

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

**RESEARCH AND DEVELOPMENT
DEPARTMENT**

REPORT NO. 01-12

1999 ANNUAL SUMMARY REPORT

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

October 2001

Metropolitan Water Reclamation District of Greater Chicago
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1999 ANNUAL SUMMARY REPORT
WATER QUALITY WITHIN THE WATERWAYS SYSTEM OF
THE METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

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October 2001

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TABLE LOCATOR - BY PARAMETER

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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

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TABLE LOCATOR - BY PARAMETER (Continued)

Parameter	Waterways Sample through 1999	Violation History through 1999	Mean History through 1999
	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
Calcium	AII-7		AII-71
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
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
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5	Compliance Rates of Water Quality Standards for Secondary Contact Waters Section of Chicago River in 1998 and 1999	51
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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 1999. In addition, the District compared these data with data for 1998.

Compliance with Water Quality Standards During 1999

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 Du Page River System, and the Fox River System (Poplar Creek). Sixteen water quality parameters were in total compliance with the standards in all river systems. They were temperature, phenols, ammonium nitrogen, un-ionized ammonia, and 12 metals (total zinc, total cadmium, total copper, total chromium [trivalent and hexavalent], total nickel, total lead, total mercury, boron, total arsenic, total selenium, total barium, and soluble iron).

Nine of the remaining 12 parameters, viz., pH, chloride, total dissolved solids, sulfate, fluoride, weak acid dissociable cyanide, total iron, total silver, and manganese had compliance rates of greater than 80 percent in all 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. Dissolved oxygen had a compliance rate greater than 77.0 percent in various river systems. Fecal coliform had the lowest compliance rate, and was in the range of 39.1 to 55.6 percent in the Chicago, Calumet, and the Des Plaines River Systems.

A comparison of 1999 data with 1998 data indicated that there was no significant difference between 1998 and 1999 compliance rates except for temperature, total dissolved solids, and total silver, which had all improved. The compliance rate of total silver has increased from 87.5 percent in 1998 to total compliance in the Calumet River. The compliance rate of temperature has increased from 91.7 percent in 1998 to total compliance in 1999 in the Des Plaines River. Total dissolved solids compliance rate has also increased from 86.9 percent in 1998 to 94.2 percent in 1999 in the Des Plaines River System.

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 1999 had applicable IPCB standards.

Seventeen parameters were in complete compliance with the IPCB standards for the Chicago and the Calumet River Systems in 1999. They were temperature, phenols, total cyanide, fluoride, and 13 metals (total zinc, total cadmium, total copper, total chromium, total nickel, total lead, total mercury, total arsenic, total selenium, total barium, total silver, total manganese, and soluble iron).

A comparison of 1999 data with 1998 data indicated that there was no significant difference between the 1998 and 1999 compliance rates in both river systems except for pH, which improved. The compliance rate of pH increased from 91.7 percent in 1998 to 98.4 percent in 1999 in the Chicago River System, and from 87.9 percent in 1998 to 96.2 percent in 1999 in the Calumet 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) for all water quality data collected have been published by the District for the years 1972 through 1998. Complete tabulations of waterway surveillance data collected by the District are available for the years 1970 through 1999.

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 facil-

tate 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.

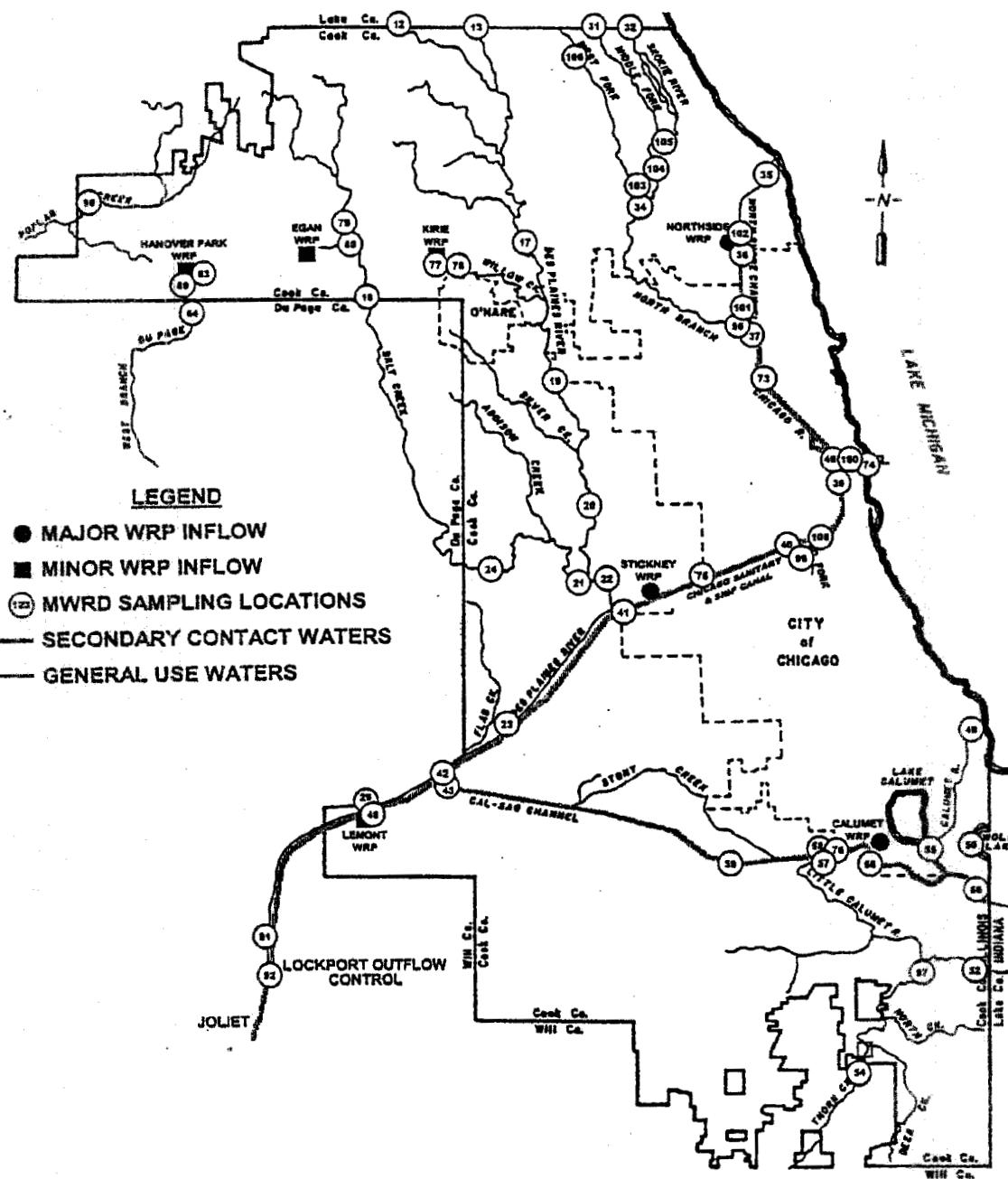
The functions of the canal system are to:

- 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, and
- 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

MAP OF 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, and
- comparisons of water quality with the results of previous years.

The major computations of data are presented in Appendices AI through AII, 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.

Summary water quality results for 1999 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 val-

ues 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 1999 and their eight-year history.

Because 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 1989 through 1998, with the 1999 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 each water reclamation plant (WRP) are significantly different.

Water Sampling

Surface water grab samples were taken at 47 locations during 1999 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 sampling dates for the Chicago, Calumet, and Des Plaines River Systems during 1999 are shown in Table 1. Note that samples taken in

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

1999 WATERWAYS (BRIDGE RUNS) SAMPLING DATES

Month	Chicago River System	Calumet River System	Des Plaines River System
January	7	9	18
February	14	19	19
March	15	19	19
April	15	19	19
May	15	19	19
June	15	19	19
July	15	19	19
August	15	19	18
September	15	19	19
October	15	19	19
November	15	19	17
December	15	19	0

the West Branch of the Du Page 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 to the surface water grab samples, weekly samples were taken from an automatic sampler located at the Lockport Powerhouse.

Locations sampled in the respective river systems during 1999 are shown without an asterisk in Table AI-2, Appendix I. Sixteen sites were sampled in the Chicago River System, 12 in the Calumet, and 19 in the Des Plaines River System (including four locations in Du Page and Fox River systems). The waterways system sampling location points correspond to the map numbers shown in Figure 1. The complete waterways sampling stations directory for all 90 stations, of which the 47 sampling locations in 1999 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 1999. 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.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS¹

Assay	State Standard	Section ²	Effective Date
<u>Dissolved Oxygen</u>			
General Use Waters ³	6.0 mg/L ⁴ 5.0 mg/L ^{4,5}	302.206 302.206	04/16/72 04/16/72
Secondary Contact Waters ⁶	5.0 mg/L ^{4,5} 4.0 mg/L ^{4,5} 3.0 mg/L ^{5,7}	303.441(j) 302.405 302.405	04/16/72 01/01/78 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>Ammonia Nitrogen</u>			
General Use Waters ³	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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
Secondary Contact Waters ⁶	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</u> ⁸			
General Use Waters ³	200 counts/100 ml 400 counts/100 ml (400 counts/100 ml) ⁵	302.209 302.209	04/16/72 04/16/72
Secondary Contact Waters ⁶	No standard		
<u>Gross Alpha Radioactivity</u>	No standard		

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS¹

Assay	State Standard	Section ²	Effective Date
<u>Gross Beta Radioactivity</u>			
General Use Waters ³	100 picocuries/L	302.207	04/16/72
Secondary Contact Waters ⁶	No standard		
<u>pH</u>			
General Use Waters ³	6.5-9.0	302.204	04/16/72
Secondary Contact Waters ⁶	6.0-9.0	302.404	04/16/72
<u>Alkalinity</u>	No standard		
<u>Temperature</u>			
General Use Waters ³	32°C, Apr.- ¹⁰ Nov.	302.211	04/16/72
	16°C, Dec.- ¹⁰ Mar.	302.211	04/16/72
Secondary Contact Waters ⁶	34°C ¹¹ 37.8°C ¹¹ (37.8°C) ⁵	302.408 302.408	04/16/72 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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
<u>Total Dissolved Solids</u>			
General Use Waters ³	1,000 mg/L	302.208	04/16/72
Secondary Contact Waters ⁶	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 ³	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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
Secondary Contact Waters	No standard		
<u>Sulfate</u>			
General Use Waters ³	500 mg/L	302.208	04/16/72
Secondary Contact Waters ⁶	0.1 mg/L	302.407	09/07/78
<u>Total Cyanide</u>			
General Use Waters ^{3,5}	0.025 mg/L	302.208	04/16/72
	No standard		02/01/96
Secondary Contact Waters ⁶	0.1 mg/L	302.407	09/07/78
<u>WAD Cyanide</u>			
General Use Waters ^{3,5}	0.022 mg/L (weak acid dissociable)	302.208	02/01/96
Secondary Contact Waters ⁶	No standard		
<u>Fluoride</u>			
General Use Waters ³	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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
Secondary Contact Waters ⁶	15.0 mg/L	302.407	05/24/79
<u>Methylene Blue Active Substances</u>	No standard		
<u>Phenols</u>			
General Use Waters ³	0.1 mg/L	302.208	04/16/72
Secondary Contact Waters ⁶	0.3 mg/L	302.407	05/24/79
<u>Fats, Oils, and Greases</u>			
General Use Waters ³	No standard		
Secondary Contact Waters ⁶	15.0 mg/L ¹²	302.407	05/24/79
<u>Total Arsenic</u>			
General Use Waters ³	1.0 mg/L	302.208	05/24/79
	0.36 mg/L		02/04/90
Secondary Contact Waters ⁶	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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
<u>Total Barium</u>			
General Use Waters ³	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 ³	0.05 mg/L note ¹⁴	302.208	04/16/72 02/04/90
Secondary Contact Waters ⁶	0.15 mg/L	302.407	05/24/79
<u>Total Calcium</u>			
	No standard		
<u>Chromium (Total Hexavalent)¹³</u>			
General Use Waters ³	0.05 mg/L 0.016 mg/L	302.208	04/16/72 02/04/90
Secondary Contact Waters ⁶	0.3 mg/L	302.407	05/24/79
<u>Chromium (Total Trivalent)¹³</u>			
General Use Waters ³	1.0 mg/L note ¹⁶	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 STANDARDS¹

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

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS¹

Assay	State Standard	Section ²	Effective Date
Secondary Contact Waters ⁶	0.5 mg/L	302.407	05/24/79
<u>Total Lead</u>			
General Use Waters ³	0.1 mg/L note ¹⁷ note ¹⁸	302.208	04/16/72 02/04/90 05/16/96
Secondary Contact Waters ⁶	0.1 mg/L	302.407	05/24/79
<u>Total Magnesium</u>	No standard		
<u>Total Manganese</u>			
General Use Waters ³	1.0 mg/L	302.208	04/16/72
Secondary Contact Waters ⁶	1.0 mg/L	302.407	05/24/79
<u>Total Mercury</u>			
General Use Waters ³	0.0005 mg/L 0.0026 mg/L	302.208	04/25/71 05/16/96
Secondary Contact Waters ⁶	0.0005 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 STANDARDS¹

Assay	State Standard	Section ²	Effective Date
<u>Total Boron</u>			
General Use Waters	1.0 mg/L		
Secondary Contact Waters	No standards		
<u>Total Nickel</u>			
General Use Waters ³	1.0 mg/L	302.208	4/16/72
Secondary Contact Waters ⁶	1.0 mg/L	302.407	5/24/79
<u>Total Selenium</u>			
General Use Waters ³	1.0 mg/L	302.208	4/16/72
Secondary Contact Waters ⁶	1.0 mg/L	302.407	5/24/79
<u>Total Silver</u>			
General Use Waters ³	0.005 mg/L	302.208	4/16/72
Secondary Contact Waters ⁶	0.1 mg/L	302.407	5/24/79

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS¹

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

¹Water Quality Standards from "State of Illinois Rules and Regulations," Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, January 14, 1999.

²Section number from 1 above.

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

⁴The 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.

⁵Water 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).

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

⁷Cal-Sag Channel only.

⁸Repealed, 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.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2 (Continued)

WATER SAMPLE ASSAYS PERFORMED AND CORRESPONDING
WATER QUALITY STANDARDS¹

Assay	State Standard	Section ²	Effective Date
⁹	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.		
¹⁰	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.		
¹¹	The upper value cannot be exceeded more than 5 percent of the time, and the lower value cannot be exceeded at any time.		
¹²	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.		
¹³	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).		
¹⁴	Cadmium = $\min(0.05, \exp(-2.918 + 1.128\ln[H]))$.		
¹⁵	Copper = $\exp(-1.464 + 0.9422\ln[H])$.		
¹⁶	Total Chromium = $\exp(3.688 + 0.8190\ln[H])$.		
¹⁷	Lead = $\min(0.1, \exp(-1.464 + 1.273\ln[H]))$.		
¹⁸	Lead = $\exp(-1.301 + 1.273\ln[H])$: Where, Hardness, mg equivalent CaCO ₃ /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 five water quality parameters (dissolved oxygen [DO], fecal coliform, temperature, total chromium, and dissolved iron) with standards which require interpretation in light of the 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 not possible. In view of this, the District interprets the IPCB standard limitation of 400 count/100 ml in General Use Waters.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

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

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

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3 (Continued)

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

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

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.

The IPCB water quality standards for chromium are specified separately for the hexavalent and trivalent 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 (hexavalent and trivalent) 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 1999 is shown in Table 4. Of the five river systems sampled during 1999, three (Des Plaines, Du Page, 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 Du Page 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 Du Page River (Station 64).

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4

GENERAL USE WATERS, 1999 LOCATIONS SAMPLED AND
ANNUAL SAMPLING FREQUENCIES

Station No ¹	Station Name	Annual No. Sample
<u>Chicago River System</u>		
31	County Line Rd., Md. Fork N. Branch	11
32	County Line Rd., Skokie River	11
34	Dempster St., N.B. Chicago River	11
74	Outer Dr. Bridge, Chicago River	11
35	Central Ave., N. Shore Channel	10
		54
<u>Calumet River System</u>		
49	92nd and Ewing Ave., Calumet River	24
50	Wolf Lake Burnham Ave.	12
52	Wentworth Ave., Little Calumet River	11
54	Joe Orr Road, Thorn Creek	12
55	130th Street, Calumet River	22
57	135th and Ashland, Little Calumet River	11
		92
<u>Des Plaines River System</u>		
12	County Line Rd., Buffalo Creek	11
18	Davon Ave., Salt Creek	11
24	Wolf Road, Salt Creek	11
21	First Ave., Salt Creek	11
13	County Line Road, Des Plaines River	11
17	Oakton St., Des Plaines River	11
19	Belmont Ave., Des Plaines River	11
20	Roosevelt Road, Des Plaines River	11
22	Ogden Ave., Des Plaines River	11
23	Willow Springs Rd., Des Plaines River	11

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4 (Continued)

GENERAL USE WATERS, 1999 LOCATIONS SAMPLED AND
ANNUAL SAMPLING FREQUENCIES

Station No. ¹	Station Name	Annual No. Sample
<u>Des Plaines River System</u>		
29	Lemont Stephen St., Des Plaines River	11
77	Elmhurst Rd., Higgins Creek	11
78	Wille Rd., Higgins Creek	11
79	Higgins Rd., Salt Creek	10
80	Arlington Hts. Rd., Salt Creek	11
		164
<u>Du Page River System</u>		
63	Longmeadow Lane, Du Page River	9
89	Walnut Lane, West Branch Du Page River	11
64	Lake St., Du Page River	11
		31
<u>Fox River System</u>		
90	Chicago-Elgin Rd., Poplar Creek	10
		10

¹Refer to Figure 1.

The frequency of sampling during 1999 was once per month at most locations. Table 4 shows the frequency of sampling at all General Use locations in 1999.

River System Compliance Data

In the General Use Waters sampled during 1999, 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 16 parameters which were in 100 percent compliance in all river systems were: temperature, phenols, ammonium nitrogen, un-ionized ammonia, total zinc, total cadmium, total copper, total chromium, total nickel, total lead, total mercury, boron, total arsenic, total selenium, total barium, and soluble iron.

The 12 water quality parameters which were in less than complete compliance with General Use Water Quality Standards during 1999 are shown in Table 5. The percent compliance of these parameters in each river system is also presented.

CHICAGO RIVER SYSTEM

There are five locations (31, 32, 34, 35, and 74) in the

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 5

GENERAL USE WATERS
 1999 WATER QUALITY PARAMETERS NOT IN TOTAL COMPLIANCE
 IN ALL RIVER SYSTEMS

Parameter	Estimated Percent Compliance*		
	Chicago	Calumet	Des Plaines
Dissolved Oxygen	77.3	89.6	92.8
pH	98.2	91.5	94.6
Chloride	94.5	100.0	97.6
Total Dissolved Solids	94.5	80.6	94.2
Sulfate	100.0	95.8	100.0
Weak Acid Dissociable Cyanide	100.0	97.2	98.6
Fluoride	100.0	94.4	100.0
Fecal Coliform	39.1	55.6	47.7
Gross Beta Radioactivity	100.0	ND	100.0
Silver	96.4	100.0	99.5
Iron	95.9	91.7	92.5
Manganese	98.2	100.0	100.0

ND = No Data

*Based on number of violations over total samples taken.

General Use section of the river system. Twenty parameters were in 100 percent compliance at each of the locations. In addition to the 16 parameters listed above, sulfate, fluoride, gross beta radioactivity, and weak acid dissociable cyanide were the other 4 parameters also in total compliance. Many violations of the pertinent standards of the remaining 8 parameters (dissolved oxygen, pH, chloride, total dissolved solids, fecal coliform, total iron, total silver, and total manganese) occurred at sampling locations 31, 32, 34, and 35.

The compliance rate for the fecal coliform standard was 39.1 percent. The compliance rate of dissolved oxygen for the river system was 77.3 percent. The compliance rates of other parameters pH, chloride, total dissolved solids, total iron, total silver, and total manganese ranged from 94.5 percent to 98.2 percent.

The 12 violations of dissolved oxygen occurred in various months of 1999. Location 31 had 3 violations in July, October, and November. Location 32 had 6 violations in June, July, August, September, October, and November. Location 34 had only 1 violation in June, and location 35 had 2 violations in April and December. Total silver had 2 violations, 1 each at locations 31 and 34 in March. Only 1 violation of pH occurred in June at location 35. Chloride and total dissolved solids each had 3 violations in March, 1 each at locations 31, 32, and 34. Manganese

had only 1 violation in November at location 31. Total iron had 2 violations, 1 each at locations 41 and 34 in November and February, respectively. Fecal coliform had 33 violations, 9 at location 31, 11 each at locations 32 and 34, and 2 at location 35, covering all months except January. The compliance rates of all parameters in 1999 were not significantly different from those in 1998.

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 16 parameters previously listed, which were in complete compliance in all river systems, 3 more parameters (chloride, total silver, and manganese) 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, fecal coliform, fluoride, weak acid dissociable cyanide, and total iron were 89.6, 91.5, 80.6, 95.8, 55.6, 94.4, 97.2, and 91.7 percent, respectively. No measurement for gross beta radioactivity was taken for General Use Waters of the river system.

Dissolved oxygen had 10 violations, 5 each at locations 52 and 57. The violations of dissolved oxygen occurred in April, June, July, August, September, and November. Seven violations of

pH occurred, 3 at location 49, two at location 54, and 1 each at locations 55 and 57. Total dissolved solids had 13 violations, 7 at location 54, 4 at location 57, and 2 at location 52. Sulfate had 3 violations in March, all at location 54. Total iron had 6 violations, 4 at location 52, and 2 at location 57. Fecal coliform had 31 violations, 10 each at locations 52, 54, and 57, and 1 violation at location 55. Fluoride had 4 violations all at location 52. Weak acid dissociable cyanide had 2 violations in September and November at location 52.

The compliance rates of all parameters in 1999 were not significantly different from those in 1998 except for total silver. The compliance rate of total silver increased from 87.5 percent in 1998 to 100 percent in 1999.

DES PLAINES RIVER SYSTEM

Fifteen 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 for the Des Plaines River System.

In addition to the 16 parameters previously listed, which were in total compliance in all river systems, 4 other parameters (sulfate, fluoride, gross beta radioactivity, and total manganese) were also in total compliance. However, other parameters

were less than 100 percent compliance. The compliance rate of fecal coliform was 47.7 percent. The compliance rates were 92.8, 94.6, 97.6, 94.2, 98.6, 92.5, and 99.5 for dissolved oxygen, pH, chloride, total dissolved solids, weak acid dissociable cyanide, total iron, and total silver, respectively.

Dissolved oxygen had 15 violations, 4 each at locations 19 and 20, 2 at location 22, and 1 each at locations 17, 18, 21, 24, and 79. These violations of dissolved oxygen occurred in June, July, August, and September. Eleven violations of pH occurred, 3 at location 22, 2 at location 79, and one each at locations 12, 17, 21, 29, 64, and 77. Chloride had 5 violations, 3 at location 77, and 1 each at locations 13 and 63. Total dissolved solids had 12 violations, 3 each at locations 63 and 77, 2 at location 79, and 1 each at locations 18, 21, 24, and 80. The violations of total dissolved solids occurred in January, February, and March. Total iron had 15 violations, 3 each at locations 12 and 77, 2 at location 18, and 1 each at locations 13, 24, 17, 63, 79, 80, and 89. Fecal coliform had 107 violations; 9 each at locations 20 and 21; 8 each at locations 17 and 19; 7 each at locations 18, 22, and 64; 6 each at locations 63, 77, and 89; 5 each at locations 13, 23, 24, and 78; 4 each at locations 29 and 90; and 3 each at locations 12 and 80. All 3 violations of weak acid dissociable cyanide, 1 each at locations 13, 17, and

78 occurred in March. Total silver had only 1 violation in May at location 22.

The compliance rates of all parameters in 1999 were not significantly different from those in 1998 except for temperature and total dissolved solids. The compliance rate of temperature increased from 91.7 percent in 1998 to total compliance in 1999. The compliance rate of total dissolved solids increased from 86.9 percent in 1998 to 94.2 percent in 1999.

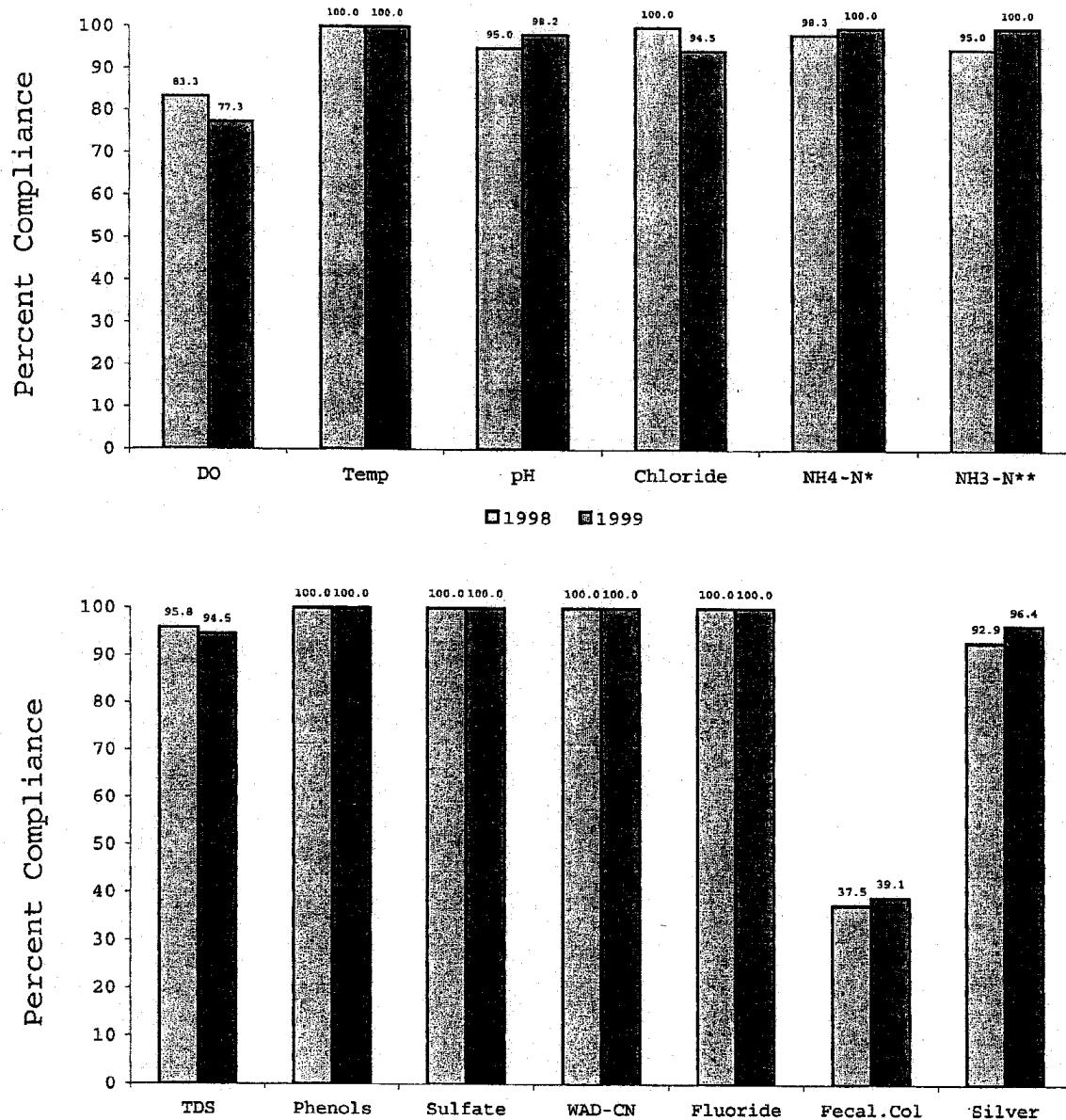
The compliance rates of 27 water quality parameters for each of the three river systems, during 1998 and 1999, are presented in Figures 2, 3, and 4.

