	0.036	0.050	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.015	0.016	0.033	0.050	0.044	0.022	0.045	0.017	0.025	0.000	0.058
54 Joe Orr Road, Thorn Creek	0.000	0.035	0.036	0.042	0.000	0.009	0.067	0.000	0.000	0.000	0.025
57 Ashland Avenue, Little Calumet River	0.000	0.040	0.042	0.050	0.011	0.010	0.020	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.014	0.014	0.014	0.933	0.008	0.020	0.033	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.016	0.013	0.035	0.092	0.000	0.064	0.042	0.033	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.008	0.016	0.040	0.083	0.000	0.018	0.027	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.021	0.505	0.122	0.018	0.030	0.036	0.018	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.012	0.041	0.030	0.018	0.017	0.040	0.033	0.000	0.000	0.036
89 Walnut Lane, West Branch Du Page River	0.017	0.053	0.328	0.042	0.008	0.017	0.017	0.000	0.000	0.000	0.025
64 Lake Street, West Branch Du Page River	0.007	0.060	0.021	0.058	0.009	0.025	0.045	0.033	0.000	0.000	0.025
79 Higgins Road, Salt Creek	0.018	0.058	0.062	0.055	0.010	0.000	0.010	0.055	0.000	0.000	0.027
80 Arlington Heights Road, Salt Creek	0.000	0.057	0.067	0.050	0.008	0.025	0.030	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.061	0.035	0.067	0.008	0.017	0.017	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.044	0.077	0.033	0.033	0.042	0.000	0.017	0.000	0.025	0.050
21 First Avenue, Salt Creek	0.000	0.062	0.019	0.027	0.017	0.017	0.064	0.050	0.000	0.000	0.050
77 Elmhurst Road, Higgins Creek	0.000	0.045	0.053	0.036	0.050	0.008	0.018	0.000	0.000	0.000	0.050
78 Wille Road, Higgins Creek	0.008	0.050	0.019	0.033	0.017	0.008	0.018	0.033	0.000	0.000	0.025
12 Lake-Cook Road, Buffalo Creek	0.000	0.068	0.045	0.055	0.008	0.025	0.030	0.017	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.000	0.056	0.058	0.045	0.000	0.050	0.067	0.017	0.000	0.000	0.050
17 Oakton Steet, Des Plaines River	0.000	0.079	0.036	0.018	0.033	0.009	0.000	0.050	0.000	0.000	0.050
19 Belmont Avenue, Des Plaines River	0.000	0.062	0.052	0.025	0.025	0.000	0.025	0.017	0.000	0.000	0.025
20 Roosevelt Road, Des Plaines River	0.000	0.064	0.051	0.025	0.025	0.000	0.042	0.017	0.000	0.025	0.025
22 Ogden Avenue, Des Plaines River	0.000	0.064	0.012	0.017	0.000	0.033	0.045	0.033	0.000	0.025	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.095	0.025	0.055	0.055	0.000	0.045	0.033	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.065	0.033	0.017	0.000	0.017	0.055	0.033	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-80