The ratio of violations (number of violations/total number of observations which occurred at each sampling location on the three river systems for the last eight years, 1992 through 1999) 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 1998 AND 1999



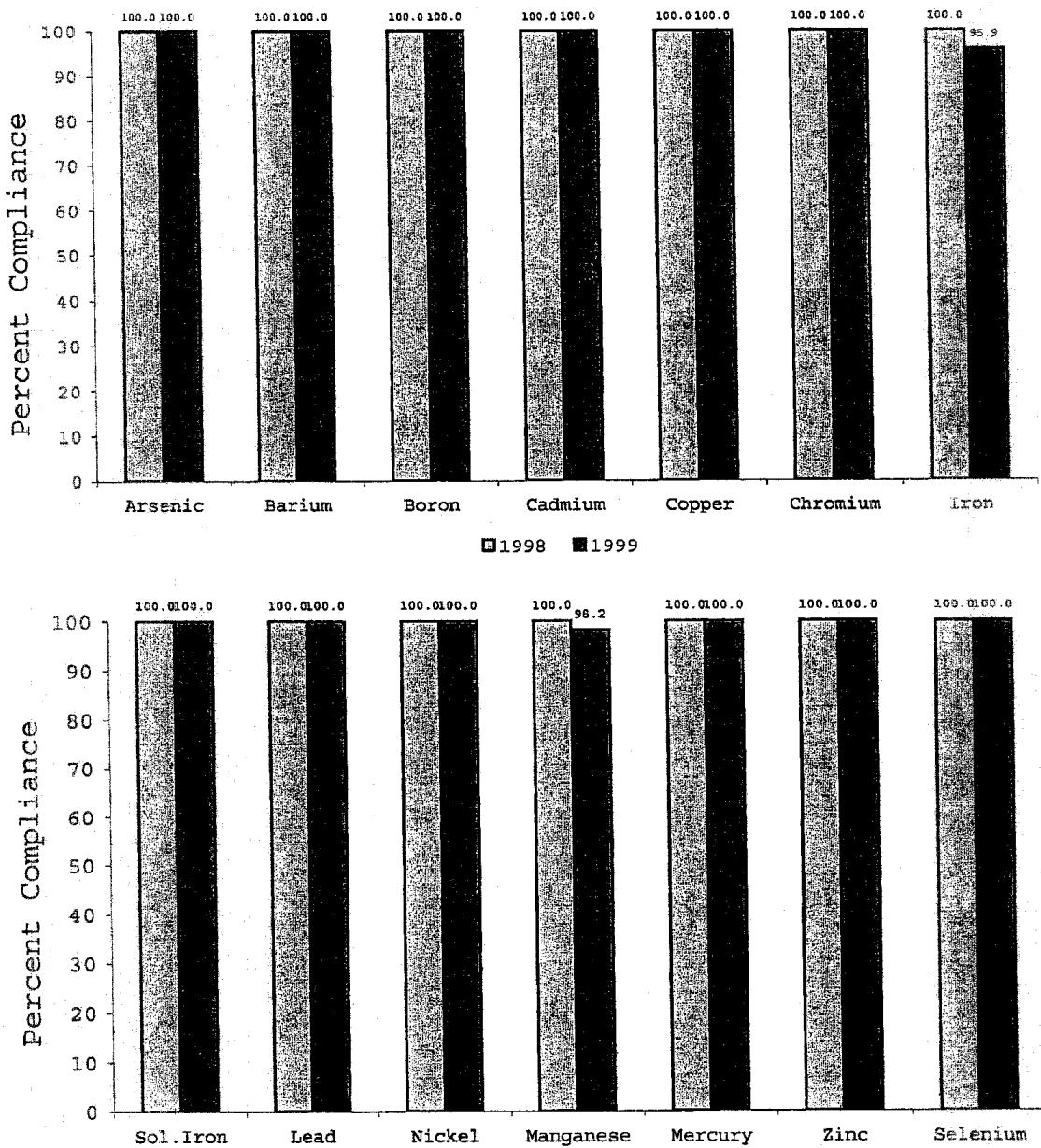
*NH₄-N = Ammonium Nitrogen

**NH₃-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2 (Continued)

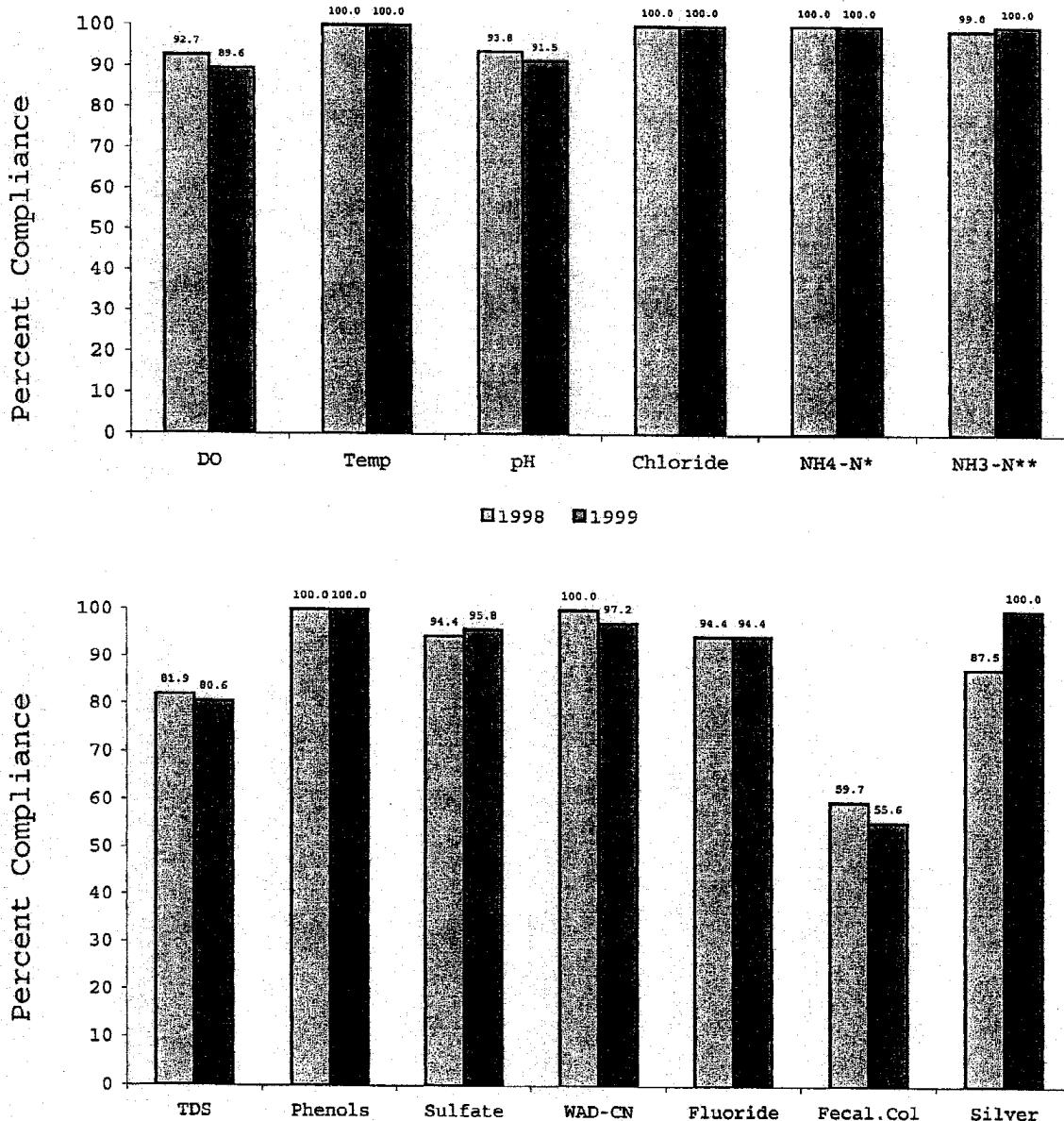
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CHICAGO RIVER IN 1998 AND 1999



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CALUMET RIVER IN 1998 AND 1999



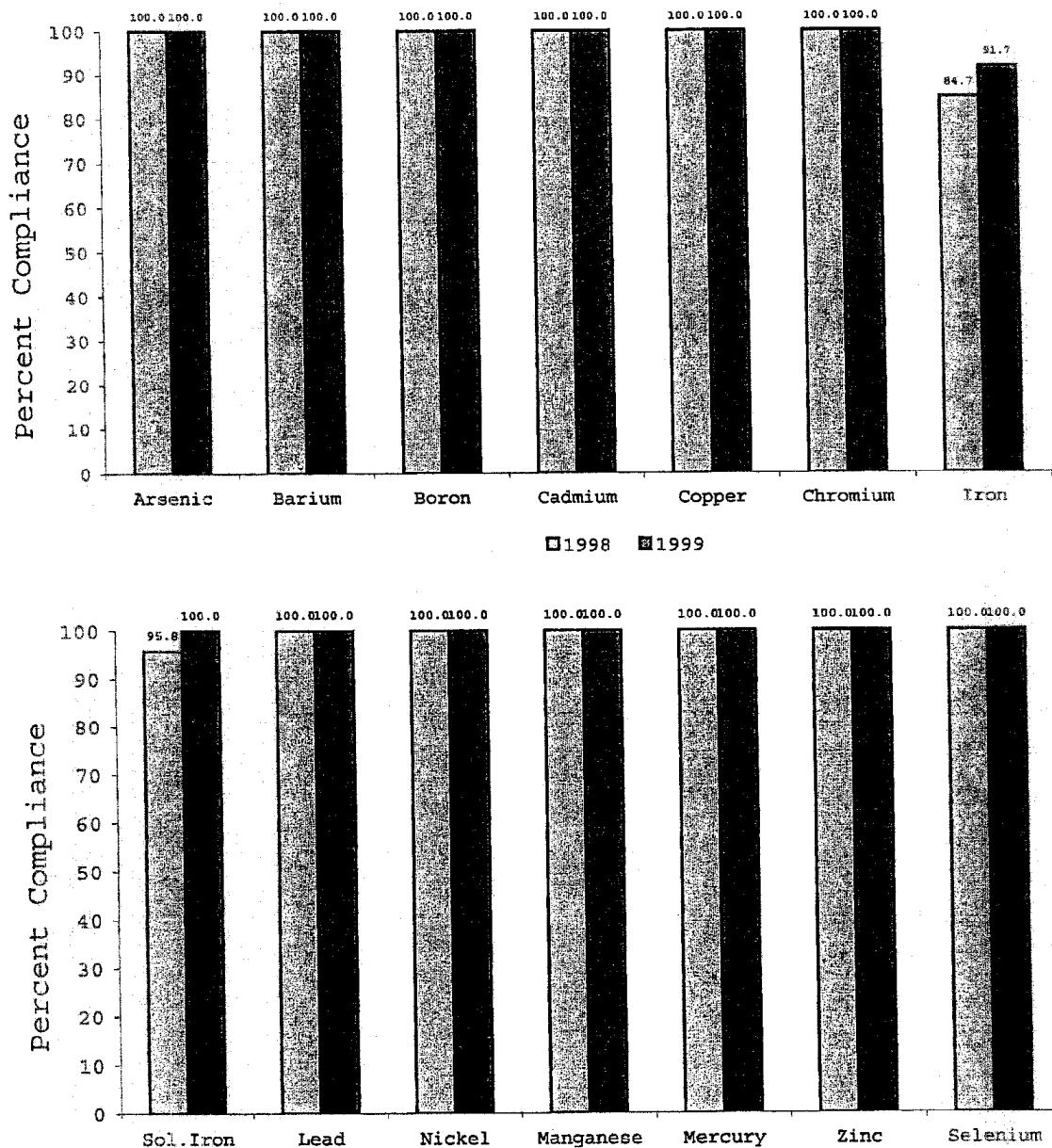
*NH₄-N = Ammonium Nitrogen

**NH₃-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3 (Continued)

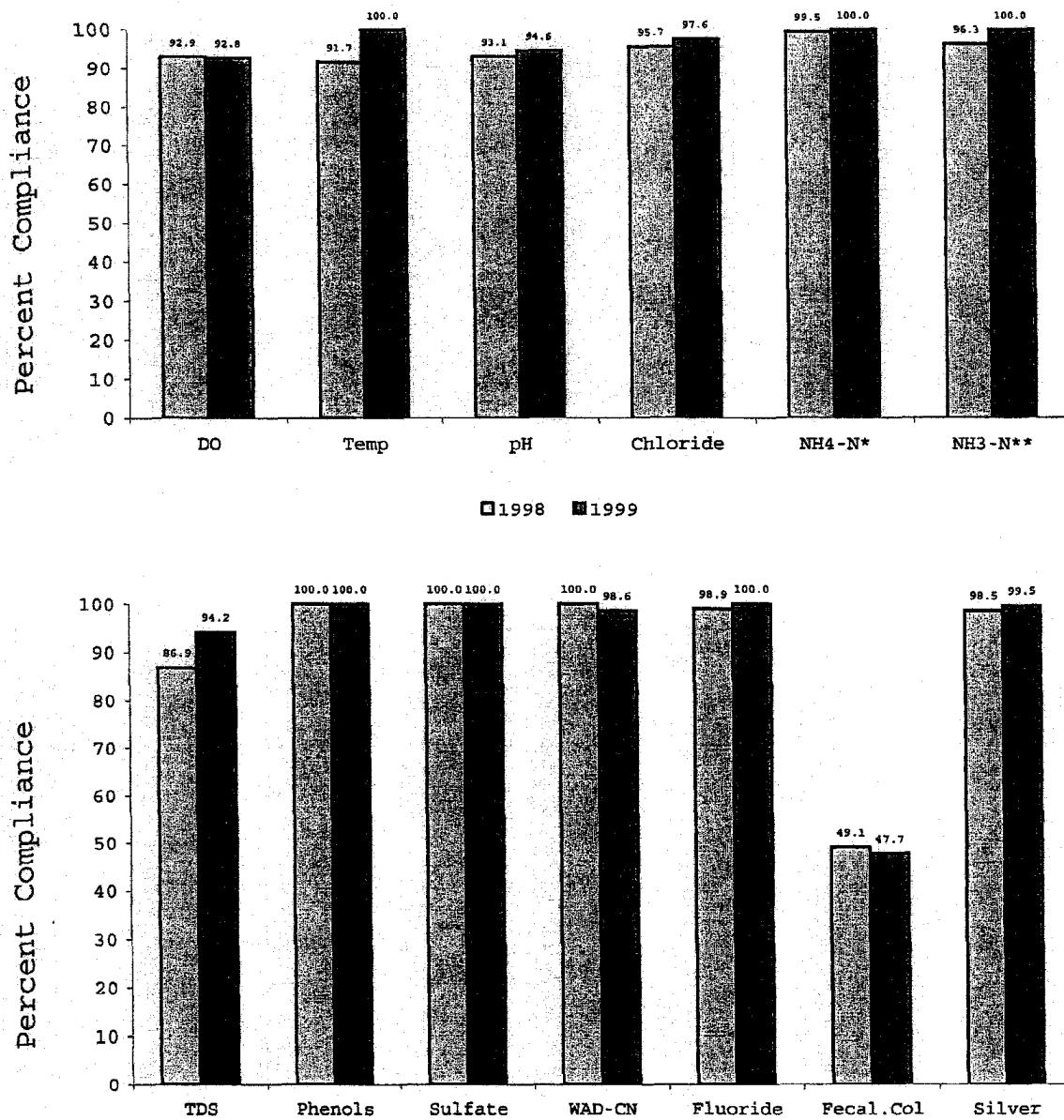
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR GENERAL USE WATERS SECTION OF CALUMET RIVER IN 1998 AND 1999



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 1998 AND 1999



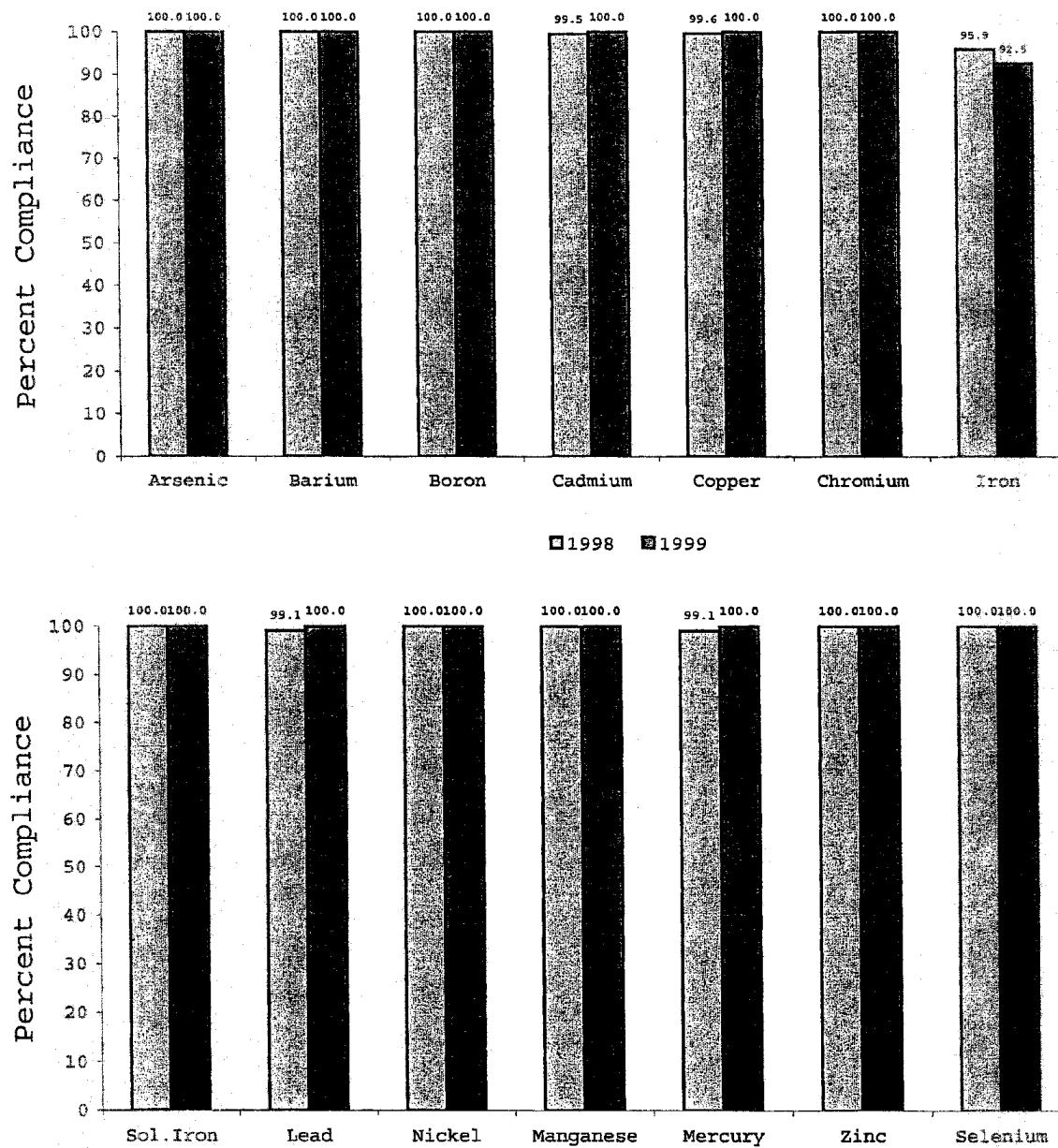
*NH₄-N = Ammonium Nitrogen

**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 1998 AND 1999



COMPLIANCE WITH WATER QUALITY STANDARDS
IN SECONDARY CONTACT WATERS

Sampling Locations and Frequencies

As previously defined, 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 1999, 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. Twenty-four hour composite samples were collected from an automatic sampler located in the Lockport Powerhouse (Chicago River System) once per week.

River System Compliance Data

In the Secondary Contact Waters sampled during 1999, 22 parameters were covered by IPCB Water Quality Standards. Summary results, including means and compliance standards, are shown in Appendix II for the Chicago and Calumet River Systems.

Generally, compliance with IPCB standards was high in 1999 in both the Chicago and Calumet River Systems. Seventeen

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 6

SECONDARY CONTACT WATERS, 1999 LOCATIONS SAMPLED AND
ANNUAL SAMPLING FREQUENCIES

Station No. ¹	Station Name	Annual No. Sample
<u>Chicago River System</u>		
36	Touhy Ave., N. Shore Channel	12
37	Wilson Ave., N.B. Chicago River	12
73	Diversey Ave., N.B. Chicago River	12
46	Grand Ave., N.B. Chicago River	12
39	Madison St., S.B. Chicago River	12
40	Damen Ave., S.B. Chicago River	11
75	Cicero Ave., Chgo. San. and Ship Canal	12
41	Harlem Ave., Chgo. San. and Ship Canal	11
42	Hwy. 83 and Chgo. San. and Ship Canal	12
48	Lemont Bridge Stephen Street (Comp)	11
	Chicago Sanitary and Ship Canal	
		117
82	Lockport Trebler (daily composite, automatic sampler)	50
		50
<u>Calumet River System</u>		
86	Burnham Avenue, Grand Calumet River	11
56	Indiana Ave., Calumet River	23
76	Halsted Street, Little Cal. River	23
58	Ashland Ave., Cal-Sag Channel	23
59	Cicero Ave., Cal-Sag Channel	23
43	Hwy. 83 and Cal-Sag Channel	23
		126

¹Refer to Figure 1.

water quality parameters were in complete compliance in both of the river systems. They were temperature, phenols, total cyanide, fluoride, total zinc, total cadmium, total copper, total chromium, total nickel, total lead, total mercury, total arsenic, total selenium, total barium, total silver, total iron, and manganese.

Five 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	96.7	97.7
pH	98.4	96.2
Total Dissolved Solids	98.9	100.0
Un-ionized Ammonia	93.8	97.1
Total Iron	96.3	100.0

CHICAGO RIVER SYSTEM

The 17 parameters listed above were in complete compliance in the Chicago River System. The 5 parameters dissolved oxygen, pH, total dissolved solids, un-ionized ammonia, and total iron, which were not in total compliance, had a compliance rate in the range of 93.8 to 98.9 percent.

Dissolved oxygen had 4 violations, 2 at location 75 in

May and June, and 1 each at locations 42 and 73 in June. Two pH violations occurred, 1 each at locations 39 and 75 in January and November, respectively. Locations 37 and 73 had 1 violation each in March due to total dissolved solids. Total iron had six violations at location 82 (Lockport Trebler) in January, March, April, July, October, and November. Un-ionized ammonia also had 6 violations, 2 at location 37 in February and June, 1 each at locations 36 and 39 in February and January, respectively, and 1 each at locations 40, and 75 in November.

The compliance rates of all parameters in 1999 were not significantly different from those in 1998 except for pH. The pH compliance rate increased from 91.7 percent in 1998 to 98.4 percent in 1999.

CALUMET RIVER SYSTEM

In addition to the 17 parameters previously listed, which were in complete compliance in all of the river systems, 2 more parameters (total dissolved solids, and total iron) had complete compliance. However, the compliance rates for dissolved oxygen, pH, and un-ionized ammonia were 97.7, 96.2, and 97.1, respectively.

Dissolved oxygen had 3 violations in June, July, and Sep-

tember at location 86. Location 56 had 1 violation of pH in October. Each of the locations 43, 58, 59, and 76 had 1 violation of pH in February. Un-ionized ammonia had 1 violation in November at location 86, and locations 43 and 58 had 1 violation each in February.

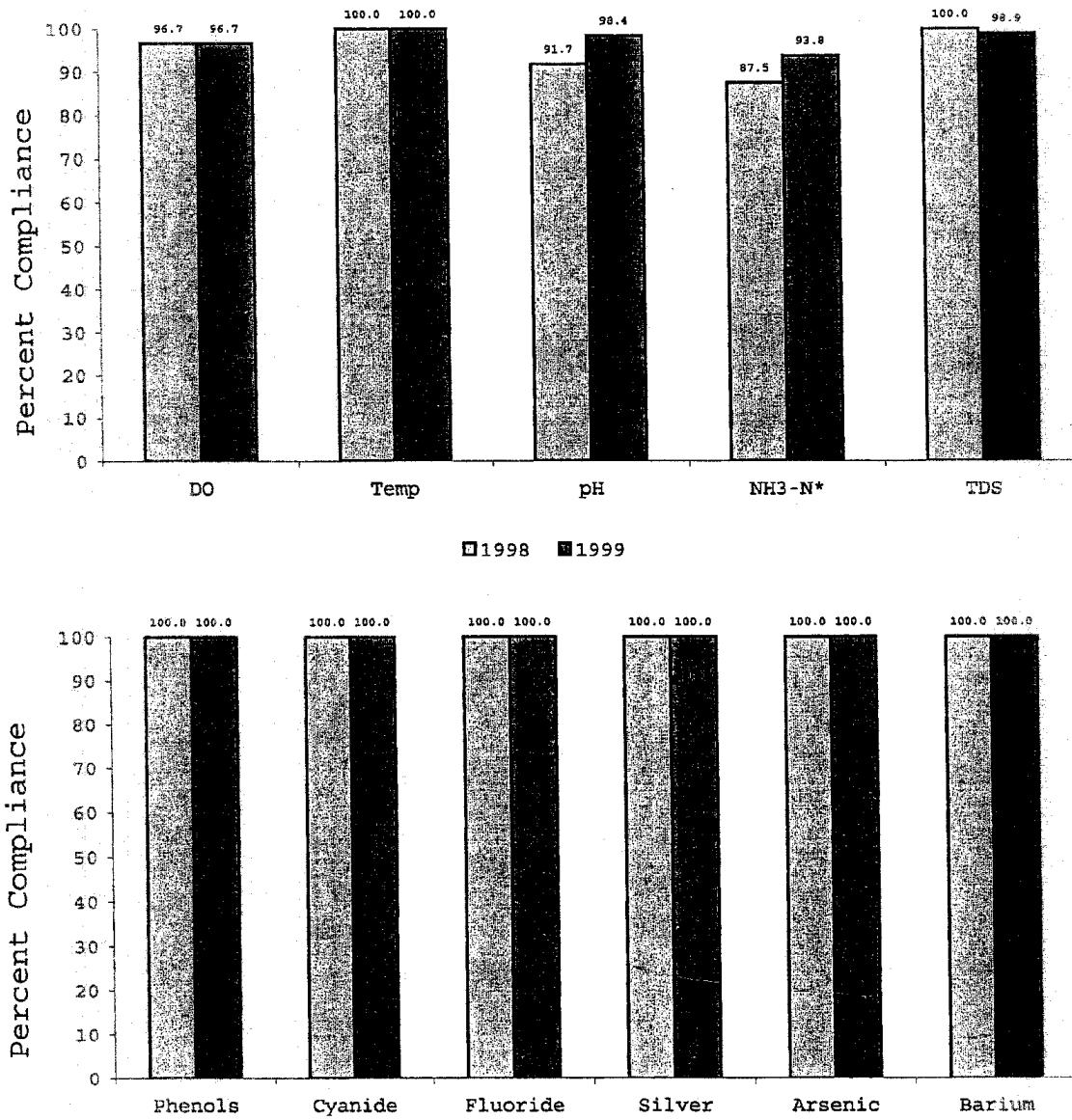
The compliance rates of all parameters in 1999 are not significantly different from those in 1998 except for pH. The compliance rate of pH increased from 87.9 percent in 1998 to 96.2 percent in 1999.

The compliance rates of 22 water quality parameters for secondary contact waters of the two river systems, during 1998 and 1999, are presented in Figures 5 and 6. The number of violations which occurred in each sampling location of the three river systems for the last eight years are presented in Appendix II, Tables AII-2 through AII-31.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 5

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY
CONTACT WATERS SECTION OF CHICAGO RIVER IN 1998 AND 1999

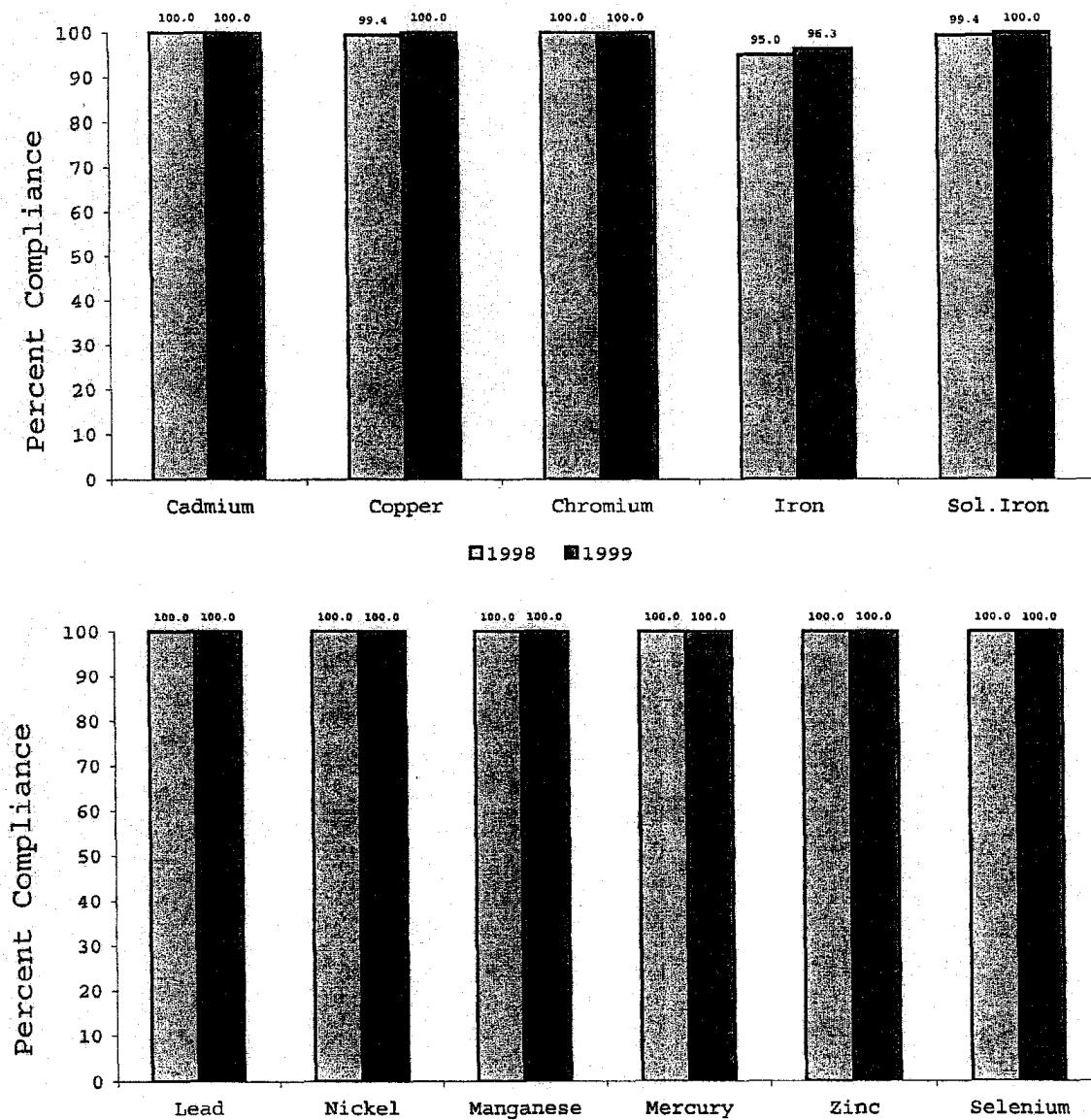


*NH₃-N = Un-ionized Ammonia

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 5 (Continued)

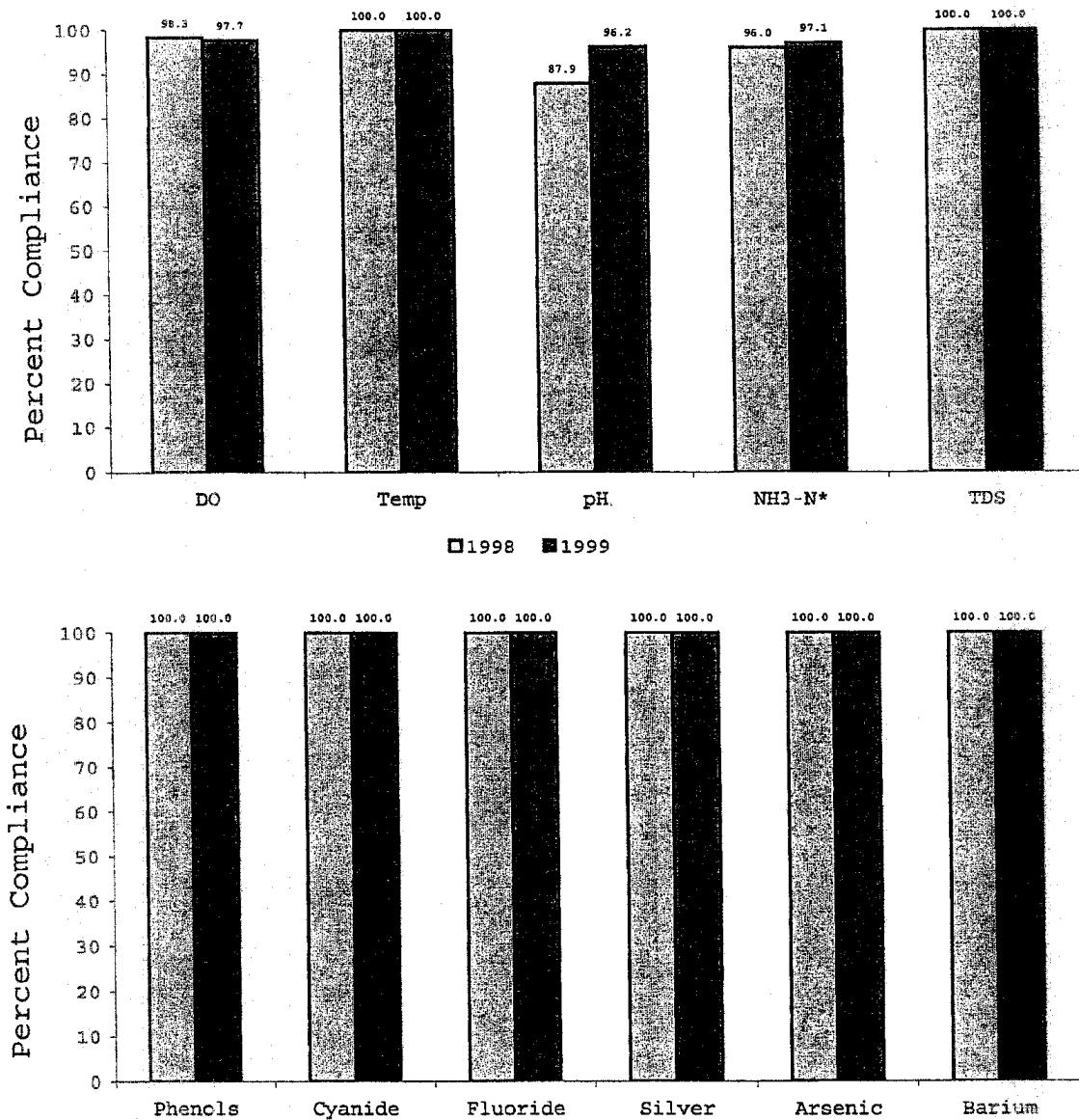
COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CHICAGO RIVER IN 1998 AND 1999



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 6

COMPLIANCE RATES OF WATER QUALITY STANDARDS FOR SECONDARY CONTACT WATERS SECTION OF CALUMET RIVER IN 1998 AND 1999

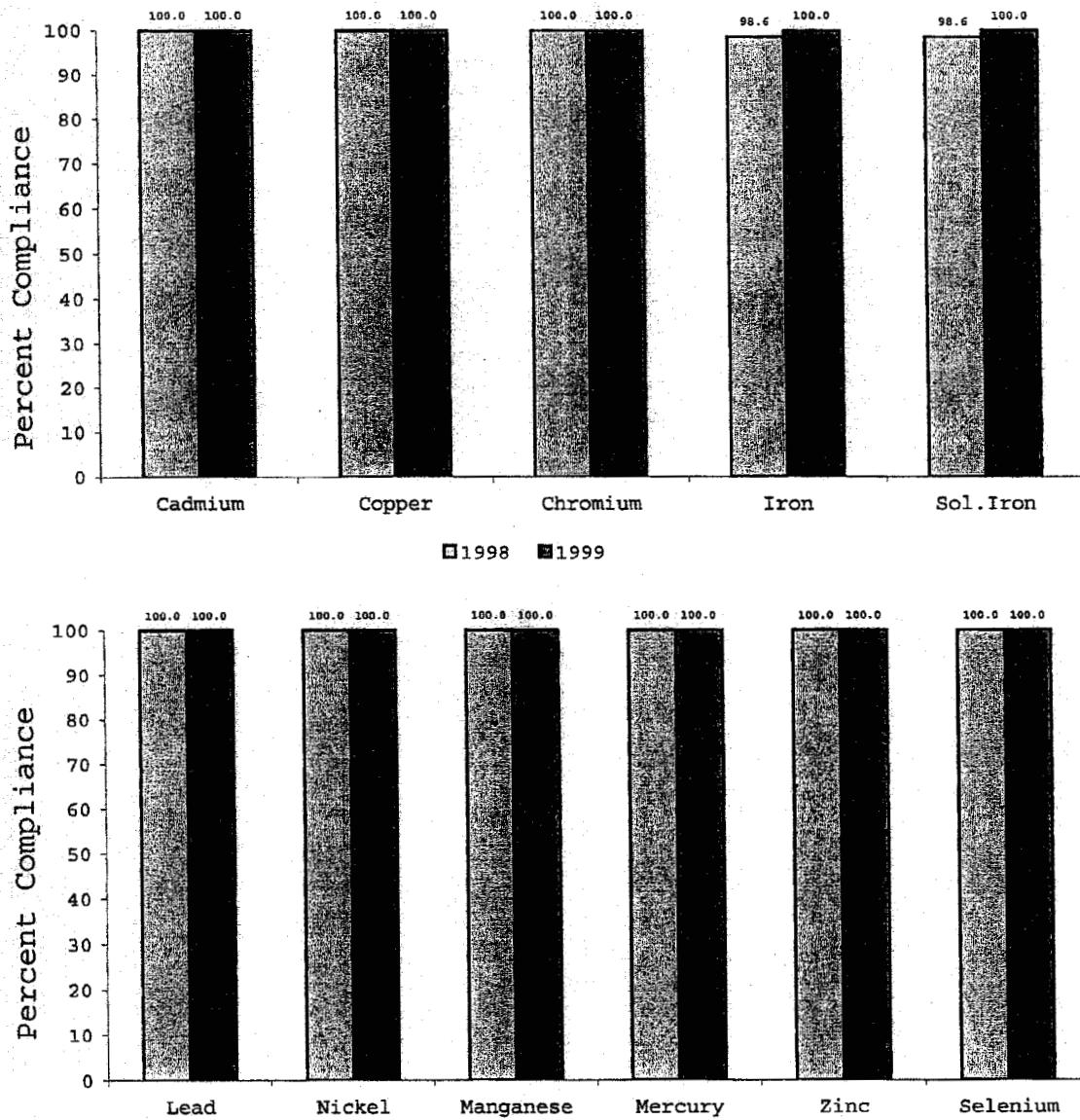


*NH₃-N = Un-ionized Ammonia

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 1998 AND 1999



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 1999. 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 Waters. During 1999, 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 Du Page 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 - 1999

WRP	Location	Upstream Sample			Downstream Sample		
		No ¹	Annual	Freq.	Location	No ¹	Annual
North Side	Central Road North Shore Channel	35	12		Touhy Ave. North Shore Channel	36	12
Stickney	Cicero Avenue Sanitary and Ship Canal	75	12		Harlem Avenue Sanitary and Ship Canal (Sta. 41)	41	12
Calumet	Indiana Avenue Calumet River	56	24		Halsted Street Calumet River	76	24
Egan	Higgins Road Salt Creek	79	11		Arlington Hts. Rd. Salt Creek	80	11
Kirie	Visitor's Road "A" Bridge Higgins Creek	77	11		Willie Road Higgins Creek	78	11
Hanover Park	Long Meadow Lane - West Branch Du Page River	63	10		Walnut Lane West Branch Du Page River	89	11

¹ 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

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	7.51		7.43	0.77
Temperature	Temp (°C)	15.9		16.9	0.76
pH	pH	8.12		7.56	0.02
Chloride	Cl (mg/L)	43		154	0.00
Turbidity	Turb (JTU)	9.10		7.50	0.18
Alkalinity	Alk (mg/L)	129		142	0.14
Total Kjeldahl Nitrogen	TKN (mg/L)	1.27		2.48	0.04
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.348		0.921	0.03
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.008		0.021	0.36
Organic Nitrogen	ORG-N (mg/L)	0.92		1.56	0.11
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	0.32		5.67	0.00
Total Solids	TS (mg/L)	299		573	0.00
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	9.9		10.3	0.97
Total Dissolved Solids	TDS (mg/L)	289		563	0.00
Phenols	Phenol (μg/L)	12.4		20.4	0.00
Sulfate	SO ₄ (mg/L)	34.3		51.3	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.215		1.351	0.00
Soluble Phosphorus	Sol. P (mg/L)	0.098		1.066	0.00
Cyanide	CN (mg/L)	0.002		0.005	0.00
WAD Cyanide	WAD-CN (mg/L)	0.000		0.001	0.00
Fluoride	F (mg/L)	0.184		0.781	0.00
Total Organic Carbon	TOC (mg/L)	6.30		9.92	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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	130		7866	0.00
Calcium	Ca (mg/L)	43.4		56.5	0.01
Magnesium	Mg (mg/L)	15.4		19.9	0.01
Hardness	Hard (mg/L)	172		223	0.01
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.40		3.49	0.41
Gross Beta Radioactivity	G. Beta (pCi/L)	5.97		8.46	0.00
Silver	Ag (mg/L)	0.000		0.000	1.00
Arsenic	As (mg/L)	0.000		0.000	1.00
Barium	Ba (mg/L)	0.023		0.020	0.10
Boron	B (mg/L)	0.015		0.207	0.00
Cadmium	Cd (mg/L)	0.000		0.000	1.00
Copper	Cu (mg/L)	0.001		0.003	0.18
Chromium	Cr (mg/L)	0.001		0.000	0.89
Iron	Fe (mg/L)	0.183		0.136	0.09
Lead	Pb (mg/L)	0.000		0.000	1.00
Nickel	Ni (mg/L)	0.000		0.000	1.00
Manganese	Mn (mg/L)	0.024		0.018	0.27
Mercury	Hg (µg/L)	0.012		0.006	0.47
Zinc	Zn (mg/L)	0.007		0.037	0.00
Selenium	Se (mg/L)	0.000		0.000	1.00

Sig Prob = Significance Probability. A value ≤ 0.05 indicates that means are different.

- = 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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	5.99		7.16	0.05
Temperature	Temp (°C)	15.6		17.9	0.39
pH	pH	7.85		7.67	0.49
Chloride	Cl (mg/L)	106		155	0.34
Turbidity	Turb (JTU)	13.83		9.73	0.03
Alkalinity	Alk (mg/L)	140		129	0.19
Total Kjeldahl Nitrogen	TKN (mg/L)	1.64		1.43	0.76
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.793		0.357	0.00
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.031		0.006	0.12
Organic Nitrogen	ORG-N (mg/L)	0.85		1.07	0.06
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	3.58		7.01	0.00
Total Solids	TS (mg/L)	478		613	0.09
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	18.5		13.2	0.08
Total Dissolved Solids	TDS (mg/L)	459		600	0.09
Phenols	Phenol (μg/L)	16.0		15.3	0.74
Sulfate	SO ₄ (mg/L)	50.0		75.6	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.690		1.044	0.27
Soluble Phosphorus	Sol. P (mg/L)	0.459		0.754	0.15
Cyanide	CN (mg/L)	0.005		0.006	0.10
WAD Cyanide	WAD-CN (mg/L)	0.001		0.001	0.86
Fluoride	F (mg/L)	0.512		0.743	0.00
Total Organic Carbon	TOC (mg/L)	7.25		8.45	0.05

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	327	4970	0.00	
Calcium	Ca (mg/L)	54.4	56.8	0.27	
Magnesium	Mg (mg/L)	20.3	21.0	0.37	
Hardness	Hard (mg/L)	219	228	0.37	
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.96	3.64	0.72	
Gross Beta Radioactivity	G. Beta (pCi/L)	7.36	9.18	0.03	
Silver	Ag (mg/L)	0.000	0.000	1.00	
Arsenic	As (mg/L)	0.000	0.000	1.00	
Barium	Ba (mg/L)	0.023	0.019	0.06	
Boron	B (mg/L)	0.132	0.175	0.00	
Cadmium	Cd (mg/L)	0.000	0.000	1.00	
Copper	Cu (mg/L)	0.002	0.001	0.96	
Chromium	Cr (mg/L)	0.001	0.001	0.52	
Iron	Fe (mg/L)	0.313	0.210	0.02	
Lead	Pb (mg/L)	0.004	0.000	0.38	
Nickel	Ni (mg/L)	0.001	0.000	0.38	
Manganese	Mn (mg/L)	0.027	0.022	0.07	
Mercury	Hg (μ g/L)	0.022	0.018	0.79	
Zinc	Zn (mg/L)	0.032	0.036	0.30	
Selenium	Se (mg/L)	0.000	0.000	1.00	

Sig Prob = Significance Probability. A value ≤ 0.05 indicates that means are different.

- = 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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	8.48		6.69	0.01
Temperature	Temp (°C)	15.7		16.5	0.88
pH	pH	8.10		7.82	0.10
Chloride	Cl (mg/L)	95		139	0.11
Turbidity	Turb (JTU)	14.73		8.82	0.00
Alkalinity	Alk (mg/L)	129		158	0.03
Total Kjeldahl Nitrogen	TKN (mg/L)	1.10		1.38	0.18
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.276		0.332	0.14
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.012		0.009	0.56
Organic Nitrogen	ORG-N (mg/L)	0.82		1.05	0.03
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	1.79		4.27	0.00
Total Solids	TS (mg/L)	461		664	0.03
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	26.4		12.7	0.00
Total Dissolved Solids	TDS (mg/L)	440		651	0.02
Phenols	Phenol (µg/L)	15.3		46.6	0.00
Sulfate	SO ₄ (mg/L)	72.4		125.0	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.324		2.595	0.00
Soluble Phosphorus	Sol. P (mg/L)	0.110		2.684	0.00
Cyanide	CN (mg/L)	0.003		0.010	0.00
WAD Cyanide	WAD-CN (mg/L)	0.000		0.003	0.00
Fluoride	F (mg/L)	0.317		0.759	0.00
Total Organic Carbon	TOC (mg/L)	6.68		9.26	0.01

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	55		3792	0.00
Calcium	Ca (mg/L)	50.4		62.1	0.07
Magnesium	Mg (mg/L)	21.6		22.4	0.77
Hardness	Hard (mg/L)	215		247	0.22
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.51		3.70	0.25
Gross Beta Radioactivity	G. Beta (pCi/L)	7.07		9.25	0.01
Silver	Ag (mg/L)	0.000		0.000	1.00
Arsenic	As (mg/L)	0.000		0.000	1.00
Barium	Ba (mg/L)	0.032		0.020	0.00
Boron	B (mg/L)	0.123		0.244	0.00
Cadmium	Cd (mg/L)	0.000		0.000	1.00
Copper	Cu (mg/L)	0.003		0.000	0.24
Chromium	Cr (mg/L)	0.001		0.001	1.00
Iron	Fe (mg/L)	0.395		0.251	0.03
Lead	Pb (mg/L)	0.000		0.000	1.00
Nickel	Ni (mg/L)	0.002		0.003	1.00
Manganese	Mn (mg/L)	0.057		0.056	0.45
Mercury	Hg (μ g/L)	0.029		0.038	1.00
Zinc	Zn (mg/L)	0.032		0.027	0.97
Selenium	Se (mg/L)	0.000		0.000	1.00

Sig Prob = Significance Probability. A value ≤ 0.05 indicates that means are different.

- = 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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	9.07		7.97	0.31
Temperature	Temp (°C)	14.4		15.2	0.82
pH	pH	8.24		7.87	0.22
Chloride	Cl (mg/L)	218		177	0.08
Turbidity	Turb (JTU)	23.70		11.18	0.00
Alkalinity	Alk (mg/L)	158		166	0.36
Total Kjeldahl Nitrogen	TKN (mg/L)	1.17		1.46	0.44
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.067		0.090	0.59
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.007		0.003	0.92
Organic Nitrogen	ORG-N (mg/L)	1.11		1.37	0.40
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	0.26		7.07	0.00
Total Solids	TS (mg/L)	734		670	0.27
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	33.7		14.4	0.00
Total Dissolved Solids	TDS (mg/L)	700		655	0.50
Phenols	Phenol (µg/L)	16.6		20.3	0.09
Sulfate	SO ₄ (mg/L)	74.9		83.6	0.48
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.128		2.224	0.00
Soluble Phosphorus	Sol. P (mg/L)	0.074		1.843	0.00
Cyanide	CN (mg/L)	0.004		0.010	0.01
WAD Cyanide	WAD-CN (mg/L)	0.002		0.002	0.02
Fluoride	F (mg/L)	0.282		0.595	0.05
Total Organic Carbon	TOC (mg/L)	10.50		9.82	0.37

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	45		265	0.01
Calcium	Ca (mg/L)	60.0		58.4	0.55
Magnesium	Mg (mg/L)	27.8		23.5	0.07
Hardness	Hard (mg/L)	264		242	0.92
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.64		3.53	0.38
Gross Beta Radioactivity	G. Beta (pCi/L)	6.06		11.95	0.00
Silver	Ag (mg/L)	0.000		0.000	1.00
Arsenic	As (mg/L)	0.000		0.000	1.00
Barium	Ba (mg/L)	0.041		0.023	0.00
Boron	B (mg/L)	0.071		0.225	0.01
Cadmium	Cd (mg/L)	0.000		0.000	1.00
Copper	Cu (mg/L)	0.000		0.003	0.09
Chromium	Cr (mg/L)	0.000		0.001	0.39
Iron	Fe (mg/L)	0.760		0.375	0.01
Lead	Pb (mg/L)	0.000		0.000	1.00
Nickel	Ni (mg/L)	0.000		0.000	1.00
Manganese	Mn (mg/L)	0.091		0.050	0.00
Mercury	Hg (μ g/L)	0.058		0.057	0.79
Zinc	Zn (mg/L)	0.020		0.027	0.06
Selenium	Se (mg/L)	0.000		0.000	1.00

Sig Prob = Significance Probability. A value ≤ 0.05 indicates that means are different.

- = 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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	9.39		8.61	0.92
Temperature	Temp (°C)	14.0		16.1	0.50
pH	pH	8.02		7.77	0.34
Chloride	Cl (mg/L)	294		168	0.03
Turbidity	Turb (JTU)	22.09		5.36	0.00
Alkalinity	Alk (mg/L)	172		190	0.29
Total Kjeldahl Nitrogen	TKN (mg/L)	1.29		1.74	0.07
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.116		0.245	0.04
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.016		0.022	0.34
Organic Nitrogen	ORG-N (mg/L)	1.17		1.50	0.06
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	0.34		4.99	0.00
Total Solids	TS (mg/L)	858		700	0.65
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	43.9		5.0	0.00
Total Dissolved Solids	TDS (mg/L)	814		695	0.77
Phenols	Phenol (μg/L)	21.6		25.0	0.28
Sulfate	SO ₄ (mg/L)	55.4		99.3	0.00
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.221		0.671	0.00
Soluble Phosphorus	Sol. P (mg/L)	0.071		0.506	0.00
Cyanide	CN (mg/L)	0.003		0.011	0.00
WAD Cyanide	WAD-CN (mg/L)	0.000		0.005	0.20
Fluoride	F (mg/L)	0.207		0.745	0.00
Total Organic Carbon	TOC (mg/L)	10.82		10.18	0.57

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	369		223	0.60
Calcium	Ca (mg/L)	67.5		72.3	0.55
Magnesium	Mg (mg/L)	28.5		28.2	0.94
Hardness	Hard (mg/L)	286		297	0.77
Gross Alpha Radioactivity	G. Alpha (pCi/L)	3.77		3.69	0.92
Gross Beta Radioactivity	G. Beta (pCi/L)	7.18		16.83	0.00
Silver	Ag (mg/L)	0.000		0.000	1.00
Arsenic	As (mg/L)	0.000		0.000	1.00
Barium	Ba (mg/L)	0.054		0.022	0.00
Boron	B (mg/L)	0.124		0.376	0.00
Cadmium	Cd (mg/L)	0.000		0.000	1.00
Copper	Cu (mg/L)	0.003		0.000	0.08
Chromium	Cr (mg/L)	0.000		0.000	1.00
Iron	Fe (mg/L)	0.812		0.103	0.00
Lead	Pb (mg/L)	0.000		0.000	1.00
Nickel	Ni (mg/L)	0.000		0.000	1.00
Manganese	Mn (mg/L)	0.112		0.022	0.00
Mercury	Hg (μg/L)	0.045		0.050	0.97
Zinc	Zn (mg/L)	0.025		0.045	0.01
Selenium	Se (mg/L)	0.000		0.000	1.00

Sig Prob = Significance Probability. A value <=0.05 indicates that means are different.

- = 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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Dissolved Oxygen	DO (mg/L)	10.04		8.20	0.22
Temperature	Temp (°C)	13.9		16.0	0.55
pH	pH	7.90		7.89	0.94
Chloride	Cl (mg/L)	257		127	0.09
Turbidity	Turb (JTU)	17.67		12.36	0.04
Alkalinity	Alk (mg/L)	192		163	0.27
Total Kjeldahl Nitrogen	TKN (mg/L)	1.81		2.64	0.08
Ammonium Nitrogen	NH ₄ -N (mg/L)	0.131		0.367	0.62
Un-ionized Ammonia	NH ₃ -N (mg/L)	0.003		0.018	0.66
Organic Nitrogen	ORG-N (mg/L)	1.68		2.27	0.20
Nitrite Plus Nitrate	NO ₂ +NO ₃ (mg/L)	2.88		8.01	0.00
Total Solids	TS (mg/L)	869		622	0.20
Total Volatile Solids	TVS (mg/L)	-		-	-
Total Suspended Solids	TSS (mg/L)	21.1		19.6	0.22
Total Dissolved Solids	TDS (mg/L)	848		603	0.20
Phenols	Phenol (μg/L)	18.8		20.1	0.53
Sulfate	SO ₄ (mg/L)	87.1		68.7	0.18
Fats, Oils, and Greases	FOG (mg/L)	-		-	-
Phosphorus	T.P (mg/L)	0.952		2.742	0.01
Soluble Phosphorus	Sol. P (mg/L)	0.729		2.243	0.01
Cyanide	CN (mg/L)	0.007		0.012	0.05
WAD Cyanide	WAD-CN (mg/L)	0.001		0.002	0.25
Fluoride	F (mg/L)	0.419		0.719	0.03
Total Organic Carbon	TOC (mg/L)	12.67		11.45	0.06

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 1999

Parameters	Abbreviation (Units)	U	vs	D	Sig Prob
Fecal Coliform	FC (#/100ml)	386		590	0.50
Calcium	Ca (mg/L)	76.9		61.9	0.49
Magnesium	Mg (mg/L)	51.0		24.7	0.25
Hardness	Hard (mg/L)	402		256	0.36
Gross Alpha Radioactivity	G. Alpha (pCi/L)	4.14		3.59	0.30
Gross Beta Radioactivity	G. Beta (pCi/L)	8.49		10.64	0.10
Silver	Ag (mg/L)	0.000		0.000	1.00
Arsenic	As (mg/L)	0.000		0.000	1.00
Barium	Ba (mg/L)	0.045		0.025	0.02
Boron	B (mg/L)	0.128		0.311	0.01
Cadmium	Cd (mg/L)	0.001		0.000	0.31
Copper	Cu (mg/L)	0.002		0.006	0.16
Chromium	Cr (mg/L)	0.002		0.000	0.13
Iron	Fe (mg/L)	0.672		0.285	0.00
Lead	Pb (mg/L)	0.000		0.000	1.00
Nickel	Ni (mg/L)	0.002		0.000	0.31
Manganese	Mn (mg/L)	0.073		0.038	0.09
Mercury	Hg (μ g/L)	0.012		0.053	0.20
Zinc	Zn (mg/L)	0.036		0.042	0.97
Selenium	Se (mg/L)	0.000		0.000	1.00

Sig Prob = Significance Probability. A value ≤ 0.05 indicates that means are different.

other parameters. This is indicated by the value of 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 entries of Tables 8 through 13, and the Appendix II tables reveal that the quality of effluents from the District's WRPs is high and, therefore, the quality of water

in the receiving streams to which they discharge is not adversely affected. 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 there exists a pertinent water quality standard, and for some there is no such standard. A discussion of the results from each WRP follows. Parameters, which are significantly different in the downstream location than in 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 22 water quality parameters had significantly different means between upstream and downstream locations. These parameters were:

- pH, chloride, total Kjeldahl nitrogen, ammonium nitrogen, nitrite plus nitrate nitrogen, total solids, total dissolved solids, phenols, sul-

fate, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, total organic carbon, fecal coliform, calcium, total manganese, hardness, gross beta radioactivity, boron, and total zinc.

The downstream averages of all parameters were significantly higher than the upstream averages except for pH, which had significantly lower averages downstream than upstream.

Among the 22 parameters listed above, 13 parameters have either General Use or Secondary Contact Water quality limits as prescribed by the IPCB. These parameters are:

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

At location 35, 10 parameters were in total compliance:

- chloride, ammonium nitrogen, total dissolved solids, phenols, sulfate, weak acid dissociable cyanide, fluoride, gross beta radioactivity, boron, and total zinc.

The percent compliance for pH and fecal coliform was 88.9 and 80.0 percent, respectively. Cyanide does not have General Use water quality limit.

At location 36, 6 parameters have Secondary Contact Water quality limits. These parameters are:

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

All 6 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. Ten water quality parameters had significantly different means between the upstream and the downstream locations. These parameters were:

- dissolved oxygen, turbidity, ammonium nitrogen, nitrite plus nitrate nitrogen, sulfate, fluoride, fecal coliform, gross beta radioactivity, boron, and total iron.

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

- dissolved oxygen, nitrite plus nitrate nitrogen, sulfate, fluoride, fecal coliform, gross beta radioactivity, and boron.

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

- turbidity, ammonium nitrogen, and total iron.

Among the ten parameters listed above, only dissolved oxygen, fluoride, 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. Fluoride 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-one water quality parameters had significantly different means between upstream and downstream locations. These parameters were:

- dissolved oxygen, turbidity, alkalinity, 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, gross beta radioactivity, total barium, boron, and total iron.

Sixteen parameters had significantly higher means downstream than upstream. These parameters were:

- alkalinity, 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, gross beta radioactivity, and boron.

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

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

Among 21 parameters listed above, seven parameters have Secondary Contact Water quality limits. These parameters are:

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

All 7 parameters were in total compliance at upstream and downstream locations.

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. Fourteen water quality parameters had significantly different means between the upstream and the downstream locations. These parameters were:

- turbidity, nitrite plus nitrate nitrogen, total suspended solids, total phosphorus, soluble phosphorus, total cyanide, weak acid dissociable cyanide, fluoride, fecal coliform, gross beta radioactivity, total barium, boron, total iron, and total manganese.

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

- nitrite plus nitrate nitrogen, total phosphorus, soluble phosphorus, total cyanide, fluoride, fecal coliform, gross beta radioactivity, and boron.

Six parameters had significantly lower means at the downstream location than the upstream location. These parameters were:

- turbidity, total suspended solids, weak acid dissociable cyanide, total barium, total iron, and total manganese.

Among the 14 parameters listed above which had significantly different means between the upstream and the downstream locations, eight parameters have applicable General Use Water quality limits. These parameters are:

- weak acid dissociable cyanide, fluoride, fecal coliform, gross beta radioactivity, total barium, boron, total iron, and total manganese.

Fecal coliform had 72.7 percent compliance at the downstream location and total compliance at the upstream location. Total iron had 90.9 percent compliance at the downstream location and 90.0 percent compliance at the upstream location. The remaining six parameters were in complete compliance at both locations.

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.

Sixteen parameters had significantly different means between the upstream and the downstream locations. These parameters were:

- chloride, turbidity, ammonium 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.

Ten parameters had significantly higher means at the downstream location than the upstream location. These parameters were:

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

Six parameters had significantly higher means upstream than downstream. These parameters were:

- chloride, turbidity, total suspended solids, total barium, total iron, and total manganese.

Among the 16 parameters listed above, ten parameters have General Use Water quality limits. These parameters are:

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

Both chloride and total iron had 72.7 percent compliance at the upstream location and total compliance at the downstream location. All other 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 means between the upstream and the downstream locations. These parameters were:

- turbidity, nitrite plus nitrate nitrogen, total phosphorus, soluble phosphorus, total cyanide, fluoride, total barium, boron, and total iron.

Six parameters had significantly higher means downstream than upstream. These parameters were:

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

Three parameters, turbidity, total barium, and total iron had significantly higher means at the upstream location than the downstream location.

Of the nine parameters listed above which had signifi-

cantly different means, four parameters have General Use Waters quality limits. These parameters are:

- fluoride, total barium, boron, and total iron.

Total iron had 88.9 percent compliance at the upstream location and 90.9 percent compliance at the downstream location. All other parameters were in complete compliance at both locations.

REFERENCES

1. Metropolitan Water Reclamation District of Greater Chicago, Research and Development Department, Annual Reports 1983 - 1993.
2. State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C Water Pollution, Chapter I: Pollution Control Board, December 1, 1982.
3. State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, February 1, 1986.
4. State of Illinois Rules and Regulations, Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board, January 14, 1999.
5. 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.
6. Illinois Pollution Control Board - Amendments to Title 35, Subtitle C (Toxic Control) R88-21, District A, January 25, 1990.
7. 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.
8. Metropolitan Sanitary District of Greater Chicago, Facilities Planning Study, Update Supplement and Summary; May 1984.
9. Metropolitan Sanitary District of Greater Chicago Facilities Planning Study, Update Supplement and Summary, May 1986.