TOTAL ZINC MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.079	ND	ND	ND	0.033	0.024	6.600	0.000	0.028	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.020	0.027	0.005	0.019	0.013	0.006	0.040	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.024	0.032	0.009	0.020	0.028	0.010	0.000	0.000	0.018	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.036	0.058	0.008	0.025	0.035	0.012	0.018	0.008	0.017	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.038	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.015	0.007	0.001	0.009	0.012	0.004	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.047	0.037	0.017	0.038	0.043	0.014	0.027	0.000	0.028	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.046	0.033	0.013	0.028	0.039	0.015	0.008	0.013	0.017	0.000	0.000
73 Diversely Parkway, North Branch Chicago River	0.062	0.043	0.020	0.057	0.053	0.013	0.000	0.000	0.017	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.049	0.035	0.015	0.034	0.028	0.023	0.017	0.008	0.017	0.000	0.000
74 Lake Shore Drive, Chicago River	0.031	0.011	0.008	0.025	0.006	0.006	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.043	0.028	0.011	0.024	0.027	0.016	0.000	0.017	0.017	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.039	0.023	0.012	0.028	0.023	0.039	0.017	0.017	0.008	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.046	0.033	0.012	0.032	0.033	0.016	0.025	0.008	0.008	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.047	0.036	0.013	0.033	0.036	0.021	0.042	0.008	0.033	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.036	0.031	0.018	0.046	0.037	0.023	0.036	0.017	0.008	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.046	0.028	0.015	0.041	0.043	0.024	0.025	0.017	0.025	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.075	0.094	0.162	0.141	0.133	0.069	0.049	0.067	0.023	0.032	0.000
92 Lockport Forsbay, Chicago Sanitary & Ship Canal	0.053	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.022	0.025	0.013	0.008	0.027	0.011	0.009	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.015	0.013	0.008	0.007	0.016	0.003	0.008	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.022	0.015	0.019	0.012	0.028	0.014	0.009	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.078	0.080	0.103	0.068	0.296	0.102	0.075	0.075	0.233	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.040	0.032	0.028	0.025	0.031	0.018	0.009	0.017	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.047	0.027	0.034	0.036	0.133	0.056	0.033	0.017	0.028	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.045	0.028	0.023	0.031	0.054	0.021	0.018	0.000	0.013	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.060	0.041	0.032	0.054	0.042	0.025	0.025	0.006	0.017	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.060	0.031	0.063	0.032	0.026	0.018	0.010	0.027	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.054	0.030	0.028	0.032	0.095	0.063	0.008	0.033	0.013	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.044	0.036	0.034	0.038	0.054	0.046	0.042	0.033	0.028	0.000	0.000
43 Route 83, Cal-Sag Channel	0.062	0.035	0.042	0.064	0.057	0.030	0.045	0.050	0.033	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.012	0.015	0.015	0.037	0.021	0.019	0.000	0.009	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.022	0.036	0.023	0.035	0.040	0.043	0.000	0.017	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.047	0.043	0.059	0.042	0.038	0.058	0.008	0.017	0.017	0.000	0.000
64 Lake Street, West Branch Du Page River	0.037	0.029	0.039	0.040	0.053	0.038	0.018	0.033	0.017	0.000	0.000
79 Higgins Road, Salt Creek	0.018	0.020	0.006	0.027	0.026	0.020	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.034	0.027	0.016	0.031	0.019	0.022	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.034	0.033	0.014	0.028	0.017	0.023	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.143	0.052	0.045	0.031	0.032	0.032	0.027	0.008	0.008	0.000	0.000
21 First Avenue, Salt Creek	0.038	0.041	0.029	0.026	0.030	0.031	0.027	0.025	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.032	0.025	0.029	0.015	0.038	0.032	0.036	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.067	0.045	0.062	0.043	0.045	0.050	0.036	0.033	0.033	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.020	0.023	0.011	0.026	0.012	0.020	0.020	0.008	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.030	0.023	0.021	0.063	0.028	0.022	0.000	0.000	0.000	0.000	0.000
17 Oakton Street, Des Plaines River	0.033	0.025	0.024	0.014	0.023	0.029	0.033	0.008	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.030	0.025	0.031	0.023	0.023	0.030	0.017	0.000	0.000	0.033	0.000
20 Roosevelt Road, Des Plaines River	0.029	0.033	0.023	0.028	0.025	0.033	0.017	0.017	0.017	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.047	0.040	0.025	0.033	0.031	0.033	0.018	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.056	0.035	0.033	0.029	0.032	0.025	0.009	0.017	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.043	0.031	0.026	0.031	0.030	0.040	0.036	0.033	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-81