REFERENCES (Continued)

10. Deshpande, J.V., A.P. Gore and A. Shanubhogue, Statistical Analysis of Nonnormal Data, Wiley Eastern Limited, John Wiley & Sons, New Delhi, 1995.
11. Gibbons, J.D. and S. Chakraborti, Nonparametric Statistical Inference, 3rd Edition, Marcel Dekker Inc., New York, 1992.
12. 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 ₅	Biochemical Oxygen Demand	mg/L	None	None
DO	Dissolved Oxygen	mg/L	5.0	4.0
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		6.0-9.0	6.0
Cl	Chloride	mg/L	500	None
Turb	Turbidity	JTU	None	None
Cond	Conductivity	μmhos	None	None
SRI	Solar Radiation Intensity	cal/cm ² /min	None	None
Alk	Alkalinity	mg/L	None	None
TKN	Total Kjeldahl Nitrogen	mg/L	None	None
NH ₄ -N	Ammonium Nitrogen	mg/L	15.00	None
NH ₃ -N	Un-ionized Ammonia	mg/L	14.0 (0.33 Apr-Oct)	0.10
ORG-N	Organic Nitrogen	mg/L	None	None
NO ₂	Nitrite	mg/L	None	None
NO ₃	Nitrate	mg/L	None	None
NO ₂ +NO ₃	Nitrite Plus Nitrate	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	300
SO ₄	Sulfate	mg/L	500	None
FOG	Fats, Oils, and Greases	mg/L	None	15.0
T.P	Phosphorus	mg/L	None	None
Sol.P	Soluble Phosphorus	mg/L	None	None
CN	Cyanide	mg/L	None	0.10
WAD-CN	Weak Acid Dissociable Cyanide	mg/L	0.02	None
MBAS	Methylene Blue Active Substances	mg/L	None	None

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
F	Fluoride	mg/L	1.4	15.0
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	Calcium	mg/L	None	None
Mg	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	None
Rain	Precipitation	inches	None	None
Al	Aluminum	mg/L	None	None
Ag	Silver	mg/L	0.005	1.100
As	Arsenic	mg/L	0.360	1.000
Ba	Barium	mg/L	5.000	5.000
B	Boron	mg/L	1.000	None
Cd	Cadmium	mg/L	$\min(e^{-2.918+1.128*\ln(\text{Hard})}/1000, 0.05)$	0.150
Cu	Copper	mg/L	$e^{-1.464+0.942*\ln(\text{Hard})}/1000$	1.000
Cr	Chromium	mg/L	$e^{3.688+0.819*\ln(\text{Hard})}/1000$	1.000
Cr ⁺⁶	Hexavalent Chromium	mg/L	None	None
Fe	Iron	mg/L	1.000	2.000
Sol.Fe	Soluble Iron	mg/L	1.000	0.500
Pb	Lead	mg/L	$e^{-1.301+1.273*\ln(\text{Hard})}/1000$	0.100
Ni	Nickel	mg/L	1.000	1.000
Mn	Manganese	mg/L	1.000	1.000
Hg	Mercury	µg/L	2.600	0.500
Zn	Zinc	mg/L	1.000	1.000
Se	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

<u>Sampling Station</u>	<u>No.</u>	<u>Name</u>	<u>Sample Type</u>	<u>Water Use</u>	<u>River System</u>
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	County Line Road, Buffalo Creek		Grab	GEN	Des Plaines
13	County Line Road, Des Plaines River		Grab	GEN	Des Plaines
14	Hinz 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 Street, Des Plaines River		Grab	GEN	Des Plaines
18	Davon 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	Lemont Stephen Street, Des Plaines River		Grab	GEN	Des Plaines
30	County Line Road, West Fork North Branch*		Grab	GEN	Chicago
31	County Line Road, Middle Fork North Branch		Grab	GEN	Chicago
32	County Line 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 Avenue, 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
39	Madison Street, South Branch Chicago River		Grab	SEC	Chicago
40	Damen Avenue, South Branch Chicago River		Grab	SEC	Chicago
41	Harlem Avenue, Chicago Sanitary and Ship Canal		Grab	SEC	Chicago
42	Highway 83 and Chicago Sanitary and Ship Canal		Grab	SEC	Chicago
43	Highway 83 and 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

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AI-2 (Continued)

DIRECTORY OF SAMPLING STATIONS IN WATER QUALITY NETWORK

<u>Sampling Station</u>		Sample Type	Water Use	River System
No.	Name			
46	Grand Avenue, North Branch Chicago River	Grab	SEC	Chicago
47	Randolph Street, South Branch Chicago River*	Grab	SEC	Chicago
48	Lemont Bridge, Stephen Street (Comp)	Grab	SEC	Chicago
49	92nd and Ewing Avenue, Calumet River	Grab	GEN	Calumet
50	Wolf Lake, Burnham Avenue	Grab	GEN	Calumet
51	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, Calumet River	Grab	SEC	Calumet
57	135th and Ashland, 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, Du Page River	Grab	GEN	Des Plaines
64	Lake Street, 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 Avenue, North Branch Chicago River	Grab	SEC	Chicago
74	Outer Drive Bridge, Chicago River	Grab	GEN	Chicago
75	Cicero Avenue, Chicago Sanitary and Ship Canal	Grab	SEC	Chicago
76	Halsted Street, Little Calumet River	Grab	SEC	Calumet
77	Elmhurst Road, Higgins Creek	Grab	GEN	Des Plaines
78	Willie 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	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	Chicago-Elgin Road, Poplar Creek	Grab	GEN	Des Plaines

GEN: General Use; SEC: Secondary Contact; EFL: Effluent

* Excluded From 1999 Studies.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1
WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		BOD ₅	DO	COD	Temp	pH
No.	Name	mg/L	mg/L	mg/L	°C	
<u>Chicago River System</u>						
31	County Line Rd., Md. Fork N. Branch	ND	6.72	ND	13.93	7.87
32	County Line Rd., Skokie River	ND	6.59	ND	14.03	7.96
34	Dempster St., N.B. Chicago River	ND	7.93	ND	14.47	7.84
74	Outer Dr. Bridge, Chicago River	ND	9.26	ND	14.91	8.09
35	Central Ave., N. Shore Channel	ND	7.51	ND	15.93	8.12
36	Touhy Ave., N. Shore Channel	ND	7.43	ND	16.90	7.56
37	Wilson Ave., N.B. Chicago River	ND	6.75	ND	16.01	7.58
73	Diversey Ave., N.B. Chicago River	ND	5.81	ND	16.47	7.41
46	Grand Ave., N.B. Chicago River	ND	6.53	ND	15.05	7.74
39	Madison St., S.B. Chicago River	ND	6.89	ND	14.66	7.89
40	Damen Ave., S.B. Chicago River	ND	6.19	ND	16.83	7.72
75	Cicero Ave., Chgo. San. and Ship Canal	ND	5.99	ND	15.58	7.85
41	Harlem Ave., Chgo. San. and Ship Canal	ND	7.16	ND	17.91	7.67
42	Hwy. 83 and Chgo. San. and Ship Canal	ND	5.76	ND	17.97	7.71
48	Lemont Bridge Stephen Street (Comp)	ND	5.63	ND	18.49	7.62
82	Lockport Treblier	6.20	ND	ND	ND	7.61
<u>Calumet River System</u>						
50	Wolf Lake Burnham Ave.	ND	9.45	ND	13.60	8.29
54	Joe Orr Road, Thorn Creek	ND	8.85	ND	15.00	8.10
52	Wentworth Ave., Little Calumet River	ND	6.23	ND	15.25	7.95
57	135th and Ashland, Little Calumet River	ND	5.80	ND	15.96	7.91
86	Burnham Avenue, Grand Calumet River	ND	5.14	ND	15.33	7.79
49	92nd and Ewing Ave., Calumet River	ND	9.81	ND	13.45	8.19
55	130th Street, Calumet River	ND	8.97	ND	15.73	8.21
56	Indiana Ave., Calumet River	ND	8.48	ND	15.72	8.10
76	Halsted Street, Little Cal. River	ND	6.69	ND	16.46	7.82
58	Ashland Ave., Cal-Sag Channel	ND	6.21	ND	16.67	7.78
59	Cicero Ave., Cal-Sag Channel	ND	6.12	ND	16.57	7.79
43	Hwy. 83 and Cal-Sag Channel	ND	5.95	ND	16.49	7.72
<u>Des Plaines River System</u>						
63	Longmeadow Lane, Du Page River	ND	10.04	ND	13.90	7.90
64	Lake St., Du Page River	ND	8.74	ND	14.67	7.71
89	Walnut Lane, West Branch Du Page River	ND	8.20	ND	16.05	7.89
90	Chicago-Elgin Rd., Poplar Creek	ND	10.15	ND	13.13	8.16
12	County Line Rd., Buffalo Creek	ND	8.60	ND	12.85	7.75
79	Higgins Rd., Salt Creek	ND	9.07	ND	14.39	8.24
80	Arlington Hts. Rd., Salt Creek	ND	7.97	ND	15.20	7.87
18	Davon Ave., Salt Creek	ND	7.93	ND	14.82	7.85
24	Wolf Road, Salt Creek	ND	9.04	ND	14.81	8.05
21	First Ave., Salt Creek	ND	7.65	ND	13.47	7.68
77	Elmhurst Rd., Higgins Creek	ND	9.39	ND	13.96	8.02
78	Willie Rd., Higgins Creek	ND	8.61	ND	16.06	7.77
13	County Line Road, Des Plaines River	ND	8.46	ND	12.89	7.80
17	Oakton St., Des Plaines River	ND	8.32	ND	13.77	7.89
19	Belmont Ave., Des Plaines River	ND	7.26	ND	13.71	7.78
20	Roosevelt Road, Des Plaines River	ND	7.24	ND	13.34	7.77
22	Ogden Ave., Des Plaines River	ND	8.43	ND	14.07	7.43
23	Willow Springs Rd., Des Plaines River	ND	8.68	ND	14.82	8.13
29	Lemont Stephen St., Des Plaines River	ND	9.15	ND	14.87	8.12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Cl mg/L	Turb JTU	Cond μmhos	Alk mg/L	TKN mg/L
<u>No. Name</u>						
<u>Chicago River System</u>						
31 County Line Rd., Md. Fork N. Branch		176.8	19.73	ND	205	1.13
32 County Line Rd., Skokie River		184.5	17.64	ND	191	1.02
34 Dempster St., N.B. Chicago River		199.2	20.18	ND	171	1.21
74 Outer Dr. Bridge, Chicago River		52.5	7.00	ND	117	0.63
35 Central Ave., N. Shore Channel		42.5	9.10	ND	129	1.27
36 Touhy Ave., N. Shore Channel		153.8	7.50	ND	142	2.48
37 Wilson Ave., N.B. Chicago River		193.2	10.08	ND	152	3.34
73 Diversey Ave., N.B. Chicago River		188.3	11.67	ND	150	2.20
46 Grand Ave., N.B. Chicago River		152.9	12.67	ND	151	2.18
39 Madison St., S.B. Chicago River		113.3	11.17	ND	144	1.75
40 Damen Ave., S.B. Chicago River		107.3	11.18	ND	149	1.80
75 Cicero Ave., Chgo. San. and Ship Canal		105.8	13.83	ND	140	1.64
41 Harlem Ave., Chgo. San. and Ship Canal		155.0	9.73	ND	129	1.43
42 Hwy. 83 and Chgo. San. and Ship Canal		170.8	7.83	ND	131	1.70
48 Lemont Bridge Stephen Street (Comp)		139.3	9.36	ND	139	1.71
82 Lockport Trebler		150.9	ND	935	135	1.77
<u>Calumet River System</u>						
50 Wolf Lake Burnham Ave.		30.4	5.83	ND	98	0.47
54 Joe Orr Road, Thorn Creek		155.9	10.42	ND	175	1.43
52 Wentworth Ave., Little Calumet River		142.5	30.09	ND	193	2.39
57 135th and Ashland, Little Calumet River		171.4	22.55	ND	184	1.44
86 Burnham Avenue, Grand Calumet River		198.3	11.09	ND	155	3.34
49 92nd and Ewing Ave., Calumet River		41.6	9.83	ND	115	0.59
55 130th Street, Calumet River		67.5	8.00	ND	117	0.69
56 Indiana Ave., Calumet River		94.8	14.73	ND	129	1.10
76 Halsted Street, Little Cal. River		139.3	8.82	ND	158	1.38
58 Ashland Ave., Cal-Sag Channel		131.4	13.82	ND	156	1.37
59 Cicero Ave., Cal-Sag Channel		136.5	14.82	ND	156	1.46
43 Hwy. 83 and Cal-Sag Channel		130.0	15.36	ND	159	1.42
<u>Des Plaines River System</u>						
63 Longmeadow Lane, Du Page River		257.4	17.67	ND	192	1.81
64 Lake St., Du Page River		133.0	22.00	ND	153	2.25
89 Walnut Lane, West Branch Du Page River		127.0	12.36	ND	164	2.64
90 Chicago-Elgin Rd., Poplar Creek		156.6	16.20	ND	239	1.78
12 County Line Rd., Buffalo Creek		153.2	25.82	ND	188	1.12
79 Higgins Rd., Salt Creek		217.8	23.70	ND	158	1.17
80 Arlington Hts. Rd., Salt Creek		177.0	11.18	ND	166	1.46
18 Davon Ave., Salt Creek		177.7	15.73	ND	139	1.47
24 Wolf Road, Salt Creek		185.7	20.73	ND	153	1.23
21 First Ave., Salt Creek		183.7	22.00	ND	150	1.42
77 Elmhurst Rd., Higgins Creek		293.6	22.09	ND	172	1.29
78 Wille Rd., Higgins Creek		167.5	5.36	ND	190	1.74
13 County Line Road, Des Plaines River		183.5	22.00	ND	253	1.22
17 Oakton St., Des Plaines River		136.6	24.55	ND	180	1.18
19 Belmont Ave., Des Plaines River		145.7	19.27	ND	177	1.13
20 Roosevelt Road, Des Plaines River		145.7	19.82	ND	173	1.14
22 Ogden Ave., Des Plaines River		152.6	19.73	ND	164	1.11
23 Willow Springs Rd., Des Plaines River		160.5	22.45	ND	166	1.08
29 Lemont Stephen St., Des Plaines River		157.2	24.36	ND	166	1.15

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)
WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Un-ionized				
No.	Name	NH ₄ -N mg/L	NH ₃ -N mg/L	ORG-N mg/L	NO ₂ +NO ₃ mg/L	TS mg/L
<u>Chicago River System</u>						
31	County Line Rd., Md. Fork N. Branch	0.0382	0.0011	1.09	0.41	693
32	County Line Rd., Skokie River	0.0773	0.0024	0.95	0.55	704
34	Dempster St., N.B. Chicago River	0.0391	0.0009	1.17	4.93	726
74	Outer Dr. Bridge, Chicago River	0.2155	0.0047	0.41	1.08	297
35	Central Ave., N. Shore Channel	0.3480	0.0085	0.92	0.32	299
36	Touhy Ave., N. Shore Channel	0.9208	0.0212	1.56	5.67	573
37	Wilson Ave., N.B. Chicago River	1.7717	0.0329	1.56	6.28	663
73	Diversey Ave., N.B. Chicago River	0.8825	0.0146	1.31	6.23	655
46	Grand Ave., N.B. Chicago River	0.9542	0.0226	1.23	5.51	596
39	Madison St., S.B. Chicago River	0.8217	0.0507	0.93	4.33	484
40	Damen Ave., S.B. Chicago River	0.8473	0.0259	0.95	3.42	486
75	Cicero Ave., Chgo. San. and Ship Canal	0.7933	0.0312	0.85	3.58	478
41	Harlem Ave., Chgo. San. and Ship Canal	0.3573	0.0063	1.07	7.01	613
42	Hwy. 83 and Chgo. San. and Ship Canal	0.6042	0.0193	1.09	5.80	608
48	Lemont Bridge Stephen Street (Comp)	0.6009	0.0146	1.11	5.10	581
82	Lockport Trebler	0.4486	ND	1.33	4.87	634
<u>Calumet River System</u>						
50	Wolf Lake Burnham Ave.	0.0558	0.0030	0.46	0.78	231
54	Joe Orr Road, Thorn Creek	0.0567	0.0051	1.37	7.68	1096
52	Wentworth Ave., Little Calumet River	0.2973	0.0074	2.09	4.53	772
57	135th and Ashland, Little Calumet River	0.2318	0.0118	1.21	3.71	905
86	Burnham Avenue, Grand Calumet River	1.0591	0.0278	2.29	8.48	913
49	92nd and Ewing Ave., Calumet River	0.0560	0.0027	0.57	0.36	260
55	130th Street, Calumet River	0.1244	0.0055	0.56	0.53	342
56	Indiana Ave., Calumet River	0.2763	0.0124	0.82	1.79	461
76	Halsted Street, Little Cal. River	0.3321	0.0094	1.05	4.27	664
58	Ashland Ave., Cal-Sag Channel	0.3463	0.0117	1.03	3.32	641
59	Cicero Ave., Cal-Sag Channel	0.4063	0.0149	1.06	3.40	663
43	Hwy. 83 and Cal-Sag Channel	0.3753	0.0299	1.05	3.37	664
<u>Des Plaines River System</u>						
63	Longmeadow Lane, Du Page River	0.1311	0.0030	1.68	2.88	869
64	Lake St., Du Page River	0.4209	0.0177	1.83	6.86	630
89	Walnut Lane, West Branch Du Page River	0.3673	0.0178	2.27	8.01	622
90	Chicago-Elgin Rd., Poplar Creek	0.0670	0.0037	1.71	0.46	672
12	County Line Rd., Buffalo Creek	0.0709	0.0044	1.04	0.41	716
79	Higgins Rd., Salt Creek	0.0670	0.0066	1.11	0.26	734
80	Arlington Hts. Rd., Salt Creek	0.0900	0.0032	1.37	7.07	670
18	Dixon Ave., Salt Creek	0.0927	0.0032	1.38	7.31	693
24	Wolf Road, Salt Creek	0.1273	0.0116	1.10	6.67	757
21	First Ave., Salt Creek	0.1045	0.0131	1.32	6.35	731
77	Elmhurst Rd., Higgins Creek	0.1164	0.0157	1.17	0.34	858
78	Wille Rd., Higgins Creek	0.2445	0.0216	1.50	4.99	700
13	County Line Road, Des Plaines River	0.1082	0.0070	1.12	5.02	627
17	Oakton St., Des Plaines River	0.0755	0.0157	1.11	5.32	642
19	Belmont Ave., Des Plaines River	0.1164	0.0174	1.01	4.54	637
20	Roosevelt Road, Des Plaines River	0.0927	0.0139	1.04	4.26	639
22	Ogden Ave., Des Plaines River	0.0891	0.0106	1.02	5.02	665
23	Willow Springs Rd., Des Plaines River	0.0891	0.0101	0.99	4.77	673
29	Lemont Stephen St., Des Plaines River	0.0773	0.0100	1.08	4.61	671

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		TVS mg/L	TSS mg/L	VSS mg/L	TDS mg/L	TDVS mg/L
<u>No. Name</u>						
<u>Chicago River System</u>						
31 County Line Rd., Md. Fork N. Branch	ND	24.7	5.00	669	ND	
32 County Line Rd., Skokie River	ND	24.0	5.00	680	ND	
34 Dempster St., N.B. Chicago River	ND	29.6	6.00	697	ND	
74 Outer Dr. Bridge, Chicago River	ND	6.0	2.00	291	ND	
35 Central Ave., N. Shore Channel	ND	9.9	3.00	289	ND	
36 Touhy Ave., N. Shore Channel	ND	10.3	4.00	563	ND	
37 Wilson Ave., N.B. Chicago River	ND	13.0	4.00	650	ND	
73 Diversey Ave., N.B. Chicago River	ND	16.5	4.00	639	ND	
46 Grand Ave., N.B. Chicago River	ND	17.2	4.00	579	ND	
39 Madison St., S.B. Chicago River	ND	16.3	4.00	467	ND	
40 Damen Ave., S.B. Chicago River	ND	14.0	3.00	472	ND	
75 Cicero Ave., Chgo. San. and Ship Canal	ND	18.5	4.00	459	ND	
41 Harlem Ave., Chgo. San. and Ship Canal	ND	13.2	4.00	600	ND	
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	8.3	3.00	600	ND	
48 Lemont Bridge Stephen Street (Comp)	ND	11.5	3.00	570	ND	
82 Lockport Trebler	113	37.0	7.00	597	ND	
<u>Calumet River System</u>						
50 Wolf Lake Burnham Ave.	ND	5.4	2.00	226	ND	
54 Joe Orr Road, Thorn Creek	ND	16.6	3.00	1080	ND	
52 Wentworth Ave., Little Calumet River	ND	67.3	20.00	705	ND	
57 135th and Ashland, Little Calumet River	ND	34.9	6.00	870	ND	
86 Burnham Avenue, Grand Calumet River	ND	16.4	6.00	897	ND	
49 92nd and Ewing Ave., Calumet River	ND	12.3	2.00	247	ND	
55 130th Street, Calumet River	ND	8.6	2.00	334	ND	
56 Indiana Ave., Calumet River	ND	26.4	5.00	440	ND	
76 Halsted Street, Little Cal. River	ND	12.7	3.00	651	ND	
58 Ashland Ave., Cal-Sag Channel	ND	18.2	4.00	622	ND	
59 Cicero Ave., Cal-Sag Channel	ND	22.3	4.00	639	ND	
43 Hwy. 83 and Cal-Sag Channel	ND	23.7	4.00	638	ND	
<u>Des Plaines River System</u>						
63 Longmeadow Lane, Du Page River	ND	21.1	5.00	848	ND	
64 Lake St., Du Page River	ND	35.5	8.00	595	ND	
89 Walnut Lane, West Branch Du Page River	ND	19.6	6.00	603	ND	
90 Chicago-Elgin Rd., Poplar Creek	ND	23.1	5.00	649	ND	
12 County Line Rd., Buffalo Creek	ND	54.2	9.00	662	ND	
79 Higgins Rd., Salt Creek	ND	33.7	10.00	700	ND	
80 Arlington Hts. Rd., Salt Creek	ND	14.4	4.00	655	ND	
18 Davon Ave., Salt Creek	ND	31.3	5.00	662	ND	
24 Wolf Road, Salt Creek	ND	33.0	6.00	724	ND	
21 First Ave., Salt Creek	ND	33.6	6.00	697	ND	
77 Elmhurst Rd., Higgins Creek	ND	43.9	10.00	814	ND	
78 Wille Rd., Higgins Creek	ND	5.0	3.00	695	ND	
13 County Line Road, Des Plaines River	ND	32.8	6.00	594	ND	
17 Oakton St., Des Plaines River	ND	36.2	6.00	606	ND	
19 Belmont Ave., Des Plaines River	ND	27.7	5.00	609	ND	
20 Roosevelt Road, Des Plaines River	ND	27.3	5.00	611	ND	
22 Ogden Ave., Des Plaines River	ND	29.7	5.00	635	ND	
23 Willow Springs Rd., Des Plaines River	ND	30.5	6.00	642	ND	
29 Lemont Stephen St., Des Plaines River	ND	39.4	7.00	632	ND	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

Sampling Station No. Name	Phenol µg/L	SO4 mg/L	FOG mg/L	T.P. mg/L	Sol.P mg/L
<u>Chicago River System</u>					
31 County Line Rd., Md. Fork N. Branch	26.0	71.91	ND	0.2445	0.1091
32 County Line Rd., Skokie River	21.0	79.18	ND	0.1964	0.1082
34 Dempster St., N.B. Chicago River	16.0	72.36	ND	1.2082	0.9200
74 Outer Dr. Bridge, Chicago River	9.2	32.64	ND	0.2064	0.1573
35 Central Ave., N. Shore Channel	12.4	34.30	ND	0.2150	0.0980
36 Touhy Ave., N. Shore Channel	20.4	51.25	ND	1.3508	1.0658
37 Wilson Ave., N.B. Chicago River	18.7	55.67	ND	1.3883	1.1600
73 Diversey Ave., N.B. Chicago River	17.8	68.50	ND	1.1158	0.9167
46 Grand Ave., N.B. Chicago River	18.8	59.17	ND	1.1200	0.8525
39 Madison St., S.B. Chicago River	15.8	51.25	ND	0.8392	0.6458
40 Damen Ave., S.B. Chicago River	15.6	51.09	ND	0.7273	0.4918
75 Cicero Ave., Chgo. San. and Ship Canal	16.0	50.00	ND	0.6900	0.4592
41 Harlem Ave., Chgo. San. and Ship Canal	15.3	75.64	ND	1.0436	0.7536
42 Hwy. 83 and Chgo. San. and Ship Canal	17.4	72.17	ND	0.6425	0.4775
48 Lemont Bridge Stephen Street (Comp)	17.9	91.45	ND	1.0982	0.7982
82 Lockport Trebler	10.5	ND	ND	1.5446	ND
<u>Calumet River System</u>					
50 Wolf Lake Burnham Ave.	10.0	35.33	ND	0.2342	0.0642
54 Joe Orr Road, Thorn Creek	18.8	380.08	ND	3.0000	2.5558
52 Wentworth Ave., Little Calumet River	23.1	131.20	ND	1.1682	0.3982
57 135th and Ashland, Little Calumet River	21.1	229.82	ND	1.5218	1.2291
86 Burnham Avenue, Grand Calumet River	20.0	157.45	ND	0.8573	0.1909
49 92nd and Ewing Ave., Calumet River	7.2	29.83	ND	0.1445	0.0600
55 130th Street, Calumet River	8.2	50.64	ND	0.1967	0.0800
56 Indiana Ave., Calumet River	15.3	72.36	ND	0.3242	0.1100
76 Halsted Street, Little Cal. River	46.6	125.00	ND	2.5947	2.6836
58 Ashland Ave., Cal-Sag Channel	22.6	133.18	ND	2.1900	2.0773
59 Cicero Ave., Cal-Sag Channel	26.3	133.91	ND	2.3958	2.3136
43 Hwy. 83 and Cal-Sag Channel	21.5	132.36	ND	2.4532	2.3482
<u>Des Plaines River System</u>					
63 Longmeadow Lane, Du Page River	18.8	87.11	ND	0.9522	0.7289
64 Lake St., Du Page River	19.3	70.55	ND	2.2055	1.7118
89 Walnut Lane, West Branch Du Page River	20.1	68.73	ND	2.7418	2.2427
90 Chicago-Elgin Rd., Poplar Creek	16.3	58.00	ND	0.4300	0.0700
12 County Line Rd., Buffalo Creek	20.1	103.82	ND	0.2345	0.0809
79 Higgins Rd., Salt Creek	16.6	74.90	ND	0.1280	0.0740
80 Arlington Hts. Rd., Salt Creek	20.3	83.64	ND	2.2236	1.8427
18 Davon Ave., Salt Creek	19.5	74.55	ND	2.2309	1.8682
24 Wolf Road, Salt Creek	16.3	94.55	ND	1.7445	1.3691
21 First Ave., Salt Creek	16.3	90.09	ND	1.5955	1.2755
77 Elmhurst Rd., Higgins Creek	21.6	55.36	ND	0.2209	0.0709
78 Willie Rd., Higgins Creek	25.0	99.27	ND	0.6709	0.5064
13 County Line Road, Des Plaines River	16.7	71.09	ND	1.2609	1.0473
17 Oakton St., Des Plaines River	17.0	73.36	ND	0.9709	0.7409
19 Belmont Ave., Des Plaines River	17.9	78.27	ND	0.7800	0.6091
20 Roosevelt Road, Des Plaines River	18.7	75.64	ND	0.7009	0.5618
22 Ogden Ave., Des Plaines River	16.9	77.73	ND	0.9627	0.7691
23 Willow Springs Rd., Des Plaines River	16.1	82.18	ND	0.8873	0.6791
29 Lemont Stephen St., Des Plaines River	18.1	79.64	ND	0.9400	0.6636

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Tot-CN mg/L	WAD-CN mg/L	F mg/L	TOC mg/L	FC #/100ml
<u>No. Name</u>						
<u>Chicago River System</u>						
31 County Line Rd., Md. Fork N. Branch		0.0016	0.0001	0.3118	13.36	1697
32 County Line Rd., Skokie River		0.0025	0.0002	0.3727	11.27	1919
34 Dempster St., N.B. Chicago River		0.0050	0.0004	0.6036	9.82	1498
74 Outer Dr. Bridge, Chicago River		0.0015	0.0002	0.2355	4.91	23
35 Central Ave., N. Shore Channel		0.0020	0.0001	0.1840	6.30	130
36 Touhy Ave., N. Shore Channel		0.0053	0.0005	0.7808	9.92	7866
37 Wilson Ave., N.B. Chicago River		0.0067	0.0005	0.7583	9.08	7686
73 Diversey Ave., N.B. Chicago River		0.0077	0.0010	0.7650	9.25	4607
46 Grand Ave., N.B. Chicago River		0.0068	0.0009	0.7675	8.83	1522
39 Madison St., S.B. Chicago River		0.0046	0.0007	0.6067	8.00	642
40 Damen Ave., S.B. Chicago River		0.0046	0.0007	0.5373	8.00	282
75 Cicero Ave., Chgo. San. and Ship Canal		0.0047	0.0007	0.5125	7.25	327
41 Harlem Ave., Chgo. San. and Ship Canal		0.0059	0.0007	0.7427	8.45	4970
42 Hwy. 83 and Chgo. San. and Ship Canal		0.0066	0.0010	0.7783	8.83	886
48 Lemont Bridge Stephen Street (Comp)		0.0071	0.0009	0.7291	9.36	781
82 Lockport Trebler		ND	ND	0.8649	ND	ND
<u>Calumet River System</u>						
50 Wolf Lake Burnham Ave.		0.0007	0.0002	0.2367	6.42	15
54 Joe Orr Road, Thorn Creek		0.0068	0.0020	0.5958	10.25	2173
52 Wentworth Ave., Little Calumet River		0.0399	0.0081	1.9800	11.64	1701
57 135th and Ashland, Little Calumet River		0.0094	0.0029	0.7218	11.09	5189
86 Burnham Avenue, Grand Calumet River		0.0081	0.0009	0.7109	12.18	4100
49 92nd and Ewing Ave., Calumet River		0.0009	0.0004	0.1350	4.00	12
55 130th Street, Calumet River		0.0010	0.0002	0.3009	5.61	23
56 Indiana Ave., Calumet River		0.0032	0.0002	0.3173	6.68	55
76 Halsted Street, Little Cal. River		0.0101	0.0032	0.7591	9.26	3792
58 Ashland Ave., Cal-Sag Channel		0.0090	0.0012	0.6309	9.42	2660
59 Cicero Ave., Cal-Sag Channel		0.0083	0.0013	0.6473	9.74	673
43 Hwy. 83 and Cal-Sag Channel		0.0069	0.0009	0.6500	9.37	87
<u>Des Plaines River System</u>						
63 Longmeadow Lane, Du Page River		0.0069	0.0013	0.4189	12.67	386
64 Lake St., Du Page River		0.0086	0.0008	0.5982	10.73	658
89 Walnut Lane, West Branch Du Page River		0.0117	0.0020	0.7191	11.45	590
90 Chicago-Elgin Rd., Poplar Creek		0.0020	0.0003	0.1920	8.70	146
12 County Line Rd., Buffalo Creek		0.0027	0.0006	0.2073	10.00	230
79 Higgins Rd., Salt Creek		0.0038	0.0017	0.2820	10.50	45
80 Arlington Hts. Rd., Salt Creek		0.0097	0.0015	0.5955	9.82	265
18 Davon Ave., Salt Creek		0.0095	0.0012	0.6282	9.91	687
24 Wolf Road, Salt Creek		0.0069	0.0015	0.6000	8.64	468
21 First Ave., Salt Creek		0.0065	0.0004	0.6073	8.27	1320
77 Elmhurst Rd., Higgins Creek		0.0028	0.0004	0.2073	10.82	369
78 Wille Rd., Higgins Creek		0.0110	0.0049	0.7445	10.18	223
13 County Line Road, Des Plaines River		0.0099	0.0044	0.4582	9.73	350
17 Oakton St., Des Plaines River		0.0091	0.0062	0.4718	9.82	765
19 Belmont Ave., Des Plaines River		0.0055	0.0004	0.5064	9.55	1210
20 Roosevelt Road, Des Plaines River		0.0046	0.0003	0.4555	9.91	1224
22 Ogden Ave., Des Plaines River		0.0059	0.0004	0.5136	9.73	609
23 Willow Springs Rd., Des Plaines River		0.0050	0.0004	0.4882	9.27	367
29 Lemont Stephen St., Des Plaines River		0.0052	0.0003	0.5136	9.09	270