TOTAL SELENIUM MEAN HISTORY THROUGH 2000

Sampling Station No. Name	Annual Means (mg/L)										
	00	99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>											
30 Lake-Cook Road, West Fork North Branch	0.000	ND	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31 Lake-Cook Road, Middle Fork North Branch	0.000	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000
32 Lake-Cook Road, Skokie River	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000
34 Dempster Street, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000
96 Albany Avenue, North Branch Chicago River	0.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Street, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Avenue, North Shore Channel	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000
37 Wilson Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.008	0.008	0.000	0.000	0.000	0.000	0.000
73 Diverser Parkway, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Avenue, North Branch Chicago River	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000
74 Lake Shore Drive, Chicago River	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000
39 Madison Street, South Branch Chicago River	0.000	0.000	0.000	0.019	0.000	0.007	0.000	0.000	0.000	0.000	0.000
40 Damen Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000
75 Cicero Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000
41 Harlem Avenue, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000
42 Route 83, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000
48 Stephen Street, Chicago Sanitary & Ship Canal	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler, Chicago Sanitary & Ship Canal	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000
92 Lockport Forebay, Chicago Sanitary & Ship Canal	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
49 Ewing Avenue, Calumet River	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	ND	0.000
50 Burnham Avenue, Wolf Lake	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55 130th Street, Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51 IHB Rail Road Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56 Indiana Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Calumet River	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Avenue, Little Calumet River	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
57 Ashland Avenue, Little Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
58 Ashland Avenue, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Avenue, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000
43 Route 83, Cal-Sag Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
90 Route 19, Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000
63 Longmeadow Lane, West Branch Du Page River	0.000	0.000	0.000	0.003	0.002	0.013	0.000	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake Street, West Branch Du Page River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79 Higgins Road, Salt Creek	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Heights Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
18 Devon Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000
21 First Avenue, Salt Creek	0.000	0.000	0.000	0.000	0.001	0.020	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Road, Higgins Creek	0.000	0.000	0.000	0.000	0.003	0.023	0.000	0.000	0.000	0.000	0.000
78 Wille Road, Higgins Creek	0.000	0.000	0.000	0.017	0.000	0.007	0.000	0.000	0.000	0.000	0.000
12 Lake-Cook Road, Buffalo Creek	0.020	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
13 Lake-Cook Road, Des Plaines River	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000
19 Belmont Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Avenue, Des Plaines River	0.000	0.000	0.000	0.000	0.001	0.007	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Road, Des Plaines River	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
29 Stephen Street, Des Plaines River	0.000	0.000	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000
91 Material Service Road, Des Plaines River	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = No data

APPENDIX III

SIGNIFICANCE TESTS ON 2000 UPSTREAM AND DOWNSTREAM SAMPLE MEANS

SIGNIFICANCE PROBABILITIES ASSOCIATED WITH APPROPRIATE TEST



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-1

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR NORTH SIDE WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	7.47	7.24	0.826	0.049	0.768	0.787	0.768
Temp (°C)	18.0	15.8	0.015	-	-	0.758	0.758
pH	8.31	7.63	0.009	-	-	0.030	0.030
Cl (mg/L)	60	150	0.000	-	-	0.009	0.009
Turb (NTU)	11.8	8.1	0.002	-	-	0.043	0.043
Alk (mg/L)	126	137	0.013	-	-	0.025	0.025
TKN (mg/L)	1.05	2.65	0.027	-	-	0.008	0.008
NH <sub>4</sub> -N (mg/L)	0.301	1.273	0.000	-	-	0.013	0.013
NH <sub>3</sub> -N (mg/L)	0.020	0.051	0.000	-	-	0.375	0.375
ORG-N (mg/L)	0.75	1.37	0.136	0.183	0.026	0.017	0.026
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.29	5.59	0.001	-	-	0.000	0.000
TS (mg/L)	363	574	0.004	-	-	0.050	0.050
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	13.6	10.8	0.059	0.412	0.355	0.453	0.355
TDS (mg/L)	350	563	0.003	-	-	0.051	0.051
Phenol (µg/L)	13.3	22.2	0.127	0.172	0.025	0.054	0.025
SO <sub>4</sub> (mg/L)	32.5	53.8	0.010	-	-	0.002	0.002
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.183	1.214	0.012	-	-	0.000	0.000
Sol.P (mg/L)	0.044	0.989	0.007	-	-	0.000	0.000
CN (mg/L)	0.002	0.006	0.613	0.092	0.000	0.000	0.000
WAD-CN (mg/L)	0.000	0.001	0.023	-	-	0.133	0.133
F (mg/L)	0.187	0.812	0.009	-	-	0.000	0.000
TOC (mg/L)	5.67	10.58	0.030	-	-	0.013	0.013