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Ca mg/L	Mg mg/L	Hard G.Alpha mg/L	G.Beta pCi/L	G.Beta pCi/L
<u>Chicago River System</u>						
31	County Line Rd., Md. Fork N. Branch	69.1	31.6	302.6	ND	ND
32	County Line Rd., Skokie River	70.0	31.4	304.2	ND	ND
34	Dempster St., N.B. Chicago River	64.7	27.8	276.0	ND	ND
74	Outer Dr. Bridge, Chicago River	39.9	13.4	154.6	ND	ND
35	Central Ave., N. Shore Channel	43.4	15.4	171.6	3.40	5.97
36	Touhy Ave., N. Shore Channel	56.5	19.9	223.0	3.49	8.46
37	Wilson Ave., N.B. Chicago River	57.8	21.5	232.9	ND	ND
73	Diversey Ave., N.B. Chicago River	58.5	21.6	235.0	ND	ND
46	Grand Ave., N.B. Chicago River	56.5	20.9	227.0	ND	ND
39	Madison St., S.B. Chicago River	55.7	20.5	223.2	ND	ND
40	Damen Ave., S.B. Chicago River	56.5	21.3	228.5	ND	ND
75	Cicero Ave., Chgo. San. and Ship Canal	54.4	20.3	219.4	3.96	7.36
41	Harlem Ave., Chgo. San. and Ship Canal	56.8	21.0	228.3	3.64	9.18
42	Hwy. 83 and Chgo. San. and Ship Canal	54.9	20.2	220.4	3.57	9.32
48	Lemont Bridge Stephen Street (Comp)	57.4	21.2	230.5	3.53	10.26
82	Lockport Trebler	ND	ND	ND	ND	ND
<u>Calumet River System</u>						
50	Wolf Lake Burnham Ave.	32.5	13.2	135.8	ND	ND
54	Joe Orr Road, Thorn Creek	75.6	36.3	338.4	ND	ND
52	Wentworth Ave., Little Calumet River	75.0	40.1	352.4	ND	ND
57	135th and Ashland, Little Calumet River	75.2	33.8	327.1	ND	ND
86	Burnham Avenue, Grand Calumet River	71.0	54.5	401.7	ND	ND
49	92nd and Ewing Ave., Calumet River	39.5	13.4	154.1	ND	ND
55	130th Street, Calumet River	43.4	15.0	170.2	ND	ND
56	Indiana Ave., Calumet River	50.4	21.6	214.8	3.51	7.07
76	Halsted Street, Little Cal. River	62.1	22.4	247.1	3.70	9.25
58	Ashland Ave., Cal-Sag Channel	64.0	24.5	260.6	ND	ND
59	Cicero Ave., Cal-Sag Channel	65.2	24.8	265.1	ND	ND
43	Hwy. 83 and Cal-Sag Channel	66.1	25.4	269.7	3.62	8.97
<u>Des Plaines River System</u>						
63	Longmeadow Lane, Du Page River	76.9	51.0	401.9	4.14	8.49
64	Lake St., Du Page River	60.9	24.0	251.0	ND	ND
89	Walnut Lane, West Branch Du Page River	61.9	24.7	256.2	3.59	10.64
90	Chicago-Elgin Rd., Poplar Creek	74.1	36.5	335.2	ND	ND
12	County Line Rd., Buffalo Creek	70.5	34.5	318.0	ND	ND
79	Higgins Rd., Salt Creek	60.0	27.8	264.4	3.64	6.06
80	Arlington Hts. Rd., Salt Creek	58.4	23.5	242.4	3.53	11.95
18	Davon Ave., Salt Creek	60.1	24.1	249.4	ND	ND
24	Wolf Road, Salt Creek	66.9	28.7	285.3	ND	ND
21	First Ave., Salt Creek	65.1	28.0	277.7	ND	ND
77	Elmhurst Rd., Higgins Creek	67.5	28.5	285.9	3.77	7.18
78	Wille Rd., Higgins Creek	72.3	28.2	296.5	3.69	16.83
13	County Line Road, Des Plaines River	60.5	27.7	265.1	ND	ND
17	Oakton St., Des Plaines River	63.7	28.6	276.7	ND	ND
19	Belmont Ave., Des Plaines River	62.1	27.6	268.8	ND	ND
20	Roosevelt Road, Des Plaines River	61.5	27.6	267.2	ND	ND
22	Ogden Ave., Des Plaines River	63.6	28.4	275.9	ND	ND
23	Willow Springs Rd., Des Plaines River	62.6	28.3	273.0	ND	ND
29	Lemont Stephen St., Des Plaines River	63.1	28.0	273.1	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Ag mg/L	As mg/L	Ba mg/L	B mg/L	Cd mg/L
<u>No. Name</u>						
<u>Chicago River System</u>						
31	County Line Rd., Md. Fork N. Branch	0.0007	0.0000	0.0386	0.1318	0.0007
32	County Line Rd., Skokie River	0.0000	0.0000	0.0398	0.1245	0.0000
34	Dempster St., N.B. Chicago River	0.0006	0.0000	0.0319	0.1782	0.0000
74	Outer Dr. Bridge, Chicago River	0.0000	0.0000	0.0195	0.0245	0.0004
35	Central Ave., N. Shore Channel	0.0000	0.0000	0.0232	0.0150	0.0000
36	Touhy Ave., N. Shore Channel	0.0000	0.0000	0.0198	0.2075	0.0000
37	Wilson Ave., N.B. Chicago River	0.0000	0.0000	0.0216	0.1875	0.0000
73	Diversey Ave., N.B. Chicago River	0.0005	0.0000	0.0478	0.1925	0.0000
46	Grand Ave., N.B. Chicago River	0.0006	0.0000	0.0208	0.1892	0.0003
39	Madison St., S.B. Chicago River	0.0000	0.0000	0.0237	0.1558	0.0000
40	Damen Ave., S.B. Chicago River	0.0000	0.0000	0.0242	0.1409	0.0000
75	Cicero Ave., Chgo. San. and Ship Canal	0.0000	0.0000	0.0232	0.1325	0.0004
41	Harlem Ave., Chgo. San. and Ship Canal	0.0000	0.0000	0.0187	0.1745	0.0004
42	Hwy. 83 and Chgo. San. and Ship Canal	0.0005	0.0000	0.0175	0.1825	0.0000
48	Lemont Bridge Stephen Street (Comp)	0.0000	0.0000	0.0185	0.1973	0.0000
82	Lockport Trebler	0.0000	0.0000	0.0317	ND	0.0000
<u>Calumet River System</u>						
50	Wolf Lake Burnham Ave.	0.0000	0.0000	0.0243	0.0350	0.0000
54	Joe Orr Road, Thorn Creek	0.0000	0.0000	0.0232	0.3533	0.0000
52	Wentworth Ave., Little Calumet River	0.0000	0.0000	0.0368	0.2355	0.0000
57	135th and Ashland, Little Calumet River	0.0000	0.0000	0.0333	0.2673	0.0000
86	Burnham Avenue, Grand Calumet River	0.0000	0.0000	0.0265	0.3864	0.0000
49	92nd and Ewing Ave., Calumet River	0.0000	0.0000	0.0239	0.0017	0.0011
55	130th Street, Calumet River	0.0000	0.0273	0.0286	0.0609	0.0000
56	Indiana Ave., Calumet River	0.0000	0.0000	0.0317	0.1227	0.0000
76	Halsted Street, Little Cal. River	0.0000	0.0000	0.0196	0.2436	0.0000
58	Ashland Ave., Cal-Sag Channel	0.0000	0.0000	0.0233	0.2273	0.0000
59	Cicero Ave., Cal-Sag Channel	0.0000	0.0000	0.0233	0.2300	0.0000
43	Hwy. 83 and Cal-Sag Channel	0.0000	0.0000	0.0239	0.2345	0.0000
<u>Des Plaines River System</u>						
63	Longmeadow Lane, Du Page River	0.0000	0.0000	0.0447	0.1278	0.0014
64	Lake St., Du Page River	0.0000	0.0000	0.0315	0.2382	0.0000
89	Walnut Lane, West Branch Du Page River	0.0000	0.0000	0.0252	0.3109	0.0000
90	Chicago-Elgin Rd., Poplar Creek	0.0000	0.0000	0.1015	0.0120	0.0000
12	County Line Rd., Buffalo Creek	0.0000	0.0000	0.0478	0.1173	0.0000
79	Higgins Rd., Salt Creek	0.0000	0.0000	0.0415	0.0710	0.0000
80	Arlington Hts. Rd., Salt Creek	0.0000	0.0000	0.0235	0.2245	0.0000
18	Davon Ave., Salt Creek	0.0000	0.0000	0.0262	0.2127	0.0000
24	Wolf Road, Salt Creek	0.0000	0.0000	0.0305	0.2027	0.0008
21	First Ave., Salt Creek	0.0000	0.0000	0.0305	0.2000	0.0000
77	Elmhurst Rd., Higgins Creek	0.0000	0.0000	0.0544	0.1236	0.0000
78	Wille Rd., Higgins Creek	0.0000	0.0000	0.0217	0.3764	0.0000
13	County Line Road, Des Plaines River	0.0000	0.0000	0.0604	0.1664	0.0000
17	Oakton St., Des Plaines River	0.0000	0.0000	0.0347	0.1664	0.0000
19	Belmont Ave., Des Plaines River	0.0000	0.0000	0.0324	0.2155	0.0000
20	Roosevelt Road, Des Plaines River	0.0000	0.0000	0.0332	0.2045	0.0000
22	Ogden Ave., Des Plaines River	0.0006	0.0000	0.0316	0.2009	0.0007
23	Willow Springs Rd., Des Plaines River	0.0000	0.0000	0.0602	0.1964	0.0000
29	Lemont Stephen St., Des Plaines River	0.0000	0.0000	0.0592	0.1845	0.0000

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Cu mg/L	Cr mg/L	Fe mg/L	Sol. Fe mg/L	Pb mg/L
<u>No. Name</u>						
<u>Chicago River System</u>						
31 County Line Rd., Md. Fork N. Branch		0.0028	0.0014	0.7336	0.2909	0.0000
32 County Line Rd., Skokie River		0.0035	0.0009	0.6518	0.2118	0.0000
34 Dempster St., N.B. Chicago River		0.0028	0.0000	0.5209	0.1109	0.0000
74 Outer Dr. Bridge, Chicago River		0.0023	0.0000	0.1018	0.0336	0.0000
35 Central Ave., N. Shore Channel		0.0008	0.0011	0.1830	0.0740	0.0000
36 Touhy Ave., N. Shore Channel		0.0030	0.0003	0.1358	0.0467	0.0000
37 Wilson Ave., N.B. Chicago River		0.0023	0.0000	0.2100	0.0683	0.0000
73 Diversey Ave., N.B. Chicago River		0.0026	0.0004	0.2725	0.0725	0.0000
46 Grand Ave., N.B. Chicago River		0.0057	0.0000	0.2825	0.0725	0.0000
39 Madison St., S.B. Chicago River		0.0008	0.0018	0.2375	0.0792	0.0000
40 Damen Ave., S.B. Chicago River		0.0015	0.0019	0.2691	0.0773	0.0000
75 Cicero Ave., Chgo. San. and Ship Canal		0.0020	0.0007	0.3125	0.0850	0.0042
41 Harlem Ave., Chgo. San. and Ship Canal		0.0015	0.0014	0.2100	0.0527	0.0000
42 Hwy. 83 and Chgo. San. and Ship Canal		0.0008	0.0008	0.1700	0.0533	0.0000
48 Lemont Bridge Stephen Street (Comp)		0.0007	0.0005	0.2218	0.0600	0.0000
82 Lockport Trebler		0.0490	0.0060	1.1254	0.0618	0.0036
<u>Calumet River System</u>						
50 Wolf Lake Burnham Ave.		0.0006	0.0000	0.1183	0.0300	0.0000
54 Joe Orr Road, Thorn Creek		0.0012	0.0013	0.2617	0.0825	0.0000
52 Wentworth Ave., Little Calumet River		0.0037	0.0011	0.9273	0.2318	0.0000
57 135th and Ashland, Little Calumet River		0.0032	0.0012	0.6400	0.1455	0.0000
86 Burnham Avenue, Grand Calumet River		0.0127	0.0015	0.7664	0.1982	0.0055
49 92nd and Ewing Ave., Calumet River		0.0067	0.0022	0.2417	0.0275	0.0000
55 130th Street, Calumet River		0.0008	0.0015	0.1909	0.0373	0.0000
56 Indiana Ave., Calumet River		0.0029	0.0015	0.3955	0.0518	0.0000
76 Halsted Street, Little Cal. River		0.0005	0.0014	0.2509	0.0645	0.0000
58 Ashland Ave., Cal-Sag Channel		0.0009	0.0015	0.3600	0.0900	0.0000
59 Cicero Ave., Cal-Sag Channel		0.0016	0.0017	0.3982	0.0836	0.0073
43 Hwy. 83 and Cal-Sag Channel		0.0010	0.0016	0.3882	0.0809	0.0000
<u>Des Plaines River System</u>						
63 Longmeadow Lane, Du Page River		0.0024	0.0018	0.6722	0.2167	0.0000
64 Lake St., Du Page River		0.0015	0.0000	0.5773	0.1191	0.0000
89 Walnut Lane, West Branch Du Page River		0.0065	0.0000	0.2845	0.0664	0.0000
90 Chicago-Elgin Rd., Poplar Creek		0.0000	0.0000	0.6270	0.1950	0.0000
12 County Line Rd., Buffalo Creek		0.0008	0.0000	0.8391	0.2282	0.0000
79 Higgins Rd., Salt Creek		0.0000	0.0000	0.7600	0.1980	0.0000
80 Arlington Hts. Rd., Salt Creek		0.0028	0.0007	0.3745	0.1264	0.0000
18 Davon Ave., Salt Creek		0.0042	0.0004	0.5827	0.1364	0.0000
24 Wolf Road, Salt Creek		0.0039	0.0000	0.5573	0.1255	0.0000
21 First Ave., Salt Creek		0.0047	0.0008	0.5136	0.1209	0.0000
77 Elmhurst Rd., Higgins Creek		0.0025	0.0005	0.8118	0.2591	0.0000
78 Wille Rd., Higgins Creek		0.0000	0.0004	0.1027	0.0482	0.0000
13 County Line Road, Des Plaines River		0.0007	0.0000	0.5864	0.1664	0.0000
17 Oakton St., Des Plaines River		0.0011	0.0000	0.5773	0.1518	0.0000
19 Belmont Ave., Des Plaines River		0.0010	0.0005	0.4900	0.1373	0.0000
20 Roosevelt Road, Des Plaines River		0.0016	0.0008	0.5136	0.1264	0.0000
22 Ogden Ave., Des Plaines River		0.0011	0.0004	0.5100	0.1355	0.0000
23 Willow Springs Rd., Des Plaines River		0.0012	0.0004	0.5573	0.1391	0.0000
29 Lemont Stephen St., Des Plaines River		0.0020	0.0000	0.5800	0.1355	0.0000

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-1 (Continued)

WATERWAYS SAMPLE MEANS 1999

<u>Sampling Station</u>		Ni mg/L	Mn mg/L	Hg μg/L	Zn mg/L	Se mg/L
<u>No. Name</u>						
<u>Chicago River System</u>						
31 County Line Rd., Md. Fork N. Branch		0.0000	0.2166	0.0191	0.0273	0.0000
32 County Line Rd., Skokie River		0.0000	0.1615	0.0345	0.0318	0.0000
34 Dempster St., N.B. Chicago River		0.0000	0.0592	0.0373	0.0582	0.0000
74 Outer Dr. Bridge, Chicago River		0.0000	0.0097	0.0245	0.0109	0.0000
35 Central Ave., N. Shore Channel		0.0000	0.0236	0.0120	0.0070	0.0000
36 Touhy Ave., N. Shore Channel		0.0000	0.0176	0.0058	0.0367	0.0000
37 Wilson Ave., N.B. Chicago River		0.0000	0.0479	0.0158	0.0333	0.0000
73 Diversey Ave., N.B. Chicago River		0.0000	0.0267	0.0358	0.0433	0.0000
46 Grand Ave., N.B. Chicago River		0.0000	0.0281	0.0208	0.0350	0.0000
39 Madison St., S.B. Chicago River		0.0025	0.0268	0.0283	0.0275	0.0000
40 Damen Ave., S.B. Chicago River		0.0000	0.0277	0.0173	0.0227	0.0000
75 Cicero Ave., Chgo. San. and Ship Canal		0.0008	0.0273	0.0217	0.0325	0.0000
41 Harlem Ave., Chgo. San. and Ship Canal		0.0000	0.0225	0.0182	0.0364	0.0000
42 Hwy. 83 and Chgo. San. and Ship Canal		0.0033	0.0253	0.0183	0.0308	0.0000
48 Lemont Bridge Stephen Street (Comp)		0.0000	0.0328	0.0064	0.0282	0.0000
82 Lockport Trebler		0.0030	0.0828	0.0206	0.0937	0.0036
<u>Calumet River System</u>						
50 Wolf Lake Burnham Ave.		0.0000	0.0580	0.0208	0.0125	0.0000
54 Joe Orr Road, Thorn Creek		0.0017	0.0620	0.0350	0.0408	0.0000
52 Wentworth Ave., Little Calumet River		0.0027	0.1302	0.0164	0.0282	0.0000
57 135th and Ashland, Little Calumet River		0.0018	0.0998	0.0400	0.0309	0.0000
86 Burnham Avenue, Grand Calumet River		0.0027	0.0577	0.0509	0.0800	0.0000
49 92nd and Ewing Ave., Calumet River		0.0017	0.0288	0.0075	0.0250	0.0000
55 130th Street, Calumet River		0.0018	0.0305	0.0355	0.0145	0.0000
56 Indiana Ave., Calumet River		0.0018	0.0565	0.0291	0.0318	0.0000
76 Halsted Street, Little Cal. River		0.0027	0.0565	0.0382	0.0273	0.0000
58 Ashland Ave., Cal-Sag Channel		0.0018	0.0783	0.0136	0.0300	0.0000
59 Cicero Ave., Cal-Sag Channel		0.0018	0.0650	0.0127	0.0364	0.0000
43 Hwy. 83 and Cal-Sag Channel		0.0027	0.0605	0.0164	0.0355	0.0000
<u>Des Plaines River System</u>						
63 Longmeadow Lane, Du Page River		0.0022	0.0730	0.0122	0.0356	0.0000
64 Lake St., Du Page River		0.0000	0.0609	0.0600	0.0291	0.0000
89 Walnut Lane, West Branch Du Page River		0.0000	0.0382	0.0527	0.0418	0.0000
90 Chicago-Elgin Rd., Poplar Creek		0.0000	0.0680	0.0210	0.0150	0.0000
12 County Line Rd., Buffalo Creek		0.0000	0.1680	0.0682	0.0227	0.0000
79 Higgins Rd., Salt Creek		0.0000	0.0913	0.0580	0.0200	0.0000
80 Arlington Hts. Rd., Salt Creek		0.0000	0.0505	0.0573	0.0273	0.0000
18 Davon Ave., Salt Creek		0.0000	0.0695	0.0609	0.0327	0.0000
24 Wolf Road, Salt Creek		0.0000	0.0647	0.0436	0.0518	0.0000
21 First Ave., Salt Creek		0.0000	0.0552	0.0618	0.0409	0.0000
77 Elmhurst Rd., Higgins Creek		0.0000	0.1123	0.0455	0.0255	0.0000
78 Wille Rd., Higgins Creek		0.0000	0.0223	0.0500	0.0445	0.0000
13 County Line Road, Des Plaines River		0.0000	0.0652	0.0564	0.0227	0.0000
17 Oakton St., Des Plaines River		0.0000	0.0706	0.0791	0.0245	0.0000
19 Belmont Ave., Des Plaines River		0.0000	0.0593	0.0618	0.0245	0.0000
20 Roosevelt Road, Des Plaines River		0.0000	0.0611	0.0636	0.0327	0.0000
22 Ogden Ave., Des Plaines River		0.0000	0.0561	0.0636	0.0400	0.0000
23 Willow Springs Rd., Des Plaines River		0.0000	0.0615	0.0945	0.0355	0.0000
29 Lemont Stephen St., Des Plaines River		0.0000	0.0641	0.0645	0.0309	0.0000

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-2

DISSOLVED OXYGEN VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	1/ 9	0/ 2	2/ 9	1/ 12
31 County Line Rd., Md. Fork N. Branch	3/ 10	6/ 12	2/ 10	4/ 8	5/ 10	3/ 10	2/ 12	4/ 11
32 County line Rd., Skokie River	6/ 11	2/ 12	2/ 10	1/ 8	4/ 9	3/ 9	1/ 12	2/ 11
34 Dempster St., N.B. Chicago River	1/ 11	0/ 12	2/ 11	0/ 12	3/ 10	1/ 11	2/ 12	2/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	2/ 10	2/ 9	0/ 10	2/ 9	1/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	1/ 12	2/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	1/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	2/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	1/ 12	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	3/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 11	2/ 12	0/ 12
82 Lockport Treblex	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	3/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	5/ 11	2/ 12	5/ 12	3/ 9	4/ 10	6/ 11	4/ 12	3/ 12
57 135th and Ashland, Little Calumet River	5/ 11	5/ 12	4/ 12	4/ 9	4/ 11	1/ 10	5/ 11	5/ 12
86 Burnham Avenue, Grand Calumet River	3/ 11	2/ 12	2/ 12	9/ 11	10/ 13	10/ 12	8/ 12	7/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 24	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 22	0/ 24	1/ 23	0/ 15	0/ 11	0/ 11	0/ 12	1/ 12
56 Indiana Ave., Calumet River	0/ 23	0/ 23	0/ 22	0/ 15	0/ 11	1/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 23	0/ 24	0/ 24	0/ 4	0/ 12	0/ 12	1/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 23	0/ 16	0/ 15	0/ 17	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 23	0/ 24	0/ 24	0/ 16	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 23	0/ 24	0/ 24	0/ 16	0/ 12	0/ 11	2/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	1/ 11	0/ 12	1/ 10	1/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	1/ 11	1/ 10	0/ 11	1/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	2/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	1/ 10	1/ 10	1/ 11	1/ 10	0/ 10	1/ 10	2/ 11	1/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 10	1/ 12	0/ 12
18 Devon Ave., Salt Creek	1/ 11	0/ 12	0/ 12	2/ 11	0/ 12	1/ 12	1/ 12	0/ 12
24 Wolf Road, Salt Creek	1/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	1/ 11	2/ 12	3/ 11	3/ 12	2/ 12	1/ 11	3/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	2/ 12	2/ 11	1/ 12	1/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	1/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	1/ 12	0/ 12	1/ 9	0/ 11	0/ 12
17 Oakton St., Des Plaines River	1/ 11	0/ 12	2/ 11	1/ 12	0/ 11	0/ 3	3/ 12	1/ 11
19 Belmont Ave., Des Plaines River	4/ 11	4/ 12	2/ 12	1/ 12	2/ 12	3/ 12	3/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	4/ 11	5/ 12	2/ 12	2/ 12	2/ 12	2/ 12	2/ 12	1/ 12
22 Ogden Ave., Des Plaines River	2/ 11	0/ 12	0/ 12	0/ 13	1/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	1/ 11	1/ 11	0/ 11	0/ 11	3/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 11	2/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-3

TEMPERATURE VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 10	0/ 12	0/ 8	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 10	0/ 12	0/ 8	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 10	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 10	0/ 12	0/ 7	0/ 11	0/ 10	0/ 10	0/ 11	0/ 11
35 Central Ave., N. Shore Channel	0/ 9	0/ 9	0/ 8	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 11	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 11	0/ 12	0/ 9	0/ 12	0/ 7	0/ 12	0/ 11	0/ 12
39 Madison St., S.B. Chicago River	0/ 11	0/ 12	0/ 7	0/ 12	0/ 11	0/ 5	0/ 11	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 10	0/ 12	0/ 10	0/ 12	0/ 9	0/ 12	0/ 11	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 10	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 10	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 10	0/ 12	0/ 12	0/ 8	0/ 9	0/ 10	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 8	0/ 11	0/ 10	0/ 9	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 10	0/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 20	0/ 24	0/ 23	0/ 14	0/ 10	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 18	0/ 24	0/ 23	0/ 14	0/ 10	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 19	0/ 23	0/ 22	0/ 14	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 19	0/ 24	0/ 24	0/ 4	0/ 12	0/ 12	0/ 10	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 20	0/ 16	0/ 15	0/ 15	0/ 11	0/ 12	0/ 10	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 20	0/ 24	0/ 24	0/ 14	0/ 12	0/ 12	0/ 10	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 20	0/ 24	0/ 24	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	1/ 8	0/ 8	0/ 11	0/ 12	0/ 9	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 11	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 10	1/ 12	0/ 10	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 9	1/ 11	0/ 8	0/ 11	0/ 10	0/ 9	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 10	1/ 11	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 9	1/ 10	0/ 9	0/ 10	1/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12
24 Wolf Road, Salt Creek	0/ 11	1/ 6	0/ 8	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	1/ 12	0/ 9	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	1/ 12	0/ 7	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	1/ 12	0/ 8	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 10	1/ 12	0/ 10	0/ 11	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	1/ 12	0/ 8	0/ 11	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	1/ 12	0/ 7	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	1/ 12	0/ 8	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-4

pH VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
Chicago River System								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 10	0/ 12	1/ 8	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 10	0/ 12	1/ 8	0/ 8	0/ 9	0/ 9	2/ 12	0/ 11
34 Dempster St., N.E. Chicago River	0/ 11	0/ 12	1/ 10	1/ 12	0/ 10	0/ 11	0/ 12	1/ 12
74 Outer Dr. Bridge, Chicago River	0/ 10	1/ 12	0/ 7	1/ 11	1/ 10	1/ 10	0/ 11	0/ 11
35 Central Ave., N. Shore Channel	1/ 9	2/ 9	1/ 8	1/ 9	1/ 8	1/ 8	0/ 12	2/ 11
36 Touhy Ave., N. Shore Channel	0/ 11	1/ 12	1/ 10	0/ 12	0/ 11	0/ 11	0/ 11	1/ 12
37 Wilson Ave., N.B. Chicago River	0/ 11	2/ 12	1/ 11	1/ 12	0/ 12	1/ 12	0/ 8	2/ 12
73 Diversey Ave., N.B. Chicago River	0/ 11	2/ 12	3/ 11	1/ 12	0/ 12	0/ 12	0/ 12	1/ 12
46 Grand Ave., N.B. Chicago River	0/ 11	0/ 12	1/ 9	0/ 12	0/ 7	0/ 12	0/ 11	1/ 12
39 Madison St., S.B. Chicago River	1/ 11	1/ 12	0/ 7	0/ 12	0/ 11	0/ 5	0/ 11	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 10	3/ 12	0/ 10	0/ 12	0/ 9	1/ 12	0/ 11	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	1/ 12	2/ 12	1/ 10	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 10	1/ 12	0/ 9	1/ 12	1/ 12	0/ 11	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 11	1/ 12	0/ 7	1/ 12	0/ 12	0/ 10	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 10	1/ 12	0/ 9	1/ 12	0/ 12	1/ 11	0/ 11	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 150	1/ 252	0/ 33	2/ 36
Calumet River System								
50 Wolf Lake, Burnham Ave.	0/ 11	1/ 12	2/ 12	4/ 11	0/ 11	0/ 12	1/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	2/ 11	1/ 12	1/ 12	0/ 11	0/ 12	1/ 12	0/ 10	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 10	0/ 12	0/ 12	3/ 8	0/ 9	0/ 10	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	1/ 11	1/ 12	2/ 12	1/ 8	0/ 11	0/ 10	0/ 9	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 10	1/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	3/ 20	1/ 24	2/ 23	3/ 13	0/ 10	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	1/ 18	2/ 24	2/ 23	5/ 13	1/ 10	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	1/ 19	3/ 23	0/ 22	3/ 13	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	1/ 19	2/ 24	2/ 23	0/ 4	0/ 12	0/ 12	0/ 10	0/ 12
58 Ashland Ave., Cal-Sag Channel	1/ 20	2/ 16	1/ 14	1/ 15	0/ 11	0/ 12	0/ 10	0/ 12
59 Cicero Ave., Cal-Sag Channel	1/ 20	4/ 24	2/ 23	1/ 14	0/ 12	0/ 12	0/ 10	0/ 12
43 Hwy. 83 and Cal-Sag Channel	1/ 20	3/ 24	3/ 23	1/ 14	0/ 12	0/ 11	0/ 12	0/ 12
Des Plaines River System								
63 Longmeadow Lane, Du Page River	0/ 8	2/ 8	0/ 8	0/ 11	0/ 12	0/ 9	2/ 12	0/ 11
64 Lake St., Du Page River	1/ 9	2/ 12	0/ 10	0/ 11	0/ 12	0/ 9	1/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 9	0/ 12	0/ 10	0/ 12	0/ 12	0/ 10	1/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 8	1/ 11	0/ 8	0/ 11	0/ 10	0/ 9	1/ 11	0/ 11
12 County Line Rd., Buffalo Creek	1/ 9	4/ 11	2/ 10	1/ 12	1/ 12	2/ 10	1/ 12	1/ 12
79 Higgins Rd., Salt Creek	2/ 8	2/ 10	0/ 9	0/ 10	0/ 10	0/ 10	1/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 9	1/ 12	0/ 10	0/ 12	0/ 12	0/ 9	1/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 9	0/ 12	0/ 10	0/ 12	0/ 12	2/ 11	1/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	2/ 8	3/ 11	0/ 12	1/ 11	4/ 12	1/ 12
21 First Ave., Salt Creek	1/ 11	0/ 12	0/ 9	0/ 11	1/ 12	0/ 11	2/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	1/ 11	0/ 12	1/ 7	1/ 11	0/ 12	0/ 11	2/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	4/ 8	1/ 11	0/ 12	0/ 11	2/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 9	3/ 12	0/ 10	1/ 12	1/ 12	2/ 9	1/ 12	2/ 12
17 Oakton St., Des Plaines River	1/ 11	0/ 12	0/ 8	1/ 11	1/ 11	1/ 3	2/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	1/ 10	0/ 11	0/ 12	0/ 12	2/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 10	0/ 11	1/ 12	0/ 12	1/ 12	0/ 12
22 Ogden Ave., Des Plaines River	3/ 11	0/ 12	1/ 10	0/ 12	1/ 12	1/ 11	3/ 12	2/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	2/ 7	2/ 11	0/ 10	1/ 11	5/ 12	1/ 12
29 Lemont Stephen St., Des Plaines River	1/ 11	0/ 12	2/ 8	3/ 11	0/ 11	1/ 11	4/ 12	1/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-5

CHLORIDE VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	1/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	1/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	1/ 11	0/ 12	1/ 10	1/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	1/ 11	0/ 12	1/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	1/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	1/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	1/ 9	0/ 8	2/ 10	3/ 11	0/ 12	0/ 10	2/ 12	1/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	2/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	1/ 11	1/ 9	1/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	1/ 12	0/ 12	0/ 10	2/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	1/ 11	2/ 10	0/ 10	0/ 10	1/ 11	1/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 10	1/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	1/ 6	1/ 12	0/ 12	0/ 12	0/ 11	2/ 12	1/ 12
21 First Ave., Salt Creek	0/ 11	1/ 12	0/ 11	0/ 12	0/ 12	0/ 11	2/ 12	1/ 11
77 Elmhurst Rd., Higgins Creek	3/ 11	3/ 12	3/ 11	3/ 12	0/ 12	0/ 11	1/ 11	2/ 11
78 Willie Rd., Higgins Creek	0/ 11	0/ 12	1/ 12	1/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	1/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12
22 Ogden Ave., Des Plaines River	0/ 11	1/ 12	1/ 12	0/ 13	0/ 12	0/ 11	0/ 12	1/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	1/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	1/ 12	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-6