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-1 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR NORTH SIDE WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	270	9424	0.019	-	-	0.000	0.000
Ca (mg/L)	43.4	52.9	0.118	0.012	0.087	0.025	0.087
Mg (mg/L)	15.7	19.3	0.031	-	-	0.017	0.017
Hard (mg/L)	173	211	0.096	0.008	0.116	0.021	0.116
G.Alpha (pCi/L)	4.23	4.21	0.129	0.352	0.929	0.887	0.929
G.Beta (pCi/L)	6.67	11.30	0.000	-	-	0.002	0.002
Ag (mg/L)	0.000	0.001	0.000	-	-	0.441	0.441
As (mg/L)	0.000	0.006	0.000	-	-	0.441	0.441
Ba (mg/L)	0.023	0.017	0.017	-	-	0.060	0.060
B (mg/L)	0.050	0.233	0.033	-	-	0.000	0.000
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.007	0.012	0.005	-	-	0.177	0.177
Cr (mg/L)	0.000	0.002	0.000	-	-	0.236	0.236
Fe (mg/L)	0.268	0.177	0.000	-	-	0.094	0.094
Pb (mg/L)	0.000	0.003	0.000	-	-	0.441	0.441
Ni (mg/L)	0.000	0.004	0.000	-	-	0.129	0.129
Mn (mg/L)	0.021	0.029	0.000	-	-	0.093	0.093
Hg (µg/L)	0.000	0.017	0.000	-	-	0.441	0.441
Zn (mg/L)	0.015	0.047	0.132	0.053	0.001	0.001	0.001
Se (mg/L)	0.000	0.000	-	-	-	1.000	1.000

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-2

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR STICKNEY WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	4.97	6.52	0.757	0.156	0.012	0.021	0.012
Temp (°C)	18.7	17.0	0.028	-	-	0.453	0.453
pH	7.27	7.42	0.273	0.328	0.464	0.452	0.464
Cl (mg/L)	124	166	0.000	-	-	0.326	0.326
Turb (NTU)	12.8	9.3	0.017	-	-	0.008	0.008
Alk (mg/L)	135	121	0.327	0.166	0.023	0.026	0.023
TKN (mg/L)	1.99	1.72	0.127	0.476	0.462	0.260	0.462
NH <sub>4</sub> -N (mg/L)	0.843	0.438	0.001	-	-	0.005	0.005
NH <sub>3</sub> -N (mg/L)	0.007	0.006	0.001	-	-	0.341	0.341
ORG-N (mg/L)	1.14	1.28	0.000	-	-	0.583	0.583
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	4.30	7.00	0.170	0.152	0.006	0.017	0.006
TS (mg/L)	517	619	0.005	-	-	0.312	0.312
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	16.5	11.5	0.000	-	-	0.018	0.018
TDS (mg/L)	501	607	0.006	-	-	0.285	0.285
Phenol (µg/L)	17.5	18.5	0.042	-	-	0.885	0.885
SO <sub>4</sub> (mg/L)	51.6	72.3	0.227	0.191	0.003	0.008	0.003
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.965	1.120	0.180	0.282	0.462	0.644	0.462
Sol.P (mg/L)	0.672	0.834	0.073	0.208	0.296	0.564	0.296
CN (mg/L)	0.004	0.007	0.135	0.077	0.000	0.001	0.000
WAD-CN (mg/L)	0.001	0.001	0.366	0.199	0.392	0.522	0.392
F (mg/L)	0.617	0.781	0.157	0.347	0.057	0.038	0.057
TOC (mg/L)	8.58	9.75	0.121	0.497	0.460	0.467	0.460

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-2 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR STICKNEY WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	154	5043	0.332	0.420	0.000	0.000	0.000
Ca (mg/L)	53.3	54.3	0.515	0.406	0.775	0.665	0.775
Mg (mg/L)	19.7	20.1	0.410	0.243	0.833	0.885	0.833
Hard (mg/L)	214	218	0.366	0.323	0.798	0.707	0.798
G.Alpha (pCi/L)	4.22	4.26	0.018	-	-	0.795	0.795
G.Beta (pCi/L)	9.05	9.33	0.004	-	-	0.436	0.436
Ag (mg/L)	0.001	0.001	0.000	-	-	0.581	0.581
As (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Ba (mg/L)	0.023	0.018	0.009	-	-	0.014	0.014
B (mg/L)	0.174	0.200	0.410	0.102	0.237	0.140	0.237
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.012	0.012	0.006	-	-	0.929	0.929
Cr (mg/L)	0.005	0.006	0.000	-	-	1.000	1.000
Fe (mg/L)	0.379	0.262	0.017	-	-	0.046	0.046
Pb (mg/L)	0.006	0.254	0.000	-	-	0.654	0.654
Ni (mg/L)	0.005	0.003	0.000	-	-	0.654	0.654
Mn (mg/L)	0.047	0.046	0.000	-	-	0.256	0.256
Hg (µg/L)	0.028	0.026	0.000	-	-	1.000	1.000
Zn (mg/L)	0.046	0.047	0.007	-	-	0.599	0.599
Se (mg/L)	0.000	0.000	-	-	-	1.000	1.000

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-3

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR CALUMET WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	8.20	6.60	0.037	-	-	0.011	0.011
Temp (°C)	15.2	16.2	0.663	0.250	0.746	0.646	0.746
pH	7.73	7.47	0.159	0.239	0.359	0.741	0.359
Cl (mg/L)	103	150	0.061	0.166	0.074	0.141	0.074
Turb (NTU)	15.8	10.3	0.183	0.177	0.003	0.003	0.003
Alk (mg/L)	127	154	0.157	0.355	0.002	0.005	0.002
TKN (mg/L)	1.01	1.50	0.082	0.405	0.048	0.037	0.048
NH <sub>4</sub> -N (mg/L)	0.307	0.332	0.129	0.083	0.679	0.525	0.579
NH <sub>3</sub> -N (mg/L)	0.024	0.005	0.000	-	-	0.751	0.751
ORG-N (mg/L)	0.70	1.17	0.015	-	-	0.021	0.021
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	1.86	4.32	0.509	0.288	0.000	0.001	0.000
TS (mg/L)	489	697	0.830	0.348	0.007	0.014	0.007
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	22.2	11.6	0.001	-	-	0.001	0.001
TDS (mg/L)	466	685	0.720	0.329	0.005	0.014	0.005
Phenol (µg/L)	13.1	24.1	0.001	-	-	0.004	0.004
SO <sub>4</sub> (mg/L)	77.8	143.1	0.397	0.246	0.000	0.001	0.000
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.373	3.193	0.004	-	-	0.000	0.000
Sol.P (mg/L)	0.277	2.923	0.005	-	-	0.000	0.000
CN (mg/L)	0.003	0.010	0.440	0.150	0.000	0.000	0.000
WAD-CN (mg/L)	0.001	0.002	0.456	0.028	0.002	0.003	0.002
F (mg/L)	0.382	0.891	0.284	0.065	0.000	0.000	0.000
TOC (mg/L)	7.67	10.92	0.225	0.426	0.049	0.063	0.049

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-3 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR CALUMET WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	124	4774	0.779	0.212	0.000	0.000	0.000
Ca (mg/L)	49.7	63.6	0.532	0.229	0.003	0.004	0.003
Mg (mg/L)	22.3	23.4	0.185	0.069	0.690	0.707	0.690
Hard (mg/L)	216	255	0.239	0.367	0.071	0.175	0.071
G.Alpha (pCi/L)	4.30	4.39	0.146	0.348	0.783	0.623	0.783
G.Beta (pCi/L)	7.59	10.27	0.072	0.261	0.003	0.002	0.003
Ag (mg/L)	0.001	0.001	0.000	-	-	1.000	1.000
As (mg/L)	0.018	0.000	0.000	-	-	0.079	0.079
Ba (mg/L)	0.029	0.015	0.151	0.220	0.000	0.000	0.000
B (mg/L)	0.159	0.286	0.127	0.197	0.000	0.001	0.000
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.010	0.010	0.001	-	-	0.882	0.882
Cr (mg/L)	0.003	0.003	0.000	-	-	0.801	0.801
Fe (mg/L)	0.470	0.329	0.001	-	-	0.037	0.037
Pb (mg/L)	0.002	0.000	0.000	-	-	0.359	0.359
Ni (mg/L)	0.002	0.004	0.000	-	-	0.625	0.625
Mn (mg/L)	0.040	0.058	0.019	-	-	0.029	0.029
Hg (µg/L)	0.008	0.005	0.000	-	-	1.000	1.000
Zn (mg/L)	0.040	0.047	0.000	-	-	0.076	0.076
Se (mg/L)	0.000	0.017	0.000	-	-	0.359	0.359