AMMONIUM NITROGEN VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	1/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	ND	1/ 12	1/ 12	2/ 12	0/ 12	1/ 11	1/ 11	1/ 12
37 Wilson Ave., N.B. Chicago River	ND	2/ 12	2/ 12	3/ 12	0/ 12	2/ 12	0/ 8	2/ 12
73 Diversey Ave., N.B. Chicago River	ND	2/ 12	2/ 12	2/ 12	0/ 12	0/ 12	1/ 12	1/ 12
46 Grand Ave., N.B. Chicago River	ND	2/ 12	0/ 11	0/ 12	0/ 7	1/ 12	0/ 11	0/ 12
39 Madison St., S.B. Chicago River	ND	1/ 12	0/ 11	0/ 12	0/ 11	0/ 4	0/ 11	0/ 12
40 Damen Ave., S.B. Chicago River	ND	3/ 12	0/ 12	0/ 12	0/ 9	1/ 12	0/ 11	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	ND	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	0/ 12	1/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	ND	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	1/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	1/ 12
48 Lemont Bridge, Stephen Street (Comp)	ND	1/ 12	0/ 12	0/ 12	1/ 12	1/ 12	1/ 11	1/ 12
82 Lockport Trebler	ND	0/ 52	0/ 51	0/ 52	0/ 146	0/ 251	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	2/ 12	1/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 10	0/ 12
86 Burnham Avenue, Grand Calumet River	ND	0/ 12	0/ 12	4/ 11	1/ 13	1/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 20	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 18	0/ 24	0/ 23	0/ 15	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	ND	1/ 23	0/ 22	4/ 15	1/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	ND	0/ 24	1/ 24	0/ 4	1/ 12	0/ 12	0/ 10	2/ 12
58 Ashland Ave., Cal-Sag Channel	ND	1/ 16	1/ 15	0/ 17	0/ 11	1/ 12	0/ 10	3/ 12
59 Cicero Ave., Cal-Sag Channel	ND	0/ 24	2/ 24	1/ 16	1/ 12	0/ 12	1/ 10	1/ 12
43 Hwy. 83 and Cal-Sag Channel	ND	3/ 24	3/ 24	0/ 16	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	1/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-7

UN-IONIZED AMMONIA VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	0/ 10	0/ 12	0/ 8	0/ 8	ND	ND	ND	ND
32 County line Rd., Skokie River	0/ 10	0/ 12	0/ 8	1/ 8	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 10	0/ 12	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	0/ 10	0/ 12	0/ 7	0/ 11	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	0/ 9	0/ 9	0/ 8	2/ 9	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	1/ 11	1/ 12	1/ 10	2/ 12	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	2/ 11	2/ 12	2/ 11	3/ 12	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	0/ 11	2/ 12	2/ 11	2/ 12	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	0/ 11	2/ 12	0/ 9	0/ 12	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	1/ 11	1/ 12	0/ 7	0/ 12	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	1/ 10	3/ 12	0/ 10	0/ 12	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	1/ 12	1/ 12	1/ 10	0/ 12	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 10	1/ 12	0/ 9	0/ 12	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 11	1/ 12	0/ 7	0/ 12	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	0/ 10	1/ 12	0/ 9	0/ 12	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 11	0/ 12	0/ 12	0/ 11	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 11	0/ 12	1/ 12	0/ 11	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	0/ 10	0/ 12	0/ 12	3/ 8	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	1/ 12	0/ 8	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	1/ 10	0/ 12	0/ 12	4/ 10	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 19	0/ 24	0/ 23	1/ 13	ND	ND	ND	ND
55 130th Street, Calumet River	0/ 17	0/ 24	0/ 23	4/ 13	ND	ND	ND	ND
56 Indiana Ave., Calumet River	0/ 18	1/ 23	0/ 22	4/ 13	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	0/ 18	0/ 24	1/ 23	0/ 4	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	1/ 19	1/ 16	1/ 14	0/ 15	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	0/ 19	0/ 24	2/ 23	1/ 14	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	1/ 19	3/ 24	3/ 23	0/ 14	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 8	0/ 8	0/ 8	1/ 11	ND	ND	ND	ND
64 Lake St., Du Page River	0/ 9	0/ 12	0/ 10	1/ 11	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 9	0/ 12	0/ 10	1/ 12	ND	ND	ND	ND
90 Chicago-Elgin Rd., Poplar Creek	0/ 8	0/ 11	0/ 8	0/ 11	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	0/ 9	0/ 11	0/ 10	0/ 12	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	0/ 8	0/ 10	0/ 9	0/ 10	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	0/ 9	0/ 12	1/ 10	0/ 12	ND	ND	ND	ND
18 Devon Ave., Salt Creek	0/ 9	0/ 12	0/ 10	0/ 12	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 8	0/ 11	ND	ND	ND	ND
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 9	1/ 11	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 7	0/ 11	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	1/ 8	0/ 11	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	0/ 9	0/ 12	0/ 10	1/ 12	ND	ND	ND	ND
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 8	0/ 11	ND	ND	ND	ND
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 10	0/ 11	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 10	0/ 11	ND	ND	ND	ND
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	1/ 10	0/ 12	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 7	0/ 11	ND	ND	ND	ND
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 8	1/ 11	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-8

TOTAL DISSOLVED SOLIDS VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	1/ 3	1/ 9	0/ 2	2/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	1/ 11	0/ 12	1/ 10	2/ 7	1/ 10	0/ 10	1/ 12	0/ 11	
32 County line Rd., Skokie River	1/ 11	1/ 12	1/ 10	2/ 7	0/ 9	1/ 9	0/ 12	1/ 11	
34 Dempster St., N.B. Chicago River	1/ 11	1/ 12	1/ 11	3/ 11	1/ 10	1/ 11	1/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 10	1/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 8	0/ 8	0/ 8	1/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 11	1/ 12	0/ 11	0/ 11	1/ 12	
37 Wilson Ave., N.B. Chicago River	1/ 12	0/ 12	0/ 12	0/ 11	1/ 12	0/ 12	1/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	1/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 11	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 147	1/ 252	ND	0/ 35	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	7/ 12	8/ 12	9/ 12	5/ 12	3/ 12	1/ 12	1/ 12	2/ 12	
52 Wentworth Ave., Little Calumet River	2/ 11	0/ 12	0/ 12	0/ 9	0/ 10	1/ 11	2/ 12	2/ 12	
57 135th and Ashland, Little Calumet River	4/ 11	4/ 12	3/ 12	2/ 9	0/ 11	1/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	1/ 12	0/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	1/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	1/ 12	1/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	3/ 9	2/ 8	5/ 10	2/ 11	4/ 12	2/ 10	4/ 12	3/ 11	
64 Lake St., Du Page River	0/ 11	1/ 12	0/ 12	2/ 11	1/ 12	1/ 11	2/ 12	1/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	2/ 12	1/ 12	1/ 12	2/ 12	1/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	1/ 11	1/ 9	1/ 11	1/ 10	0/ 11	1/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	2/ 11	1/ 11	3/ 12	1/ 12	1/ 10	2/ 12	2/ 12	
79 Higgins Rd., Salt Creek	2/ 10	2/ 10	2/ 11	2/ 10	2/ 10	4/ 10	3/ 11	3/ 11	
80 Arlington Hts. Rd., Salt Creek	1/ 11	1/ 12	1/ 12	3/ 12	2/ 12	1/ 10	2/ 12	2/ 12	
18 Devon Ave., Salt Creek	1/ 11	1/ 12	2/ 12	3/ 12	1/ 12	0/ 12	3/ 12	1/ 12	
24 Wolf Road, Salt Creek	1/ 11	3/ 6	1/ 12	4/ 12	4/ 12	0/ 11	3/ 12	3/ 12	
21 First Ave., Salt Creek	1/ 11	3/ 12	0/ 11	3/ 12	2/ 12	1/ 11	3/ 12	3/ 11	
77 Elmhurst Rd., Higgins Creek	3/ 11	4/ 12	4/ 11	4/ 12	3/ 12	4/ 11	3/ 12	4/ 11	
78 Wille Rd., Higgins Creek	0/ 11	2/ 12	1/ 12	1/ 12	0/ 12	0/ 11	1/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	1/ 12	0/ 11	1/ 12	0/ 11	0/ 3	1/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	1/ 12	1/ 12	0/ 12	0/ 12	1/ 12	1/ 12	1/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	1/ 12	1/ 12	0/ 12	1/ 12	1/ 12	1/ 12	2/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	1/ 12	2/ 12	1/ 13	1/ 12	0/ 11	1/ 12	2/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	1/ 12	0/ 11	0/ 11	0/ 11	0/ 11	1/ 12	2/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	1/ 12	1/ 12	1/ 12	1/ 12	0/ 11	0/ 12	1/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-9

PHENOLS VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 8	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 9	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 9	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 10	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 9	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 10	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 10	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 51	0/ 151	0/ 252	0/ 33	0/ 35
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	1/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 7	0/ 9	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 9	0/ 8	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 10	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 8	0/ 10	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 11	0/ 11	1/ 11	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 10	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 11	0/ 10	0/ 12	0/ 11	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 11	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 10	0/ 9	0/ 10	0/ 10	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-10

SULFATE VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 9	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 8	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 9	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 7	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 10
54 Joe Orr Road, Thorn Creek	3/ 12	4/ 12	4/ 12	3/ 12	0/ 12	0/ 12	0/ 11	0/ 11
52 Wentworth Ave., Little Calumet River	0/ 10	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 11	0/ 10
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 10	0/ 11
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 11	0/ 11
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 10	0/ 9	0/ 11	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 8	0/ 10	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 10	0/ 9	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 8	0/ 9	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 9	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 10	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 8	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 9	0/ 2	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 10	0/ 9	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 9	0/ 10	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-11

FATS, OILS, AND GREASES VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
Chicago River System								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND
32 County Line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	0/ 3	1/ 12	0/ 12	1/ 12	1/ 11	2/ 11	1/ 12
37 Wilson Ave., N.B. Chicago River	ND	0/ 3	2/ 12	1/ 12	0/ 12	1/ 12	2/ 8	1/ 12
73 Diversey Ave., N.B. Chicago River	ND	0/ 2	2/ 12	0/ 12	0/ 12	0/ 12	3/ 12	1/ 12
46 Grand Ave., N.B. Chicago River	ND	0/ 2	2/ 11	1/ 12	1/ 7	0/ 12	3/ 12	5/ 12
39 Madison St., S.B. Chicago River	ND	0/ 2	0/ 11	0/ 12	1/ 11	0/ 5	1/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	ND	0/ 2	0/ 12	0/ 12	2/ 9	1/ 12	3/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	ND	0/ 2	1/ 12	0/ 12	3/ 12	0/ 12	2/ 12	1/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	ND	0/ 2	1/ 12	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	0/ 2	1/ 10	0/ 12	1/ 12	0/ 11	1/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	ND	0/ 2	2/ 12	0/ 12	3/ 12	1/ 12	0/ 12	1/ 12
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System								
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	0/ 3	2/ 12	1/ 11	1/ 12	0/ 12	1/ 12	1/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	ND	ND	2/ 12	0/ 7
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
56 Indiana Ave., Calumet River	ND	0/ 3	1/ 11	0/ 9	0/ 10	0/ 11	1/ 12	1/ 12
76 Halsted Street, Little Cal. River	ND	0/ 3	2/ 12	0/ 4	0/ 11	0/ 12	2/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	ND	ND	1/ 6	0/ 11	0/ 10	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	ND	0/ 3	0/ 12	1/ 11	1/ 11	0/ 12	3/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	ND	0/ 3	0/ 12	0/ 11	1/ 10	0/ 11	2/ 12	0/ 12
Des Plaines River System								
63 Longmeadow Lane, Du Page River	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake St., 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
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Ave., 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 Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Ave., 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 Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND
29 Lemont Stephen St., 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 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	ND	ND	ND	ND	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.E. Chicago River	ND	ND	ND	0/ 3	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	0/ 2	0/ 9	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	ND	ND	ND	0/ 3	1/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	2/ 10	2/ 10	0/ 12	2/ 12
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	1/ 11	1/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHE R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	0/ 1	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	ND	ND	ND	0/ 1	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 10	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 11	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	ND	ND	ND	0/ 2	1/ 12	0/ 10	1/ 12	0/ 11
64 Lake St., Du Page River	ND	ND	ND	0/ 2	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	0/ 3	1/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	0/ 2	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	ND	ND	ND	0/ 3	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	ND	ND	ND	0/ 1	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	0/ 3	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	ND	ND	ND	0/ 2	1/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	ND	ND	ND	0/ 3	0/ 12	0/ 9	1/ 12	0/ 12
17 Oakton St., Des Plaines River	ND	ND	ND	0/ 3	0/ 11	0/ 3	0/ 12	1/ 11
19 Belmont Ave., Des Plaines River	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	ND	ND	ND	0/ 3	0/ 12	0/ 12	0/ 12	1/ 12
22 Ogden Ave., Des Plaines River	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	0/ 2	0/ 11	1/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	0/ 3	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-13

WEAK ACID DISSOCIABLE CYANIDE VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND	ND
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	2/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 8	0/ 8	0/ 10	0/ 9	ND	ND	ND	ND
64 Lake St., Du Page River	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 9	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 9	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 9	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 10	0/ 6	0/ 12	0/ 9	ND	ND	ND	ND
21 First Ave., Salt Creek	0/ 10	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	1/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	1/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
17 Oakton St., Des Plaines River	1/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
22 Ogden Ave., Des Plaines River	0/ 10	0/ 12	0/ 12	0/ 10	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	0/ 10	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
29 Lemont Stephen St., Des Plaines River	0/ 10	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-14

FLUORIDE VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 11
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 49	0/ 48	0/ 51	0/ 30	0/ 95	0/252	0/ 32	0/ 35
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	4/ 11	2/ 12	6/ 12	2/ 9	3/ 10	4/ 11	3/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	2/ 12	1/ 12	0/ 9	1/ 11	1/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 6	0/ 10	0/ 11	0/ 11	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	1/ 10	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 9	0/ 8	0/ 11	0/ 9	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 9	0/ 10	0/ 12	0/ 11	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 8	0/ 10	0/ 10	0/ 9	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	1/ 10	0/ 11	0/ 12	0/ 11	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 5	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 10	0/ 10	0/ 12	0/ 11	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 10	0/ 10	0/ 12	0/ 11	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 10	1/ 10	0/ 12	0/ 11	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 10	0/ 10	0/ 12	0/ 9	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 10	0/ 11	0/ 13	0/ 11	0/ 10	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 10	0/ 10	0/ 11	0/ 10	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 10	0/ 11	0/ 12	0/ 11	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-15

FECAL COLIFORM VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	4/ 4	9/ 9	2/ 2	9/ 9	6/ 12	
31 County Line Rd., Md. Fork N. Branch	9/ 11	10/ 12	7/ 10	7/ 8	8/ 10	9/ 10	11/ 12	10/ 11	
32 County line Rd., Skokie River	11/ 11	10/ 12	9/ 10	8/ 8	9/ 9	9/ 9	12/ 12	11/ 11	
34 Dempster St., N.B. Chicago River	11/ 11	11/ 12	5/ 11	9/ 12	8/ 10	10/ 11	9/ 12	11/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	2/ 12	0/ 11	1/ 11	1/ 10	1/ 10	1/ 12	1/ 12	
35 Central Ave., N. Shore Channel	2/ 10	3/ 9	1/ 10	4/ 9	4/ 8	1/ 8	4/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND	
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	10/ 12	8/ 12	12/ 12	12/ 12	10/ 12	10/ 12	11/ 12	12/ 12	
52 Wentworth Ave., Little Calumet River	10/ 11	11/ 12	12/ 12	8/ 9	9/ 10	10/ 11	12/ 12	10/ 12	
57 135th and Ashland, Little Calumet River	10/ 11	9/ 12	10/ 12	7/ 9	9/ 11	8/ 10	10/ 11	8/ 11	
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	1/ 12	0/ 12	0/ 10	1/ 10	2/ 11	ND	ND	
55 130th Street, Calumet River	1/ 11	0/ 12	0/ 12	1/ 10	1/ 11	3/ 11	2/ 12	0/ 12	
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND	
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	6/ 9	5/ 8	8/ 10	10/ 11	9/ 12	8/ 10	10/ 12	6/ 11	
64 Lake St., Du Page River	7/ 11	7/ 12	11/ 12	10/ 11	10/ 12	10/ 11	10/ 12	8/ 12	
89 Walnut Lane, West Branch Du Page River	6/ 11	6/ 12	10/ 12	11/ 12	9/ 12	10/ 12	10/ 12	6/ 12	
90 Chicago-Elgin Rd., Poplar Creek	4/ 10	3/ 11	6/ 9	4/ 11	6/ 10	6/ 11	5/ 11	2/ 11	
12 County Line Rd., Buffalo Creek	3/ 11	4/ 11	5/ 11	7/ 12	4/ 12	7/ 10	6/ 12	2/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	3/ 11	3/ 10	2/ 10	2/ 10	7/ 11	4/ 11	
80 Arlington Hts. Rd., Salt Creek	3/ 11	5/ 12	8/ 12	7/ 12	8/ 12	6/ 10	7/ 12	8/ 12	
18 Devon Ave., Salt Creek	7/ 11	10/ 12	8/ 12	12/ 12	10/ 12	9/ 12	11/ 12	11/ 12	
24 Wolf Road, Salt Creek	5/ 11	5/ 6	11/ 12	11/ 12	12/ 12	8/ 11	11/ 12	8/ 12	
21 First Ave., Salt Creek	9/ 11	8/ 12	8/ 11	10/ 12	10/ 12	9/ 11	12/ 12	9/ 11	
77 Elmhurst Rd., Higgins Creek	6/ 11	3/ 12	7/ 11	11/ 12	9/ 12	7/ 11	7/ 12	1/ 10	
78 Wille Rd., Higgins Creek	5/ 11	6/ 12	7/ 12	9/ 12	7/ 12	6/ 11	8/ 12	4/ 11	
13 County Line Rd., Des Plaines River	5/ 11	5/ 12	7/ 11	8/ 12	7/ 12	5/ 9	8/ 12	0/ 12	
17 Oakton St., Des Plaines River	8/ 11	5/ 12	7/ 11	11/ 12	5/ 11	2/ 3	9/ 12	3/ 11	
19 Belmont Ave., Des Plaines River	8/ 11	9/ 12	12/ 12	11/ 12	11/ 12	8/ 12	10/ 12	10/ 12	
20 Roosevelt Road, Des Plaines River	9/ 11	11/ 12	11/ 12	10/ 12	11/ 12	8/ 12	11/ 12	10/ 12	
22 Ogden Ave., Des Plaines River	7/ 11	7/ 12	10/ 12	12/ 13	11/ 12	7/ 11	11/ 12	10/ 12	
23 Willow Springs Rd., Des Plaines River	5/ 11	5/ 12	7/ 11	6/ 11	5/ 11	6/ 11	9/ 12	9/ 12	
29 Lemont Stephen St., Des Plaines River	4/ 11	4/ 12	9/ 12	6/ 12	7/ 12	4/ 11	10/ 12	6/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-16

GROSS BETA RADIOACTIVITY VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	0/ 2	ND	0/ 12
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	0/ 10	ND	0/ 11
32 County line Rd., Skokie River	ND	ND	ND	ND	ND	0/ 9	ND	0/ 11
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	0/ 10	ND	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	ND	0/ 10	0/ 9	0/ 8	0/ 8	0/ 11	0/ 11
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	ND	0/ 10	ND	0/ 11
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	0/ 10	ND	0/ 12
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	0/ 9	ND	0/ 12
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	ND	0/ 8	ND	0/ 12
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	ND	0/ 9	ND	ND
55 130th Street, Calumet River	ND	ND	ND	ND	ND	0/ 9	ND	0/ 12
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	ND	0/ 10	0/ 11	0/ 11	0/ 12	0/ 11	0/ 11
64 Lake St., Du Page River	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	0/ 11	ND	0/ 11
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	0/ 10	ND	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	ND	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
18 Devon Ave., Salt Creek	ND	ND	0/ 1	ND	ND	0/ 12	ND	0/ 12
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12
21 First Ave., Salt Creek	ND	ND	ND	ND	ND	0/ 11	ND	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	ND	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	ND	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	0/ 9	ND	0/ 12
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	0/ 3	ND	0/ 11
19 Belmont Ave., Des Plaines River	ND	ND	ND	ND	ND	0/ 12	ND	0/ 12
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	0/ 12	ND	0/ 12
22 Ogden Ave., Des Plaines River	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	ND	ND	0/ 11	ND	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-17

TOTAL SILVER VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	1/ 11	1/ 12	0/ 10	1/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	1/ 12	0/ 10	1/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	1/ 11	2/ 12	0/ 11	1/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	1/ 11	1/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	2/ 12	1/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	2/ 12	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	2/ 12	0/ 12	2/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	1/ 12	2/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	2/ 12	3/ 12	1/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	1/ 12	0/ 12	1/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	3/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	1/ 12	4/ 12	1/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	3/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	1/ 11	3/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	4/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	1/ 10	4/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	3/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	4/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	1/ 11	1/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	4/ 11	1/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	3/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	1/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	1/ 11	0/ 12	3/ 12	1/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	2/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-18

TOTAL ARSENIC VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-19

TOTAL BARIUM VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11	
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11	
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-20

BORON VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND	ND
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	1/ 12	0/ 7	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	1/ 12	0/ 7	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
51 IHR R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 7	ND	ND	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 7	ND	ND	ND	ND
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 9	ND	ND	ND	ND
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 9	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 9	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 9	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 9	ND	ND	ND	ND
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 10	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 9	ND	ND	ND	ND
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 9	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-21

TOTAL CADMIUM VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11	
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11	
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	1/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Citero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 10	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 10	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-22

TOTAL COPPER VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	3/ 9	1/ 2	0/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	2/ 10	0/ 10	0/ 12	0/ 11	
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	2/ 9	0/ 9	0/ 12	0/ 11	
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	2/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	1/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	2/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	1/ 52	0/ 51	0/ 52	0/ 48	0/ 51	ND	0/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	1/ 10	1/ 11	0/ 12	1/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	2/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	1/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	5/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	2/ 12	0/ 11	0/ 12	1/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	0/ 12	0/ 12	2/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	1/ 10	0/ 11	0/ 11	1/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	1/ 12	1/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	2/ 10	0/ 10	0/ 11	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	1/ 10	0/ 12	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	1/ 12	2/ 11	0/ 12	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	1/ 12	1/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	1/ 11	0/ 12	0/ 11	
78 Willie Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	2/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	1/ 11	1/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 13	2/ 12	0/ 11	1/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	2/ 11	1/ 11	0/ 12	1/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	2/ 12	1/ 11	1/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-23

TOTAL CHROMIUM VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 10	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-24

TOTAL IRON VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	1/ 4	1/ 9	1/ 2	3/ 9	3/ 12
31 County Line Rd., Md. Fork N. Branch	1/ 11	0/ 12	3/ 10	2/ 8	3/ 10	1/ 10	2/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	1/ 8	2/ 9	0/ 9	2/ 12	3/ 11
34 Dempster St., N.B. Chicago River	1/ 11	0/ 12	0/ 11	1/ 12	1/ 10	0/ 11	0/ 12	2/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	6/ 50	9/ 52	10/ 51	3/ 52	0/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	1/ 12	2/ 12	0/ 12	0/ 12	0/ 12	1/ 12	1/ 12
52 Wentworth Ave., Little Calumet River	4/ 11	8/ 12	5/ 12	5/ 9	1/ 10	6/ 11	9/ 12	3/ 12
57 135th and Ashland, Little Calumet River	2/ 11	2/ 12	2/ 12	1/ 9	0/ 11	2/ 10	3/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	1/ 12	0/ 12	4/ 11	4/ 13	2/ 12	2/ 12	3/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	1/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	1/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	1/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	1/ 9	2/ 8	0/ 10	4/ 11	2/ 12	1/ 10	2/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	2/ 12	3/ 11	2/ 12	0/ 11	0/ 12	1/ 12
89 Walnut Lane, West Branch Du Page River	1/ 11	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	2/ 9	4/ 11	0/ 10	0/ 11	3/ 11	1/ 11
12 County Line Rd., Buffalo Creek	3/ 11	0/ 11	0/ 11	3/ 12	0/ 12	2/ 10	1/ 12	0/ 12
79 Higgins Rd., Salt Creek	1/ 10	1/ 10	2/ 11	3/ 10	0/ 10	1/ 10	5/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	1/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	2/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	1/ 11	0/ 6	1/ 12	0/ 12	2/ 12	2/ 11	3/ 12	1/ 12
21 First Ave., Salt Creek	0/ 11	1/ 12	0/ 11	1/ 12	1/ 12	0/ 11	3/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	3/ 11	2/ 12	2/ 11	5/ 12	4/ 12	2/ 11	0/ 12	1/ 11
78 Wille Rd., Higgins Creek	0/ 11	1/ 12	0/ 12	1/ 12	2/ 12	1/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	1/ 11	1/ 12	0/ 11	1/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	1/ 11	0/ 12	1/ 11	0/ 12	0/ 11	0/ 3	1/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	1/ 12	1/ 12	0/ 12	2/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	2/ 12	0/ 12	0/ 12	1/ 12	1/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	2/ 12	0/ 13	0/ 12	1/ 11	3/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	1/ 11	0/ 11	0/ 11	0/ 11	1/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	1/ 12	0/ 12	1/ 12	0/ 12	1/ 11	2/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-25

SOLUBLE IRON VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	ND	ND	ND	ND	ND
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	ND	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	ND	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
82 Lockport Trebler	0/ 50	1/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	0/ 12	1/ 12	0/ 12	ND	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	0/ 11	1/ 12	0/ 12	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	ND	ND	ND	ND	ND
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	1/ 6	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	1/ 12	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	1/ 12	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	ND	ND	ND	ND	ND
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	1/ 9	ND	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	ND	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	ND	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	ND	ND	ND	ND	ND
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	ND	ND	ND	ND	ND
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	ND	ND	ND	ND	ND

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-26

TOTAL LEAD VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	2/ 10	0/ 10	0/ 12	0/ 11	
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11	
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	1/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	1/ 51	2/ 52	0/ 48	0/ 51	0/ 50	0/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	3/ 11	0/ 13	0/ 12	0/ 12	1/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	1/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	1/ 10	0/ 10	0/ 11	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	1/ 12	0/ 11	0/ 12	0/ 11	
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	1/ 11	0/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	1/ 12	0/ 11	0/ 12	0/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-27

TOTAL NICKEL VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	1/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-28

TOTAL MANGANESE VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	1/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	1/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 136th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	1/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	1/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	1/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-29

TOTAL MERCURY VIOLATION HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County Line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	1/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	1/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 9	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	3/ 11	0/ 12	0/ 12	0/ 12	1/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 10	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 10	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 10	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	1/ 12	0/ 4	0/ 11	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	1/ 6	0/ 12	0/ 10	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	1/ 12	0/ 11	0/ 11	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	1/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	1/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-30

TOTAL ZINC VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year								
	99	98	97	96	95	94	93	92	
<u>Chicago River System</u>									
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12	
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11	
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11	
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12	
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12	
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11	
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12	
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12	
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12	
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12	
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12	
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	1/ 52	0/ 48	0/ 51	0/ 50	0/ 49	
<u>Calumet River System</u>									
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12	
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12	
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	1/ 12	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7	
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12	
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12	
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
<u>Des Plaines River System</u>									
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11	
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11	
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11	
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11	
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12	
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-31

TOTAL SELENIUM VIOLATION HISTORY THROUGH 1999

Sampling Station No. Name	Ratio of Violations/Sampling Frequency Per Year							
	99	98	97	96	95	94	93	92
<u>Chicago River System</u>								
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0/ 4	0/ 9	0/ 2	0/ 9	0/ 12
31 County Line Rd., Md. Fork N. Branch	0/ 11	0/ 12	0/ 10	0/ 8	0/ 10	0/ 10	0/ 12	0/ 11
32 County line Rd., Skokie River	0/ 11	0/ 12	0/ 10	0/ 8	0/ 9	0/ 9	0/ 12	0/ 11
34 Dempster St., N.B. Chicago River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 10	0/ 11	0/ 12	0/ 12
74 Outer Dr. Bridge, Chicago River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 10	0/ 10	0/ 12	0/ 12
35 Central Ave., N. Shore Channel	0/ 10	0/ 9	0/ 10	0/ 9	0/ 8	0/ 8	0/ 12	0/ 11
36 Touhy Ave., N. Shore Channel	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 11	0/ 12
37 Wilson Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 8	0/ 12
73 Diversey Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
46 Grand Ave., N.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 7	0/ 12	0/ 12	0/ 12
39 Madison St., S.B. Chicago River	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 5	0/ 12	0/ 12
40 Damen Ave., S.B. Chicago River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12	0/ 12
75 Cicero Ave., Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
41 Harlem Ave., Chgo. San. and Ship Canal	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
42 Hwy. 83 and Chgo. San. and Ship Canal	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
48 Lemont Bridge, Stephen Street (Comp)	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
82 Lockport Trebler	0/ 50	0/ 52	0/ 51	0/ 52	0/ 48	0/ 51	0/ 50	0/ 49
<u>Calumet River System</u>								
50 Wolf Lake, Burnham Ave.	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
54 Joe Orr Road, Thorn Creek	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
52 Wentworth Ave., Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 10	0/ 11	0/ 12	0/ 12
57 135th and Ashland, Little Calumet River	0/ 11	0/ 12	0/ 12	0/ 9	0/ 11	0/ 10	0/ 11	0/ 12
86 Burnham Avenue, Grand Calumet River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 13	0/ 12	0/ 12	0/ 12
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0/ 12	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 7
55 130th Street, Calumet River	0/ 11	0/ 12	0/ 12	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
56 Indiana Ave., Calumet River	0/ 11	0/ 12	0/ 11	0/ 10	0/ 11	0/ 11	0/ 12	0/ 12
76 Halsted Street, Little Cal. River	0/ 11	0/ 12	0/ 12	0/ 4	0/ 12	0/ 12	0/ 12	0/ 12
58 Ashland Ave., Cal-Sag Channel	0/ 11	0/ 8	0/ 6	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12
59 Cicero Ave., Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12
43 Hwy. 83 and Cal-Sag Channel	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
<u>Des Plaines River System</u>								
63 Longmeadow Lane, Du Page River	0/ 9	0/ 8	0/ 10	0/ 11	0/ 12	0/ 10	0/ 12	0/ 11
64 Lake St., Du Page River	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12
89 Walnut Lane, West Branch Du Page River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
90 Chicago-Elgin Rd., Poplar Creek	0/ 10	0/ 11	0/ 9	0/ 11	0/ 10	0/ 11	0/ 11	0/ 11
12 County Line Rd., Buffalo Creek	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
79 Higgins Rd., Salt Creek	0/ 10	0/ 10	0/ 11	0/ 10	0/ 10	0/ 10	0/ 11	0/ 11
80 Arlington Hts. Rd., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 10	0/ 12	0/ 12
18 Devon Ave., Salt Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
24 Wolf Road, Salt Creek	0/ 11	0/ 6	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
21 First Ave., Salt Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
77 Elmhurst Rd., Higgins Creek	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 11	0/ 12	0/ 11
78 Wille Rd., Higgins Creek	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12
13 County Line Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 12	0/ 9	0/ 12	0/ 12
17 Oakton St., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 12	0/ 11	0/ 3	0/ 12	0/ 11
19 Belmont Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
20 Roosevelt Road, Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12	0/ 12
22 Ogden Ave., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 13	0/ 12	0/ 11	0/ 12	0/ 12
23 Willow Springs Rd., Des Plaines River	0/ 11	0/ 12	0/ 11	0/ 11	0/ 11	0/ 11	0/ 12	0/ 12
29 Lemont Stephen St., Des Plaines River	0/ 11	0/ 12	0/ 12	0/ 12	0/ 12	0/ 11	0/ 12	0/ 12