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-4

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR JOHN E. EGAN WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	7.09	7.79	0.514	0.014	0.506	0.468	0.506
Temp (°C)	15.9	14.2	0.615	0.465	0.625	0.644	0.625
pH	8.16	8.16	0.006	-	-	0.974	0.974
Cl (mg/L)	278	219	0.000	-	-	0.668	0.668
Turb (NTU)	29.4	10.8	0.004	-	-	0.002	0.002
Alk (mg/L)	161	136	0.248	0.163	0.008	0.016	0.008
TKN (mg/L)	1.82	1.74	0.000	-	-	0.339	0.339
NH <sub>4</sub> -N (mg/L)	0.172	0.145	0.538	0.273	0.362	0.197	0.362
NH <sub>3</sub> -N (mg/L)	0.024	0.024	0.000	-	-	0.767	0.767
ORG-N (mg/L)	1.65	1.60	0.000	-	-	0.307	0.307
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.47	6.27	0.001	-	-	0.000	0.000
TS (mg/L)	895	749	0.005	-	-	0.792	0.792
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	41.2	11.7	0.008	-	-	0.001	0.001
TDS (mg/L)	854	738	0.006	-	-	0.817	0.817
Phenol (µg/L)	17.1	18.2	0.348	0.020	0.681	0.791	0.681
SO <sub>4</sub> (mg/L)	79.5	73.9	0.240	0.003	0.506	0.741	0.506
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.249	1.688	0.001	-	-	0.001	0.001
Sol.P (mg/L)	0.039	1.488	0.000	-	-	0.000	0.000
CN (mg/L)	0.002	0.007	0.003	-	-	0.001	0.001
WAD-CN (mg/L)	0.000	0.001	0.007	-	-	0.009	0.009
F (mg/L)	0.294	0.642	0.004	-	-	0.002	0.002
TOC (mg/L)	11.40	10.67	0.027	-	-	0.563	0.563

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-4 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR JOHN E. EGAN WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	305	623	0.965	0.156	0.430	0.373	0.430
Ca (mg/L)	65.9	59.4	0.050	0.022	0.363	0.717	0.363
Mg (mg/L)	28.9	24.1	0.063	0.011	0.142	0.223	0.142
Hard (mg/L)	284	248	0.079	0.016	0.246	0.531	0.246
G.Alpha (pCi/L)	4.37	4.19	0.021	-	-	0.373	0.373
G.Beta (pCi/L)	7.01	9.75	0.000	-	-	0.099	0.099
Ag (mg/L)	0.000	0.000	-	-	-	1.000	1.000
As (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Ba (mg/L)	0.040	0.026	0.131	0.009	0.044	0.005	0.044
B (mg/L)	0.086	0.206	0.005	-	-	0.001	0.001
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.007	0.011	0.005	-	-	0.336	0.336
Cr (mg/L)	0.001	0.001	0.000	-	-	0.658	0.658
Fe (mg/L)	0.858	0.350	0.024	-	-	0.001	0.001
Pb (mg/L)	0.004	0.007	0.000	-	-	1.000	1.000
Ni (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Mn (mg/L)	0.092	0.061	0.338	0.076	0.139	0.186	0.139
Hg (µg/L)	0.018	0.000	0.000	-	-	0.129	0.129
Zn (mg/L)	0.018	0.034	0.230	0.158	0.046	0.046	0.046
Se (mg/L)	0.000	0.000	-	-	-	1.000	1.000