ND = No Data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-32

BIOCHEMICAL OXYGEN DEMAND MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	5.00	3.75	4.67	2.55
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	3.00	3.20	2.91	4.88
32 County Line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	2.00	3.90	4.00	4.89
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	3.25	3.50	4.09
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	2.08	2.08	1.80
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	4.00	1.91	3.00	1.75
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	14.00	5.17	6.00	5.75
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	8.00	4.75	6.50	5.67
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	4.00	3.50	5.42	3.42
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	6.00	3.00	3.50	3.08
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	5.00	3.17	2.83	2.73
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	8.00	2.75	2.75	2.25
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	4.00	2.50	3.00	2.17
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	7.00	3.25	4.18	3.25
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	4.00	2.75	3.00	3.08
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	7.00	3.58	3.50	3.45
82 Lockport Trebler	6.20	5.29	7.10	6.19	4.41	4.77	4.76	5.04	4.74	5.02	5.98
Calumet River System											
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	ND	ND	ND	7.00	3.91	2.50	2.27
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	12.00	3.82	4.75	2.00
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	6.00	5.64	4.50	3.00
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	4.00	4.50	4.45	3.00
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	7.00	7.82	6.00	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.75
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.40
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	5.00	3.40	2.75	2.09
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	6.00	4.00	3.91	3.00
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	7.00	5.55	5.58	3.25
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	6.00	4.82	5.92	3.50
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	6.00	5.18	6.17	3.67
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	7.00	4.55	5.25	3.67
Des Plaines River System											
63 Longmeadow Lane, Du Page River	ND	ND	ND	ND	ND	ND	ND	6.00	4.09	4.45	4.00
64 Lake St., Du Page River	ND	ND	ND	ND	ND	ND	ND	7.00	6.75	4.33	3.58
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	ND	ND	ND	2.00	3.25	3.42	2.42
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	2.64	3.42	4.11
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	3.00	3.50	5.33	4.70
79 Higgins Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	3.20	4.00	3.90
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	3.00	2.58	4.08	2.58
18 Devon Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	2.00	2.25	4.00	3.09
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	3.00	4.83	3.92	3.91
21 First Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	4.00	4.83	4.00	4.18
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	7.00	5.36	4.50	4.70
78 Wille Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	3.00	3.55	3.58	2.25
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	5.00	3.42	4.00	3.09
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	5.42	3.67	2.70
19 Belmont Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	5.00	6.42	4.25	9.55
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	4.00	6.45	4.00	4.55
22 Ogden Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	4.00	5.75	4.00	4.00
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	5.00	5.03	4.17	4.90
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	5.00	5.00	4.75	5.27

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-33

DISSOLVED OXYGEN MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	8.73	7.51	9.35	6.17	7.54	8.16	7.96	8.25
31 County Line Rd., Md. Fork N. Branch	6.72	6.56	7.44	6.51	5.74	6.04	6.88	6.90	6.48	7.30	7.05
32 County line Rd., Skokie River	6.59	7.56	7.49	7.91	6.63	6.11	7.41	7.40	7.10	7.43	7.94
34 Dempster St., N.B. Chicago River	7.93	8.04	8.18	8.45	6.88	7.66	7.13	7.83	7.75	6.68	8.41
74 Outer Dr. Bridge, Chicago River	9.26	9.36	9.79	10.15	9.93	9.68	9.76	9.17	10.03	8.87	10.23
35 Central Ave., N. Shore Channel	7.51	7.20	9.69	6.36	8.18	9.20	9.23	9.47	10.05	7.78	8.94
36 Touhy Ave., N. Shore Channel	7.43	7.31	7.85	7.35	6.45	7.58	7.65	7.39	8.21	7.32	7.34
37 Wilson Ave., N.B. Chicago River	6.75	7.04	7.36	6.82	6.37	6.65	7.29	7.43	7.76	7.23	7.12
73 Diversey Ave., N.B. Chicago River	5.81	6.05	6.36	6.27	6.08	6.67	6.57	6.96	6.92	7.27	6.98
46 Grand Ave., N.B. Chicago River	6.53	6.35	5.92	6.95	6.93	5.68	5.65	5.83	5.87	5.76	5.97
39 Madison St., S.B. Chicago River	6.89	7.38	7.82	8.75	8.02	8.30	7.03	7.82	7.56	6.24	7.66
40 Damen Ave., S.B. Chicago River	6.19	7.00	7.48	8.21	7.08	7.65	6.03	7.39	6.99	6.35	6.72
75 Cicero Ave., Chgo. San. and Ship Canal	5.99	6.21	7.16	6.85	7.00	6.81	5.88	6.64	6.43	5.38	6.48
41 Harlem Ave., Chgo. San. and Ship Canal	7.16	7.13	6.96	7.16	6.97	7.20	6.23	6.84	6.80	6.54	7.30
42 Hwy. 83 and Chgo. San. and Ship Canal	5.76	5.90	6.23	6.35	6.10	6.10	5.50	6.43	6.05	5.57	5.61
48 Lemont Bridge, Stephen Street (Comp)	5.63	6.03	6.07	6.40	5.84	5.80	5.27	5.42	5.05	5.03	5.60
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System											
50 Wolf Lake, Burnham Ave.	9.45	9.25	9.73	10.25	9.56	8.59	9.92	9.69	9.61	9.80	9.42
54 Joe Orr Road, Thorn Creek	8.85	8.61	8.03	8.36	8.57	8.32	7.72	8.18	8.63	7.92	7.37
52 Wentworth Ave., Little Calumet River	6.23	6.91	6.47	6.08	6.43	6.01	7.43	6.43	7.13	5.68	5.67
57 135th and Ashland, Little Calumet River	5.80	6.34	6.07	5.56	6.77	6.25	6.03	6.70	7.10	6.54	6.35
86 Burnham Avenue, Grand Calumet River	5.14	5.63	5.25	3.19	3.55	2.50	3.27	3.16	4.26	5.65	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.09
49 92nd and Ewing Ave., Calumet River	9.81	9.36	10.17	9.53	9.99	8.45	10.56	9.63	ND	10.70	11.26
55 130th Street, Calumet River	8.97	8.56	8.95	8.97	9.92	9.05	9.63	8.18	8.39	9.28	8.83
56 Indiana Ave., Calumet River	8.48	7.84	8.16	8.72	8.00	6.59	7.34	8.38	7.60	7.31	6.06
76 Halsted Street, Little Cal. River	6.69	6.60	6.53	7.35	6.29	6.09	5.64	6.31	6.04	5.63	5.04
58 Ashland Ave., Cal-Sag Channel	6.21	5.61	6.66	6.31	5.85	6.34	6.18	6.25	6.50	5.61	4.75
59 Cicero Ave., Cal-Sag Channel	6.12	6.04	6.44	6.26	6.29	5.81	6.68	5.91	5.45	5.41	4.08
43 Hwy. 83 and Cal-Sag Channel	5.95	5.64	6.04	5.82	5.24	5.99	5.64	5.64	4.95	5.08	4.38
Des Plaines River System											
63 Longmeadow Lane, Du Page River	10.04	8.36	9.38	7.76	9.29	8.62	8.76	8.33	8.63	9.07	8.26
64 Lake St., Du Page River	8.74	7.79	7.71	7.37	8.47	9.10	8.49	9.22	8.68	8.07	8.32
89 Walnut Lane, West Branch Du Page River	8.20	7.33	8.22	7.61	8.43	8.52	7.63	8.58	9.09	7.31	8.73
90 Chicago-Elgin Rd., Poplar Creek	10.15	8.40	9.26	9.09	9.71	10.03	8.67	9.88	9.66	9.05	9.57
12 County Line Rd., Buffalo Creek	8.60	8.47	8.63	8.50	10.18	8.85	9.42	10.27	8.81	10.04	9.15
79 Higgins Rd., Salt Creek	9.07	7.77	8.94	7.35	9.28	8.34	7.65	9.31	8.51	8.36	11.01
80 Arlington Hts. Rd., Salt Creek	7.97	7.31	8.43	7.74	8.42	8.27	8.58	8.80	8.82	8.84	7.97
18 Devon Ave., Salt Creek	7.93	7.66	8.98	7.26	8.85	8.30	8.64	9.57	9.36	8.39	7.74
24 Wolf Road, Salt Creek	9.04	9.70	9.73	8.89	8.94	9.32	9.63	9.73	8.77	8.26	7.69
21 First Ave., Salt Creek	7.65	6.48	7.07	7.08	7.49	7.63	7.42	8.11	8.10	7.93	6.65
77 Elmhurst Rd., Higgins Creek	9.39	7.97	9.23	7.95	8.28	8.75	9.94	9.06	8.46	8.46	7.34
78 Wille Rd., Higgins Creek	8.61	7.80	8.97	8.26	8.36	8.87	8.88	8.56	8.63	8.56	8.08
13 County Line Rd., Des Plaines River	8.46	8.01	8.55	7.06	8.86	8.97	8.15	8.57	9.01	7.80	7.35
17 Oakton St., Des Plaines River	8.32	8.11	8.49	7.94	8.14	8.50	8.32	8.27	8.33	8.47	8.19
19 Belmont Ave., Des Plaines River	7.26	6.58	8.26	7.18	7.38	6.38	7.14	7.70	7.58	7.83	7.51
20 Roosevelt Road, Des Plaines River	7.24	6.44	8.05	7.28	7.63	7.28	7.53	8.27	6.64	7.26	7.37
22 Ogden Ave., Des Plaines River	8.43	8.40	9.18	8.25	8.61	8.21	8.55	9.26	8.25	8.31	8.22
23 Willow Springs Rd., Des Plaines River	8.68	8.41	9.14	8.42	8.85	9.06	7.93	8.89	7.68	8.08	9.00
29 Lemont Stephen St., Des Plaines River	9.15	9.11	9.74	8.82	8.43	9.78	8.12	9.54	9.28	8.20	9.85

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-34

CHEMICAL OXYGEN DEMAND MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	26.33	31.50	38.22	32.75	44.00	45.50	34.18
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	21.00	33.30	33.75	28.55	33.80	33.09	49.13
32 County line Rd., Skokie River	ND	ND	ND	ND	23.67	33.33	29.92	27.73	33.20	32.83	37.22
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	17.50	48.82	25.58	26.25	26.92	30.83	32.91
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	5.75	10.40	13.42	9.83	12.08	13.75	9.50
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	8.67	12.50	12.42	11.73	13.00	15.00	10.50
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	22.80	27.82	22.36	22.75	27.50	30.00	26.42
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	26.60	26.00	21.38	22.25	24.83	28.67	27.25
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	16.40	24.67	22.33	20.00	28.00	30.25	24.17
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	24.00	25.00	21.25	22.00	25.67	22.83	28.50
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	19.75	15.80	15.83	17.92	22.92	20.92	19.00
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	31.67	20.67	16.08	18.00	19.50	20.42	21.00
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	17.20	22.00	18.75	16.75	20.08	22.08	19.50
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	18.40	26.25	21.58	25.42	23.42	26.00	26.33
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	16.80	26.64	20.42	20.75	22.67	23.42	28.58
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	29.80	26.67	25.33	27.58	29.58	27.08	31.36
82 Lockport Trebler	ND	ND	ND	ND	22.34	28.43	26.75	23.85	23.79	29.05	25.93
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	14.33	23.92	19.17	19.67	23.58	22.42	22.64
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	27.00	33.92	34.50	27.00	33.83	36.25	29.73
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	27.50	37.18	37.92	35.08	45.00	38.45	38.60
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	27.40	33.80	32.09	31.08	64.82	31.64	37.10
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	49.29	59.92	60.67	90.42	51.50	64.33	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	67.58
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	9.60	10.18	9.67	14.86	ND	17.00	20.60
55 130th Street, Calumet River	ND	ND	ND	ND	12.80	13.64	13.83	13.00	21.55	20.08	19.09
56 Indiana Ave., Calumet River	ND	ND	ND	ND	26.00	25.82	28.17	20.00	31.58	29.18	33.40
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	29.17	29.25	27.58	30.00	37.63	34.00	33.67
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	31.60	30.58	29.17	30.92	42.33	37.67	34.75
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	32.00	31.08	31.42	27.58	38.25	36.64	37.42
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	31.33	31.45	33.42	26.17	42.42	35.36	37.08
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	ND	ND	ND	ND	62.50	40.70	40.33	36.09	38.09	36.82	43.63
64 Lake St., Du Page River	ND	ND	ND	ND	51.00	44.36	41.75	35.08	42.92	37.75	35.08
89 Walnut Lane, West Branch Du Page River	ND	ND	ND	ND	54.00	40.92	34.83	35.58	36.00	29.92	32.00
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	35.80	33.27	33.82	27.73	35.45	26.92	37.33
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	34.33	37.50	37.42	30.67	35.42	47.25	42.60
79 Higgins Rd., Salt Creek	ND	ND	ND	ND	38.60	40.80	34.09	30.64	31.30	34.36	32.10
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	ND	28.50	29.90	25.00	27.75	27.92	27.25	28.92
18 Devon Ave., Salt Creek	ND	ND	ND	ND	30.83	35.42	29.08	27.92	25.42	30.58	29.64
24 Wolf Road, Salt Creek	ND	ND	ND	ND	33.83	39.18	32.00	31.58	37.00	33.67	39.82
21 First Ave., Salt Creek	ND	ND	ND	ND	31.00	37.73	36.75	30.27	35.50	34.92	41.18
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	ND	39.83	57.36	33.75	35.18	37.27	33.92	33.70
78 Wille Rd., Higgins Creek	ND	ND	ND	ND	37.17	35.09	29.08	29.25	28.09	30.17	28.75
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	28.00	36.33	32.17	29.42	34.75	37.08	35.27
17 Oakton St., Des Plaines River	ND	ND	ND	ND	36.50	34.00	30.00	34.27	37.17	33.25	38.80
19 Belmont Ave., Des Plaines River	ND	ND	ND	ND	45.00	45.42	32.33	34.17	40.83	33.67	49.91
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	31.67	40.00	30.92	37.00	35.33	34.25	41.45
22 Ogden Ave., Des Plaines River	ND	ND	ND	ND	31.17	42.18	34.33	32.50	35.75	33.17	39.82
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	30.67	40.36	30.00	32.58	36.50	36.75	44.80
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	ND	35.17	44.36	36.00	36.58	38.58	38.25	40.64

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-35

TEMPERATURE MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	No.	Name	Annual Means (°C)										
			99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>													
30	County Line Rd., W. Fork N. Branch		ND	ND	ND	15.0	16.3	21.1	14.3	14.3	14.3	14.3	12.4
31	County Line Rd., Md. Fork N. Branch		13.9	12.2	11.6	13.4	12.8	13.3	11.7	12.9	13.6	13.4	12.5
32	County line Rd., Skokie River		14.0	11.9	12.1	13.1	14.9	15.6	12.1	13.5	14.8	12.7	12.1
34	Dempster St., N.B. Chicago River		14.5	13.2	12.4	10.9	14.0	13.6	12.7	12.7	13.4	13.1	11.6
74	Outer Dr. Bridge, Chicago River		14.9	13.3	11.5	10.6	12.4	13.6	9.7	11.4	10.7	12.8	12.2
35	Central Ave., N. Shore Channel		15.9	16.2	12.0	13.9	15.0	16.1	11.8	12.4	12.2	13.2	14.4
36	Touhy Ave., N. Shore Channel		16.9	15.8	12.8	14.7	14.2	15.2	15.1	14.9	15.4	15.5	13.6
37	Wilson Ave., N.B. Chicago River		16.0	15.2	12.4	13.7	13.0	14.6	10.6	14.9	14.4	15.3	12.8
73	Diversey Ave., N.B. Chicago River		16.5	15.4	12.4	13.7	13.5	15.1	14.8	15.1	14.0	15.2	12.6
46	Grand Ave., N.B. Chicago River		15.1	15.0	14.6	12.1	8.8	14.5	12.2	14.0	15.1	14.2	13.4
39	Madison St., S.B. Chicago River		14.7	13.8	12.1	10.8	12.2	10.9	11.1	12.7	12.3	14.1	12.5
40	Damen Ave., S.B. Chicago River		16.8	15.4	13.3	11.6	14.9	13.8	12.8	13.1	13.8	15.3	12.1
75	Cicero Ave., Chgo. San. and Ship Canal		15.6	18.0	12.5	13.5	14.1	14.3	14.5	13.7	14.9	15.2	12.3
41	Harlem Ave., Chgo. San. and Ship Canal		17.9	16.7	13.9	13.5	13.7	15.1	13.6	14.1	15.3	15.4	13.7
42	Hwy. 83 and Chgo. San. and Ship Canal		18.0	17.2	15.0	14.7	14.8	14.5	14.5	14.7	15.8	15.8	12.7
48	Lemont Bridge, Stephen Street (Comp)		18.5	16.6	14.6	14.2	14.4	14.9	13.3	14.5	15.8	16.1	12.5
82	Lockport Trebler		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>													
50	Wolf Lake, Burnham Ave.		13.6	15.0	12.4	12.5	13.1	14.0	12.7	12.8	12.6	14.5	12.3
54	Joe Orr Road, Thorn Creek		15.0	15.8	13.2	14.0	15.4	14.7	15.2	16.4	13.7	14.0	12.0
52	Wentworth Ave., Little Calumet River		15.3	14.3	11.9	14.7	14.7	14.3	12.5	12.6	11.9	12.2	14.2
57	135th and Ashland, Little Calumet River		16.0	14.6	11.2	15.2	13.6	15.5	13.5	13.9	13.1	14.1	12.3
86	Burnham Avenue, Grand Calumet River		15.3	15.6	13.7	13.9	14.3	15.4	14.3	14.5	13.6	15.2	ND
51	IHB R.R. Bridge, Grand Calumet River		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.9
49	92nd and Ewing Ave., Calumet River		13.4	14.8	12.6	13.3	13.1	13.3	11.7	13.1	ND	13.0	12.7
55	130th Street, Calumet River		15.7	15.5	13.3	14.8	15.3	14.6	12.8	12.8	14.7	13.2	14.2
56	Indiana Ave., Calumet River		15.7	16.7	14.1	14.7	14.4	15.2	13.3	14.1	14.8	14.9	13.8
76	Halsted Street, Little Cal. River		16.5	16.4	13.6	4.3	14.9	14.5	14.8	15.5	13.9	14.9	12.7
58	Ashland Ave., Cal-Sag Channel		16.7	19.1	14.1	13.6	15.5	13.7	13.8	14.4	12.9	13.7	11.9
59	Cicero Ave., Cal-Sag Channel		16.6	16.0	13.1	14.4	13.9	14.1	13.8	14.6	12.6	14.0	12.6
43	Hwy. 83 and Cal-Sag Channel		16.5	15.5	14.0	14.9	13.5	13.3	14.1	14.2	13.5	13.5	12.0
<u>Des Plaines River System</u>													
63	Longmeadow Lane, Du Page River		13.9	17.8	10.6	13.4	13.2	15.4	12.5	12.6	17.5	14.1	15.1
64	Lake St., Du Page River		14.7	17.9	13.9	14.7	14.1	14.8	15.0	14.3	16.5	15.7	14.4
89	Walnut Lane, West Branch Du Page River		16.0	18.3	15.1	14.3	15.5	14.0	14.3	14.9	17.2	16.1	16.7
90	Chicago-Elgin Rd., Poplar Creek		13.1	17.1	14.6	13.7	15.3	13.2	13.1	13.3	18.4	12.6	17.0
12	County Line Rd., Buffalo Creek		12.9	16.9	12.1	13.2	14.6	15.7	13.1	11.4	14.4	13.3	14.8
79	Higgins Rd., Salt Creek		14.4	19.1	14.2	14.4	16.1	16.0	14.1	12.8	17.9	14.9	14.9
80	Arlington Hts. Rd., Salt Creek		15.2	17.6	14.2	15.2	14.4	12.7	14.1	14.0	16.7	15.5	14.8
18	Devon Ave., Salt Creek		14.8	17.5	13.5	14.8	14.7	15.0	14.0	19.8	16.8	16.2	15.3
24	Wolf Road, Salt Creek		14.8	9.9	9.6	14.2	13.9	14.3	13.6	12.7	14.3	13.0	11.7
21	First Ave., Salt Creek		13.5	14.8	11.6	13.5	12.5	13.0	12.1	10.7	12.4	13.1	10.5
77	Elmhurst Rd., Higgins Creek		14.0	15.3	9.2	12.3	12.7	13.1	12.2	12.2	13.5	13.5	11.7
78	Wille Rd., Higgins Creek		16.1	17.3	11.5	15.3	15.4	15.4	14.7	14.6	15.7	15.4	12.8
13	County Line Rd., Des Plaines River		12.9	15.7	11.6	13.8	13.1	12.7	12.3	12.4	15.3	12.6	13.3
17	Oakton St., Des Plaines River		13.8	15.1	10.0	13.3	13.6	2.1	12.8	12.4	13.0	12.3	11.4
19	Belmont Ave., Des Plaines River		13.7	15.3	10.7	13.4	13.0	12.8	12.7	11.8	13.4	12.2	10.3
20	Roosevelt Road, Des Plaines River		13.3	15.2	10.6	13.5	12.4	12.5	12.2	11.5	13.6	12.0	10.6
22	Ogden Ave., Des Plaines River		14.1	14.8	11.2	14.6	13.1	14.3	13.0	13.2	13.0	13.7	11.1
23	Willow Springs Rd., Des Plaines River		14.8	16.2	10.0	14.2	13.8	14.1	13.3	12.7	14.4	12.8	11.4
29	Lemont Stephen St., Des Plaines River		14.9	16.7	9.0	14.5	13.5	14.7	13.6	12.9	15.0	13.0	11.4

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-36
PH MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means											
	99	98	97	96	95	94	93	92	91	90	89	
<u>Chicago River System</u>												
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	7.93	8.01	7.86	7.37	7.45	7.75	7.48	7.36	
31 County Line Rd., Md. Fork N. Branch	7.87	7.77	6.75	7.93	8.04	7.61	7.57	7.38	7.87	7.60	7.51	
32 County line Rd., Skokie River	7.96	7.82	6.67	7.94	8.10	7.55	7.36	7.50	7.82	7.50	7.66	
34 Dempster St., N.B. Chicago River	7.84	7.72	6.79	7.73	7.88	7.39	7.38	7.44	8.11	7.37	7.75	
74 Outer Dr. Bridge, Chicago River	8.09	8.15	7.96	7.88	7.53	8.08	8.02	7.65	7.55	7.65	7.87	
35 Central Ave., N. Shore Channel	8.12	8.24	7.03	8.07	8.37	8.05	7.95	7.88	8.32	7.70	7.95	
36 Touhy Ave., N. Shore Channel	7.56	7.50	6.95	7.59	7.64	7.47	7.51	7.62	7.94	7.45	7.43	
37 Wilson Ave., N.B. Chicago River	7.58	7.68	6.99	7.71	7.38	7.03	7.21	7.49	7.88	7.44	7.42	
73 Diversey Ave., N.B. Chicago River	7.41	7.84	7.16	7.94	7.24	7.28	7.54	7.18	7.82	7.52	7.30	
46 Grand Ave., N.B. Chicago River	7.74	7.82	6.48	7.55	7.60	7.53	7.56	7.17	7.49	7.39	7.26	
39 Madison St., S.B. Chicago River	7.89	7.89	7.75	7.52	7.38	7.65	7.69	7.34	7.79	7.34	7.59	
40 Damen Ave., S.B. Chicago River	7.72	8.06	7.48	7.68	7.27	7.89	7.60	7.53	7.55	7.51	7.32	
75 Cicero Ave., Chgo. San. and Ship Canal	7.85	8.02	7.90	7.82	7.24	7.61	7.21	7.18	7.24	7.47	7.39	
41 Harlem Ave., Chgo. San. and Ship Canal	7.67	7.97	7.44	7.38	7.10	7.49	7.38	7.34	7.34	7.23	7.28	
42 Hwy. 83 and Chgo. San. and Ship Canal	7.71	7.98	7.54	7.51	7.33	7.53	7.44	7.32	7.42	7.36	7.28	
48 Lemont Bridge, Stephen Street (Comp)	7.62	7.97	7.58	7.49	7.48	7.54	7.54	7.29	7.37	7.38	7.24	
82 Lockport Trebler	7.61	7.65	7.80	7.64	7.45	7.72	7.40	7.52	7.83	7.67	7.69	
<u>Calumet River System</u>												
50 Wolf Lake, Burnham Ave.	8.29	8.34	7.93	8.31	8.12	7.72	7.65	7.83	7.76	7.80	7.92	
54 Joe Orr Road, Thorn Creek	8.10	7.53	7.07	7.51	7.65	7.34	7.44	7.68	7.56	7.13	7.47	
52 Wentworth Ave., Little Calumet River	7.95	8.09	7.70	8.65	7.98	7.58	7.53	7.60	7.88	7.30	7.60	
57 135th and Ashland, Little Calumet River	7.91	7.65	7.03	7.28	7.61	7.42	7.53	7.38	7.65	7.41	7.63	
86 Burnham Avenue, Grand Calumet River	7.79	7.94	7.47	8.02	7.55	7.22	7.50	7.37	7.45	7.18	ND	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.44	
49 92nd and Ewing Ave., Calumet River	8.19	8.25	7.88	8.00	7.66	7.86	7.70	7.44	ND	7.50	7.68	
55 130th Street, Calumet River	8.21	8.12	7.91	8.35	8.27	7.87	7.36	7.53	7.68	7.69	7.86	
56 Indiana Ave., Calumet River	8.10	8.03	7.75	8.32	8.16	7.32	7.19	7.16	7.57	7.62	7.77	
76 Halsted Street, Little Cal. River	7.82	7.56	7.49	7.32	7.66	7.55	7.38	7.51	7.64	7.28	7.49	
58 Ashland Ave., Cal-Sag Channel	7.78	7.92	7.78	7.27	7.68	7.58	7.44	7.48	7.57	7.24	7.53	
59 Cicero Ave., Cal-Sag Channel	7.79	7.74	7.43	7.45	7.54	7.37	7.46	7.27	7.48	7.18	7.47	
43 Hwy. 83 and Cal-Sag Channel	7.72	7.74	7.63	7.39	7.26	7.36	7.30	6.94	7.39	7.14	7.50	
<u>Des Plaines River System</u>												
63 Longmeadow Lane, Du Page River	7.90	8.13	7.66	7.94	7.95	7.81	7.46	7.63	7.88	7.71	7.43	
64 Lake St., Du Page River	7.71	8.06	7.88	8.06	7.87	7.82	7.63	7.62	7.84	7.35	7.47	
89 Walnut Lane, West Branch Du Page River	7.89	7.90	7.67	7.92	7.84	7.76	7.54	7.53	7.71	7.35	7.45	
90 Chicago-Elgin Rd., Poplar Creek	8.16	8.17	7.93	7.94	8.00	7.90	7.73	7.73	8.18	7.82	7.70	
12 County Line Rd., Buffalo Creek	7.75	7.87	7.81	7.63	7.85	7.02	7.71	7.21	7.85	7.95	7.88	
79 Higgins Rd., Salt Creek	8.24	8.29	8.09	7.73	8.11	7.65	7.85	7.59	8.24	7.71	7.72	
80 Arlington Hts. Rd., Salt Creek	7.87	7.97	7.94	7.75	8.00	7.83	7.91	7.52	7.85	7.65	7.51	
18 Devon Ave., Salt Creek	7.85	7.87	7.82	7.73	7.89	7.35	7.56	7.52	7.78	7.59	7.59	
24 Wolf Road, Salt Creek	8.05	7.91	6.77	7.73	8.18	7.92	6.63	7.93	7.57	7.74	7.57	
21 First Ave., Salt Creek	7.68	7.65	7.65	7.87	7.64	7.64	6.94	7.32	7.28	7.63	7.60	
77 Elmhurst Rd., Higgins Creek	8.02	7.75	6.87	7.84	8.07	7.63	7.08	7.79	7.62	7.93	7.36	
78 Wille Rd., Higgins Creek	7.77	7.75	6.66	7.81	8.13	7.77	6.96	7.68	7.64	7.72	7.45	
13 County Line Rd., Des Plaines River	7.80	7.93	7.92	8.02	7.73	7.36	7.71	7.19	7.45	7.81	7.62	
17 Oakton St., Des Plaines River	7.89	7.78	7.92	8.00	8.18	8.09	6.96	7.68	7.44	7.95	7.62	
19 Belmont Ave., Des Plaines River	7.78	7.74	8.05	8.09	7.91	7.81	6.93	7.58	7.46	7.89	7.59	
20 Roosevelt Road, Des Plaines River	7.77	7.70	7.78	7.93	7.92	7.61	7.03	7.53	7.54	7.73	7.73	
22 Ogden Ave., Des Plaines River	7.43	7.65	7.95	7.88	7.43	7.52	7.22	7.02	7.18	7.63	7.69	
23 Willow Springs Rd., Des Plaines River	8.13	7.87	6.47	7.95	8.26	8.07	6.63	7.79	7.61	8.00	7.87	
29 Lemont Stephen St., Des Plaines River	8.12	7.96	6.74	8.02	8.41	8.17	6.72	7.52	7.77	7.75	7.84	