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-5

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR JAMES C. KIRIE WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	7.71	8.43	0.673	0.003	0.294	0.306	0.294
Temp (°C)	15.2	16.3	0.636	0.207	0.690	0.672	0.690
pH	7.81	7.60	0.079	0.351	0.123	0.096	0.123
Cl (mg/L)	336	191	0.000	-	-	0.060	0.060
Turb (NTU)	27.7	7.2	0.000	-	-	0.000	0.000
Alk (mg/L)	140	171	0.816	0.431	0.030	0.023	0.030
TKN (mg/L)	1.41	2.35	0.331	0.480	0.001	0.003	0.001
NH <sub>4</sub> -N (mg/L)	0.134	0.396	0.000	-	-	0.001	0.001
NH <sub>3</sub> -N (mg/L)	0.004	0.006	0.000	-	-	0.245	0.245
ORG-N (mg/L)	1.28	1.95	0.334	0.293	0.019	0.044	0.019
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.46	4.25	0.014	-	-	0.000	0.000
TS (mg/L)	879	733	0.001	-	-	0.531	0.531
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	39.3	12.4	0.000	-	-	0.005	0.005
TDS (mg/L)	840	721	0.005	-	-	0.767	0.767
Phenol (µg/L)	28.4	26.6	0.000	-	-	0.644	0.644
SO <sub>4</sub> (mg/L)	47.0	94.5	0.274	0.307	0.000	0.000	0.000
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.184	0.578	0.008	-	-	0.005	0.005
Sol.P (mg/L)	0.044	0.385	0.000	-	-	0.000	0.000
CN (mg/L)	0.004	0.006	0.000	-	-	0.006	0.006
WAD-CN (mg/L)	0.001	0.001	0.259	0.413	0.187	0.231	0.187
F (mg/L)	0.317	0.746	0.010	-	-	0.003	0.003
TOC (mg/L)	11.80	12.08	0.010	-	-	0.463	0.463

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-5 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR JAMES C. KIRIE WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	636	536	0.252	0.429	0.860	1.000	0.860
Ca (mg/L)	62.4	67.6	0.142	0.131	0.485	0.277	0.485
Mg (mg/L)	22.9	25.8	0.219	0.209	0.367	0.339	0.367
Hard (mg/L)	250	275	0.171	0.156	0.432	0.277	0.432
G.Alpha (pCi/L)	4.42	4.24	0.110	0.408	0.461	0.621	0.461
G.Beta (pCi/L)	7.37	16.49	0.000	-	-	0.001	0.001
Ag (mg/L)	0.000	0.000	0.000	-	-	0.947	0.947
As (mg/L)	0.000	0.007	0.000	-	-	0.411	0.411
Ba (mg/L)	0.047	0.023	0.260	0.003	0.007	0.002	0.007
B (mg/L)	0.083	0.366	0.016	-	-	0.000	0.000
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.009	0.011	0.015	-	-	0.517	0.517
Cr (mg/L)	0.002	0.003	0.000	-	-	0.582	0.582
Fe (mg/L)	0.733	0.214	0.014	-	-	0.000	0.000
Pb (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Ni (mg/L)	0.000	0.003	0.000	-	-	0.209	0.209
Mn (mg/L)	0.132	0.064	0.007	-	-	0.032	0.032
Hg (µg/L)	0.000	0.008	0.000	-	-	0.411	0.411
Zn (mg/L)	0.032	0.067	0.246	0.080	0.016	0.027	0.016
Se (mg/L)	0.000	0.000	-	-	-	1.000	1.000

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-6

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
 AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
 FOR HANOVER PARK WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
DO (mg/L)	7.50	7.01	0.129	0.006	0.551	0.915	0.551
Temp (°C)	16.2	15.2	0.346	0.500	0.726	0.803	0.726
pH	7.95	8.13	0.041	-	-	0.722	0.722
Cl (mg/L)	189	153	0.140	0.086	0.393	0.456	0.393
Turb (NTU)	21.8	13.5	0.000	-	-	0.101	0.101
Alk (mg/L)	156	155	0.017	-	-	0.915	0.915
TKN (mg/L)	1.66	2.37	0.004	-	-	0.075	0.075
NH <sub>4</sub> -N (mg/L)	0.154	0.341	0.000	-	-	0.187	0.187
NH <sub>3</sub> -N (mg/L)	0.011	0.038	0.000	-	-	0.500	0.500
ORG-N (mg/L)	1.50	2.03	0.100	0.146	0.100	0.127	0.100
NO <sub>2</sub> +NO <sub>3</sub> (mg/L)	0.63	6.98	0.017	-	-	0.000	0.000
TS (mg/L)	698	651	0.644	0.045	0.652	0.644	0.652
TVS (mg/L)	-	-	-	-	-	-	-
TSS (mg/L)	40.0	23.5	0.000	-	-	0.070	0.070
TDS (mg/L)	658	628	0.371	0.054	0.768	0.804	0.768
Phenol (µg/L)	20.1	19.7	0.370	0.319	0.911	0.909	0.911
SO <sub>4</sub> (mg/L)	71.7	69.3	0.106	0.025	0.806	0.594	0.806
FOG (mg/L)	-	-	-	-	-	-	-
T.P (mg/L)	0.184	2.109	0.010	-	-	0.000	0.000
Sol.P (mg/L)	0.060	1.910	0.008	-	-	0.000	0.000
CN (mg/L)	0.002	0.008	0.055	0.002	0.000	0.001	0.000
WAD-CN (mg/L)	0.001	0.001	0.003	-	-	0.199	0.199
F (mg/L)	0.303	0.723	0.314	0.065	0.000	0.001	0.000
TOC (mg/L)	13.78	12.75	0.281	0.393	0.432	0.334	0.432

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AIII-6 (Continued)

SIGNIFICANCE PROBABILITIES OF WATER QUALITY PARAMETERS  
AT UPSTREAM (U) AND DOWNSTREAM (D) LOCATIONS  
FOR HANOVER PARK WATER RECLAMATION PLANT IN 2000

Parameter (Unit)	Mean (U)	Mean (D)	Normal Sig Prob <sup>1</sup>	Equal Variance Sig Prob <sup>2</sup>	t-test Sig Prob <sup>3</sup>	Wilcoxon Sig Prob <sup>4</sup>	Equal Means Sig Prob <sup>5</sup>
FC (#/100ml)	2538	1943	0.189	0.222	0.721	0.972	0.721
Ca (mg/L)	63.8	59.3	0.043	-	-	0.214	0.214
Mg (mg/L)	24.1	23.7	0.034	-	-	0.594	0.594
Hard (mg/L)	258	246	0.040	-	-	0.337	0.337
G.Alpha (pCi/L)	4.21	4.13	0.516	0.455	0.787	0.804	0.787
G.Beta (pCi/L)	7.30	9.61	0.001	-	-	0.051	0.051
Ag (mg/L)	0.000	0.000	-	-	-	1.000	1.000
As (mg/L)	0.010	0.000	0.000	-	-	0.290	0.290
Ba (mg/L)	0.044	0.025	0.040	-	-	0.002	0.002
B (mg/L)	0.069	0.285	0.022	-	-	0.000	0.000
Cd (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Cu (mg/L)	0.007	0.011	0.011	-	-	0.284	0.284
Cr (mg/L)	0.001	0.001	0.000	-	-	0.944	0.944
Fe (mg/L)	0.844	0.417	0.014	-	-	0.008	0.008
Pb (mg/L)	0.003	0.002	0.000	-	-	0.889	0.889
Ni (mg/L)	0.000	0.000	-	-	-	1.000	1.000
Mn (mg/L)	0.118	0.105	0.000	-	-	0.319	0.319
Hg (µg/L)	0.000	0.017	0.000	-	-	0.441	0.441
Zn (mg/L)	0.022	0.047	0.427	0.165	0.000	0.001	0.000
Se (mg/L)	0.000	0.000	-	-	-	1.000	1.000

<sup>1</sup>Significance Probability <=0.05 indicates that up and down populations are not normal.

<sup>2</sup>Significance Probability <=0.05 indicates that Variances are unequal.

<sup>3</sup>Significance Probability <=0.05 indicates that means are unequal if t-test is used.

<sup>4</sup>Significance Probability <=0.05 indicates that means are unequal if Wilcoxon test is used.

<sup>5</sup>Significance Probability <=0.05 indicates that means are unequal using applicable test.

- = No Statistics.