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-37

CHLORIDE MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
No. Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	197.5	181.7	116.0	246.8	152.4	155.7	170.3	174.5
31 County Line Rd., Md. Fork N. Branch	176.8	180.0	210.5	198.0	199.4	163.6	133.0	136.1	113.4	132.1	161.6
32 County line Rd., Skokie River	184.5	182.5	249.8	214.6	172.4	167.0	164.9	163.4	137.5	178.8	194.7
34 Dempster St., N.B. Chicago River	199.2	181.8	262.8	259.6	184.4	228.3	162.9	168.2	185.5	163.7	177.0
74 Outer Dr. Bridge, Chicago River	52.5	64.1	28.3	27.4	30.9	23.0	81.8	23.8	21.3	25.9	16.4
35 Central Ave., N. Shore Channel	42.5	34.3	23.3	48.6	22.0	14.0	76.2	12.9	11.4	33.0	9.9
36 Touhy Ave., N. Shore Channel	153.8	109.8	116.2	115.2	149.3	125.1	84.1	66.3	86.8	84.1	121.0
37 Wilson Ave., N.B. Chicago River	193.2	132.5	177.7	139.0	177.6	130.4	203.3	81.0	100.4	88.6	141.4
73 Diversey Ave., N.B. Chicago River	188.3	129.3	183.8	143.0	148.7	125.6	150.0	83.8	116.1	90.9	142.8
46 Grand Ave., N.B. Chicago River	152.9	150.4	133.4	161.0	167.0	121.1	109.8	91.8	106.5	89.3	113.0
39 Madison St., S.B. Chicago River	113.3	107.8	77.9	85.8	88.0	68.8	87.5	59.8	77.6	81.8	70.5
40 Damen Ave., S.B. Chicago River	107.3	136.1	98.1	122.3	84.4	99.3	93.8	82.5	78.8	83.3	92.0
75 Cicero Ave., Chgo. San. and Ship Canal	105.8	149.0	104.9	113.8	113.6	97.8	119.8	57.6	81.6	88.6	79.7
41 Harlem Ave., Chgo. San. and Ship Canal	155.0	143.3	137.3	129.9	136.3	115.9	106.8	75.2	108.2	97.4	127.0
42 Hwy. 83 and Chgo. San. and Ship Canal	170.8	147.3	156.7	144.9	137.5	136.7	107.3	83.7	146.2	95.1	108.9
48 Lemont Bridge, Stephen Street (Comp)	139.3	149.0	155.1	158.4	132.2	136.8	129.5	97.7	152.1	99.8	126.2
82 Lockport Trebler	150.9	134.0	152.7	124.1	154.7	151.8	153.0	122.5	149.3	126.6	170.1
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	30.4	29.5	34.8	31.1	34.0	40.2	38.2	33.5	44.3	33.5	31.2
54 Joe Orr Road, Thorn Creek	155.9	151.8	171.0	187.4	167.9	175.3	154.2	155.6	148.8	146.5	138.4
52 Wentworth Ave., Little Calumet River	142.5	108.8	136.1	119.3	127.9	151.1	136.2	162.7	113.7	120.3	140.4
57 135th and Ashland, Little Calumet River	171.4	138.7	184.7	151.1	163.9	131.9	130.5	149.5	127.9	128.5	148.5
86 Burnham Avenue, Grand Calumet River	198.3	192.0	189.5	267.5	259.5	222.4	178.4	202.7	181.2	176.0	ND
51 IHE R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	174.4
49 92nd and Ewing Ave., Calumet River	41.6	30.6	22.8	23.6	26.9	26.8	34.8	61.7	ND	109.0	34.6
55 130th Street, Calumet River	67.5	52.5	56.6	57.4	57.7	55.2	74.0	65.5	88.5	80.2	77.5
56 Indiana Ave., Calumet River	94.8	99.2	99.7	85.6	92.1	96.1	116.9	105.1	113.8	99.7	98.9
76 Halsted Street, Little Cal. River	139.3	122.3	136.4	163.3	132.3	127.2	138.0	104.9	137.0	139.0	146.1
58 Ashland Ave., Cal-Sag Channel	131.4	100.8	190.5	134.5	130.9	129.4	154.7	109.0	114.3	135.4	143.1
59 Cicero Ave., Cal-Sag Channel	136.5	136.3	165.6	138.8	132.3	129.4	144.8	113.8	101.4	137.8	139.4
43 Hwy. 83 and Cal-Sag Channel	130.0	134.8	142.9	145.4	126.3	152.5	166.1	116.8	103.2	135.8	152.8
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	257.4	219.6	320.8	388.1	315.2	217.0	585.8	249.1	185.0	244.9	382.9
64 Lake St., Du Page River	133.0	151.6	165.8	197.9	191.3	159.8	230.9	161.9	156.9	166.0	201.2
89 Walnut Lane, West Branch Du Page River	127.0	130.5	141.5	199.2	166.7	156.8	188.1	153.9	150.7	154.1	171.9
90 Chicago-Elgin Rd., Poplar Creek	156.6	198.8	197.4	209.2	174.6	156.4	139.2	146.8	132.2	141.2	150.1
12 County Line Rd., Buffalo Creek	153.2	174.1	206.5	239.5	197.4	205.6	222.7	204.6	184.9	159.5	212.7
79 Higgins Rd., Salt Creek	217.8	200.7	290.5	323.4	288.4	288.6	244.5	235.9	181.9	158.4	264.0
80 Arlington Hts. Rd., Salt Creek	177.0	177.6	234.6	256.3	194.8	212.1	197.9	197.3	197.8	174.1	191.6
18 Devon Ave., Salt Creek	177.7	188.0	271.4	249.9	199.8	191.7	215.8	200.7	197.4	173.6	198.3
24 Wolf Road, Salt Creek	185.7	267.0	230.7	262.8	238.9	209.8	221.3	228.3	242.9	232.0	290.5
21 First Ave., Salt Creek	183.7	215.6	214.3	252.6	240.6	203.7	221.3	244.3	240.5	231.5	287.5
77 Elmhurst Rd., Higgins Creek	293.6	363.8	347.8	377.6	354.3	515.5	254.5	363.0	182.4	222.4	215.9
78 Wille Rd., Higgins Creek	167.5	193.4	234.2	215.4	190.2	161.3	153.3	171.8	158.7	192.2	181.1
13 County Line Rd., Des Plaines River	183.5	151.0	153.9	171.0	144.5	147.6	105.2	124.0	131.3	124.7	158.8
17 Oakton St., Des Plaines River	136.6	150.5	167.1	194.3	155.2	147.0	128.1	134.2	147.4	127.2	155.0
19 Belmont Ave., Des Plaines River	145.7	160.1	187.2	203.1	182.3	206.9	161.3	166.3	150.3	132.7	190.8
20 Roosevelt Road, Des Plaines River	145.7	159.7	193.3	200.3	179.6	184.3	159.1	242.4	157.1	139.4	202.8
22 Ogden Ave., Des Plaines River	152.6	172.2	214.0	205.9	197.2	162.1	156.9	202.1	178.0	161.6	228.0
23 Willow Springs Rd., Des Plaines River	160.5	178.3	191.3	201.3	178.4	165.5	149.2	182.3	185.8	166.5	191.5
29 Lemont Stephen St., Des Plaines River	157.2	182.7	232.3	221.6	192.9	166.0	154.5	166.4	185.9	172.3	225.4

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-38

TURBIDITY MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (JTU)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	47.0	27.8	24.5	31.0	32.8	74.3	51.7	30.1
31 County Line Rd., Md. Fork N. Branch	19.7	14.6	18.3	24.6	24.7	19.4	35.7	22.5	50.2	35.0	27.0
32 County line Rd., Skokie River	17.6	13.4	12.2	18.5	22.7	14.3	26.6	21.5	33.3	27.3	23.2
34 Dempster St., N.B. Chicago River	20.2	21.2	20.2	18.3	23.3	17.3	25.8	28.3	20.7	30.3	28.3
74 Outer Dr. Bridge, Chicago River	7.0	6.8	8.5	8.7	8.8	8.6	12.1	7.3	8.7	8.9	6.5
35 Central Ave., N. Shore Channel	9.1	8.7	10.3	10.8	12.6	9.5	13.0	13.0	17.2	25.2	10.8
36 Touhy Ave., N. Shore Channel	7.5	6.8	7.0	8.4	9.1	8.7	5.8	9.3	8.5	9.5	7.0
37 Wilson Ave., N.B. Chicago River	10.1	8.7	9.5	10.2	10.3	10.2	8.1	9.2	12.4	14.9	7.3
73 Diversey Ave., N.B. Chicago River	11.7	11.3	9.1	13.8	12.0	9.3	10.8	9.1	8.6	14.4	6.9
46 Grand Ave., N.B. Chicago River	12.7	10.8	9.9	12.7	11.9	10.2	10.9	10.3	10.0	12.8	8.3
39 Madison St., S.B. Chicago River	11.2	10.3	10.5	10.1	12.6	11.0	10.3	8.2	10.3	10.3	8.7
40 Damen Ave., S.B. Chicago River	11.2	10.6	11.2	11.4	18.1	9.8	10.3	11.5	13.5	11.3	9.0
75 Cicero Ave., Chgo. San. and Ship Canal	13.8	10.8	11.8	11.1	11.8	11.0	10.1	11.2	12.8	13.8	8.6
41 Harlem Ave., Chgo. San. and Ship Canal	9.7	7.2	8.9	8.8	9.5	12.2	7.3	6.9	7.8	7.6	5.8
42 Hwy. 83 and Chgo. San. and Ship Canal	7.8	9.5	8.3	7.7	10.2	10.1	6.3	7.4	7.3	7.9	8.6
48 Lemont Bridge, Stephen Street (Comp)	9.4	11.7	11.9	13.2	16.8	11.8	10.3	15.7	12.4	19.6	10.5
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	5.8	7.4	6.8	6.7	7.0	12.1	6.8	6.1	7.3	9.0	3.9
54 Joe Orr Road, Thorn Creek	10.4	14.8	14.5	12.8	9.5	16.0	36.5	6.2	24.7	24.4	14.7
52 Wentworth Ave., Little Calumet River	30.1	30.6	43.8	41.9	18.1	50.1	46.6	28.9	119.7	41.9	56.2
57 135th and Ashland, Little Calumet River	22.5	37.8	34.3	24.1	19.2	27.7	37.5	19.7	109.3	30.2	42.2
86 Burnham Avenue, Grand Calumet River	11.1	8.4	10.5	35.5	18.5	14.6	16.1	7.8	10.8	13.6	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.6
49 92nd and Ewing Ave., Calumet River	9.8	9.8	9.5	10.5	10.5	9.1	7.3	8.0	ND	12.0	7.0
55 130th Street, Calumet River	8.0	9.4	10.7	9.7	10.5	12.1	7.4	5.7	13.5	14.7	11.5
56 Indiana Ave., Calumet River	14.7	13.0	17.5	27.1	25.0	27.5	24.9	19.5	28.5	23.5	24.7
76 Halsted Street, Little Cal. River	8.8	11.2	15.2	16.0	14.8	18.8	14.0	11.2	15.4	13.8	10.8
58 Ashland Ave., Cal-Sag Channel	13.8	12.9	26.2	20.6	18.3	19.4	23.8	13.5	72.3	25.9	21.7
59 Cicero Ave., Cal-Sag Channel	14.8	16.4	21.1	25.8	22.8	22.0	22.7	16.6	76.3	27.2	29.0
43 Hwy. 83 and Cal-Sag Channel	15.4	17.1	26.4	29.8	21.3	23.9	31.9	19.6	62.2	30.2	25.3
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	17.7	14.6	21.3	39.5	43.9	17.9	25.0	16.1	22.5	23.1	18.5
64 Lake St., Du Page River	22.0	19.7	25.8	38.5	30.2	24.4	27.4	20.3	28.8	19.8	15.5
89 Walnut Lane, West Branch Du Page River	12.4	7.0	11.4	26.8	29.8	12.7	16.5	13.8	15.6	10.2	6.0
90 Chicago-Elgin Rd., Poplar Creek	16.2	11.8	40.0	105.5	20.2	17.4	16.1	16.4	24.7	16.2	15.1
12 County Line Rd., Buffalo Creek	25.8	18.9	28.3	36.8	21.8	31.6	27.3	20.1	45.1	51.8	32.8
79 Higgins Rd., Salt Creek	23.7	21.1	33.6	61.8	25.2	22.0	32.8	16.5	39.8	27.0	18.5
80 Arlington Hts. Rd., Salt Creek	11.2	7.0	12.3	8.8	9.7	11.1	9.9	7.7	8.8	13.8	5.7
18 Devon Ave., Salt Creek	15.7	9.7	18.2	14.5	11.1	14.4	11.9	9.0	10.3	13.8	8.5
24 Wolf Road, Salt Creek	20.7	13.7	31.5	25.9	27.2	28.6	24.3	37.5	52.3	34.3	38.5
21 First Ave., Salt Creek	22.0	14.9	29.8	24.5	18.8	28.3	29.2	22.1	44.6	33.9	27.8
77 Elmhurst Rd., Higgins Creek	22.1	17.3	23.5	77.4	80.8	69.6	37.6	31.7	49.3	21.5	21.7
78 Wille Rd., Higgins Creek	5.4	7.9	7.8	17.5	22.4	18.6	7.8	3.7	9.9	5.2	5.1
13 County Line Rd., Des Plaines River	22.0	18.6	30.1	22.1	18.8	20.3	25.7	20.0	30.0	27.8	25.0
17 Oakton St., Des Plaines River	24.5	23.6	39.9	24.2	25.9	33.3	26.5	22.2	36.1	26.5	24.6
19 Belmont Ave., Des Plaines River	19.3	16.7	34.8	25.5	25.8	29.5	27.2	22.3	34.7	30.1	20.5
20 Roosevelt Road, Des Plaines River	19.8	17.3	32.2	23.3	22.8	24.7	32.8	21.8	35.2	27.4	21.5
22 Ogden Ave., Des Plaines River	19.7	17.6	33.7	23.5	20.6	32.9	35.0	23.4	38.1	30.3	25.2
23 Willow Springs Rd., Des Plaines River	22.5	23.7	30.6	29.4	26.2	34.1	29.6	27.3	35.1	34.4	32.5
29 Lemont Stephen St., Des Plaines River	24.4	24.3	30.1	31.8	25.3	36.3	32.9	29.8	40.0	36.7	34.2

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-39

CONDUCTIVITY MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (μmhos)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 County line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	935	930	1109	1172	1034	982	993	821	871	917	877
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	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
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 135th and Ashland, Little 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
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	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
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake St., 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
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Ave., 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 Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Ave., 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 Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Lemont Stephen St., 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 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	152	148	106	278	174	145	171	148
31 County Line Rd., Md. Fork N. Branch	205	209	183	206	197	202	209	210	204	187	184
32 County line Rd., Skokie River	191	231	200	237	199	200	222	220	200	205	203
34 Dempster St., N.B. Chicago River	171	194	180	177	184	184	183	194	189	177	159
74 Outer Dr. Bridge, Chicago River	117	120	115	114	122	122	114	114	113	114	109
35 Central Ave., N. Shore Channel	129	126	119	140	121	119	118	114	113	140	106
36 Touhy Ave., N. Shore Channel	142	152	144	151	171	159	154	150	147	152	139
37 Wilson Ave., N.B. Chicago River	152	161	162	157	174	151	168	160	154	157	144
73 Diversey Ave., N.B. Chicago River	150	161	149	156	165	157	158	155	149	153	143
46 Grand Ave., N.B. Chicago River	151	167	149	160	178	158	155	155	156	149	148
39 Madison St., S.B. Chicago River	144	148	131	136	140	133	140	136	139	149	130
40 Damen Ave., S.B. Chicago River	149	152	132	139	133	143	143	135	136	145	133
75 Cicero Ave., Chgo. San. and Ship Canal	140	144	133	134	148	144	142	135	143	146	135
41 Harlem Ave., Chgo. San. and Ship Canal	129	137	131	122	142	138	142	136	138	149	135
42 Hwy. 83 and Chgo. San. and Ship Canal	131	140	137	133	145	148	147	140	146	144	141
48 Lemont Bridge, Stephen Street (Comp)	139	142	143	137	152	156	157	147	157	150	147
82 Lockport Trebler	135	149	244	480	212	179	182	154	162	175	175
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	98	102	106	102	109	156	104	111	99	91	90
54 Joe Orr Road, Thorn Creek	175	203	216	223	238	202	215	204	231	185	189
52 Wentworth Ave., Little Calumet River	193	200	215	215	214	203	220	241	189	200	228
57 135th and Ashland, Little Calumet River	184	179	199	201	215	187	196	216	187	186	198
86 Burnham Avenue, Grand Calumet River	155	141	158	212	221	219	185	153	201	198	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	215
49 92nd and Ewing Ave., Calumet River	115	111	116	111	120	119	114	114	ND	112	112
55 130th Street, Calumet River	117	114	118	129	119	127	119	115	112	123	115
56 Indiana Ave., Calumet River	129	129	130	133	146	149	151	138	143	126	147
76 Halsted Street, Little Cal. River	158	153	153	154	170	165	170	166	194	156	159
58 Ashland Ave., Cal-Sag Channel	156	142	164	162	180	168	191	170	171	161	160
59 Cicero Ave., Cal-Sag Channel	156	156	159	160	187	165	179	177	164	157	159
43 Hwy. 83 and Cal-Sag Channel	159	156	161	161	173	176	183	175	162	150	162
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	192	184	160	137	192	163	177	189	149	184	163
64 Lake St., Du Page River	153	152	141	133	156	145	163	179	166	184	165
89 Walnut Lane, West Branch Du Page River	163	154	140	138	157	153	178	172	155	174	151
90 Chicago-Elgin Rd., Poplar Creek	239	230	182	213	230	211	191	233	199	213	207
12 County Line Rd., Buffalo Creek	188	206	189	191	219	195	214	217	202	210	190
79 Higgins Rd., Salt Creek	158	171	142	159	180	161	166	184	149	165	160
80 Arlington Hts. Rd., Salt Creek	166	145	140	150	160	254	160	162	158	153	138
18 Devon Ave., Salt Creek	139	144	145	144	160	144	154	161	161	154	156
24 Wolf Road, Salt Creek	153	178	139	155	173	155	156	175	178	184	188
21 First Ave., Salt Creek	150	161	140	148	178	162	150	181	182	185	187
77 Elmhurst Rd., Higgins Creek	172	196	144	140	175	139	145	190	146	172	160
78 Wille Rd., Higgins Creek	190	173	168	168	191	173	178	209	186	195	163
13 County Line Rd., Des Plaines River	253	207	184	196	221	197	198	209	196	208	204
17 Oakton St., Des Plaines River	180	205	169	192	212	165	189	204	186	194	176
19 Belmont Ave., Des Plaines River	177	199	176	188	211	192	195	208	178	201	177
20 Roosevelt Road, Des Plaines River	173	195	178	191	211	182	176	207	181	193	179
22 Ogden Ave., Des Plaines River	164	185	167	179	200	168	165	198	177	192	195
23 Willow Springs Rd., Des Plaines River	165	185	169	180	205	170	166	195	184	189	192
29 Lemont Stephen St., Des Plaines River	166	184	176	180	192	175	187	191	192	192	197

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-41

TOTAL KJELDAHL NITROGEN MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	1.94	1.61	1.34	2.58	1.92	2.09	1.82	2.27
31 County Line Rd., Md. Fork N. Branch	1.13	0.98	1.22	1.05	1.10	1.29	1.02	1.33	1.29	1.24	1.90
32 County line Rd., Skokie River	1.02	0.80	1.16	1.10	1.11	1.14	0.99	1.17	1.60	1.35	1.76
34 Dempster St., N.B. Chicago River	1.21	1.03	1.47	1.43	1.16	1.45	1.32	1.47	1.60	1.45	1.43
74 Outer Dr. Bridge, Chicago River	0.63	0.43	0.50	0.43	0.34	0.36	0.41	0.36	0.52	0.63	0.51
35 Central Ave., N. Shore Channel	1.27	0.76	0.38	2.25	0.52	0.38	0.79	0.38	0.41	1.12	0.57
36 Touhy Ave., N. Shore Channel	2.48	2.08	2.83	4.17	2.87	3.28	2.29	2.84	2.34	2.58	2.16
37 Wilson Ave., N.B. Chicago River	3.34	2.20	2.93	4.17	3.03	3.36	3.07	3.19	2.50	2.57	2.96
73 Diversey Ave., N.B. Chicago River	2.20	1.58	2.44	3.37	2.04	2.35	2.32	2.93	2.90	2.55	2.65
46 Grand Ave., N.B. Chicago River	2.18	1.94	2.27	3.06	2.93	2.83	2.43	2.64	2.15	2.20	2.58
39 Madison St., S.B. Chicago River	1.75	1.67	1.36	1.72	1.27	1.38	1.56	1.30	1.40	1.92	1.65
40 Damen Ave., S.B. Chicago River	1.80	1.31	1.85	2.03	1.44	2.01	1.62	1.75	1.47	1.70	1.98
75 Cicero Ave., Chgo. San. and Ship Canal	1.64	1.48	1.51	2.31	2.07	2.00	1.72	1.83	1.61	2.05	1.85
41 Harlem Ave., Chgo. San. and Ship Canal	1.43	1.50	2.05	2.86	2.44	2.14	1.86	1.81	1.84	2.59	2.61
42 Hwy. 83 and Chgo. San. and Ship Canal	1.70	1.86	2.48	2.80	2.40	2.80	1.98	2.26	1.85	2.14	2.72
48 Lemont Bridge, Stephen Street (Comp)	1.71	1.49	2.05	2.49	2.75	3.07	2.12	2.63	2.89	2.49	3.24
82 Lockport Trebler	1.77	1.71	1.90	2.26	2.30	2.32	2.55	2.40	2.13	2.76	2.69
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.47	0.55	0.72	0.68	0.61	0.89	0.63	0.79	0.80	0.80	0.63
54 Joe Orr Road, Thorn Creek	1.43	1.23	1.38	2.02	1.60	2.77	2.33	1.49	1.51	2.14	1.79
52 Wentworth Ave., Little Calumet River	2.39	2.65	1.53	1.76	1.27	1.80	1.49	1.75	1.90	1.66	1.83
57 135th and Ashland, Little Calumet River	1.44	1.42	1.40	1.42	1.74	2.15	1.79	1.38	1.49	1.85	1.68
86 Burnham Avenue, Grand Calumet River	3.34	2.10	1.98	6.36	6.16	8.14	3.77	5.67	5.23	6.57	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.70
49 92nd and Ewing Ave., Calumet River	0.59	0.48	0.37	0.76	0.43	0.52	0.37	0.41	ND	0.62	0.46
55 130th Street, Calumet River	0.69	0.49	0.51	0.67	0.62	0.67	0.82	0.77	1.02	1.16	1.36
56 Indiana Ave., Calumet River	1.10	1.00	1.20	1.74	1.78	2.99	2.59	2.87	2.83	2.45	3.37
76 Halsted Street, Little Cal. River	1.38	1.27	1.66	2.66	3.11	4.06	3.55	4.79	5.02	6.03	4.76
58 Ashland Ave., Cal-Sag Channel	1.37	1.11	1.62	1.83	2.78	3.08	2.42	4.56	4.02	5.06	4.43
59 Cicero Ave., Cal-Sag Channel	1.46	1.37	1.83	2.27	3.74	3.89	3.50	4.77	4.22	5.04	5.09
43 Hwy. 83 and Cal-Sag Channel	1.42	1.25	1.92	2.49	3.18	3.86	3.27	3.74	4.39	4.35	5.50
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	1.81	1.66	1.82	2.19	1.92	1.78	1.35	1.67	1.47	1.47	2.09
64 Lake St., Du Page River	2.25	2.52	2.42	2.24	2.10	2.10	2.25	2.69	3.50	2.50	3.30
89 Walnut Lane, West Branch Du Page River	2.64	2.34	2.12	2.12	1.97	2.00	2.25	2.07	2.34	1.92	2.23
90 Chicago-Elgin Rd., Poplar Creek	1.78	0.74	1.22	1.14	1.10	1.09	1.16	0.93	0.95	0.83	1.46
12 County Line Rd., Buffalo Creek	1.12	0.98	1.23	1.29	1.10	1.40	1.64	1.24	1.49	1.84	1.80
79 Higgins Rd., Salt Creek	1.17	1.31	1.36	1.27	1.52	1.38	1.32	1.00	1.15	1.26	1.25
80 Arlington Hts. Rd., Salt Creek	1.46	1.45	1.58	1.54	1.66	1.49	1.13	1.43	1.60	1.47	1.73
18 Devon Ave., Salt Creek	1.47	1.33	1.51	1.86	1.91	1.60	1.17	1.38	1.53	1.52	1.78
24 Wolf Road, Salt Creek	1.23	1.12	1.56	1.84	1.67	1.69	1.37	1.37	1.54	1.53	2.67
21 First Ave., Salt Creek	1.42	1.05	1.50	1.47	1.43	1.58	1.46	1.27	1.64	1.44	2.22
77 Elmhurst Rd., Higgins Creek	1.29	0.82	0.92	1.23	1.21	1.49	1.00	1.04	1.20	1.24	1.17
78 Wille Rd., Higgins Creek	1.74	1.37	2.10	1.44	1.66	1.75	1.56	1.54	1.43	1.31	2.69
13 County Line Rd., Des Plaines River	1.22	1.26	1.33	1.12	1.25	1.72	1.47	1.35	1.68	1.65	1.72
17 Oakton St., Des Plaines River	1.18	1.24	1.36	1.49	1.66	1.26	1.28	1.40	1.65	1.47	1.71
19 Belmont Ave., Des Plaines River	1.13	1.26	1.54	1.58	1.72	1.96	1.36	1.48	1.78	1.54	2.07
20 Roosevelt Road, Des Plaines River	1.14	1.28	1.58	1.58	1.51	1.70	1.32	1.50	1.66	1.49	1.82
22 Ogden Ave., Des Plaines River	1.11	1.48	1.75	1.52	1.49	1.68	1.49	1.33	1.62	1.45	1.82
23 Willow Springs Rd., Des Plaines River	1.08	1.39	1.39	1.57	1.48	1.76	1.35	1.42	1.62	1.43	2.12
29 Lemont Stephen St., Des Plaines River	1.15	1.51	1.67	1.62	1.85	1.95	1.43	1.52	1.67	2.27	2.00

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-42

AMMONIUM NITROGEN MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.237	0.209	0.165	1.358	0.375	0.183	0.345	0.902
31 County Line Rd., Md. Fork N. Branch	0.038	0.048	0.109	0.074	0.134	0.165	0.109	0.228	0.157	0.185	0.278
32 County line Rd., Skokie River	0.077	0.083	0.091	0.184	0.189	0.129	0.150	0.209	0.167	0.211	0.300
34 Dempster St., N.B. Chicago River	0.039	0.064	0.099	0.224	0.125	0.201	0.275	0.220	0.217	0.239	0.284
74 Outer Dr. Bridge, Chicago River	0.215	0.137	0.067	0.153	0.109	0.080	0.114	0.099	0.048	0.171	0.144
35 Central Ave., N. Shore Channel	0.348	0.413	0.020	1.197	0.127	0.072	0.375	0.050	0.035	0.317	0.109
36 Touhy Ave., N. Shore Channel	0.921	0.911	1.470	2.474	1.576	1.660	1.199	1.602	0.757	1.141	0.891
37 Wilson Ave., N.B. Chicago River	1.772	1.158	1.701	2.609	1.663	2.014	2.156	1.970	1.196	1.349	1.699
73 Diversey Ave., N.B. Chicago River	0.882	0.583	1.367	1.923	1.016	1.078	1.287	1.579	1.243	1.172	1.665
46 Grand Ave., N.B. Chicago River	0.954	0.992	1.272	1.799	1.706	1.626	1.577	1.523	1.102	1.178	1.533
39 Madison St., S.B. Chicago River	0.822	0.538	0.607	0.837	0.642	0.752	0.994	0.707	0.578	0.910	0.835
40 Damen Ave., S.B. Chicago River	0.847	0.524	0.920	1.090	0.585	1.183	0.984	1.041	0.573	0.824	1.087
75 Cicero Ave., Chgo. San. and Ship Canal	0.793	0.403	0.721	1.256	1.036	1.128	0.983	1.100	0.683	1.055	1.057
41 Harlem Ave., Chgo. San. and Ship Canal	0.357	0.495	0.716	1.317	1.217	0.925	0.892	0.706	0.595	1.405	1.300
42 Hwy. 83 and Chgo. San. and Ship Canal	0.604	0.636	1.184	1.416	1.192	1.460	1.183	1.152	0.597	0.912	1.322
48 Lemont Bridge, Stephen Street (Comp)	0.601	0.486	0.858	1.281	1.352	1.606	1.161	1.495	1.358	1.379	1.757
82 Lockport Trebler	0.449	0.343	0.444	0.614	0.809	0.731	1.031	1.112	1.119	1.407	1.687
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.056	0.018	0.003	0.045	0.045	0.072	0.051	0.099	0.087	0.091	0.137
54 Joe Orr Road, Thorn Creek	0.057	0.034	0.124	0.734	0.324	1.084	1.017	0.209	0.283	0.694	0.478
52 Wentworth Ave., Little Calumet River	0.297	0.161	0.181	0.201	0.197	0.287	0.368	0.438	0.512	0.453	0.529
57 135th and Ashland, Little Calumet River	0.232	0.183	0.204	0.212	0.629	0.798	0.756	0.343	0.275	0.710	0.370
86 Burnham Avenue, Grand Calumet River	1.059	0.417	0.632	3.459	3.950	4.840	1.738	2.745	2.284	2.778	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.994
49 92nd and Ewing Ave., Calumet River	0.056	0.044	0.010	0.051	0.077	0.050	0.082	0.076	ND	0.120	0.188
55 130th Street, Calumet River	0.124	0.114	0.083	0.162	0.135	0.184	0.323	0.315	0.365	0.448	0.563
56 Indiana Ave., Calumet River	0.276	0.307	0.396	0.755	0.919	1.889	1.507	1.677	1.503	1.142	1.730
76 Halsted Street, Little Cal. River	0.332	0.348	0.488	2.410	1.912	2.503	2.339	3.422	3.381	4.387	3.193
58 Ashland Ave., Cal-Sag Channel	0.346	0.291	0.484	0.962	1.601	1.668	1.363	2.955	2.452	3.519	2.983
59 Cicero Ave., Cal-Sag Channel	0.406	0.336	0.526	1.011	2.458	2.418	2.353	3.233	2.506	3.582	3.497
43 Hwy. 83 and Cal-Sag Channel	0.375	0.309	0.659	0.892	2.032	2.311	2.033	2.474	2.918	3.092	3.416
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.131	0.135	0.225	0.368	0.196	0.160	0.151	0.365	0.143	0.204	0.461
64 Lake St., Du Page River	0.421	0.601	0.415	0.387	0.228	0.232	0.642	0.996	1.409	0.744	1.472
89 Walnut Lane, West Branch Du Page River	0.367	0.192	0.191	0.257	0.145	0.104	0.652	0.377	0.745	0.388	0.639
90 Chicago-Elgin Rd., Poplar Creek	0.067	0.075	0.074	0.073	0.047	0.079	0.054	0.061	0.079	0.052	0.163
12 County Line Rd., Buffalo Creek	0.071	0.088	0.056	0.092	0.067	0.097	0.087	0.120	0.167	0.250	0.154
79 Higgins Rd., Salt Creek	0.067	0.118	0.076	0.156	0.226	0.075	0.107	0.074	0.112	0.079	0.081
80 Arlington Hts. Rd., Salt Creek	0.090	0.178	0.137	0.285	0.246	0.195	0.106	0.348	0.355	0.282	0.273
18 Devon Ave., Salt Creek	0.093	0.243	0.132	0.357	0.206	0.199	0.113	0.203	0.367	0.302	0.272
24 Wolf Road, Salt Creek	0.127	0.155	0.131	0.208	0.160	0.153	0.106	0.153	0.162	0.345	0.510
21 First Ave., Salt Creek	0.105	0.134	0.121	0.207	0.120	0.145	0.196	0.145	0.137	0.273	0.407
77 Elmhurst Rd., Higgins Creek	0.116	0.158	0.107	0.186	0.192	0.238	0.147	0.200	0.170	0.076	0.175
78 Wille Rd., Higgins Creek	0.245	0.297	0.515	0.151	0.259	0.355	0.370	0.311	0.232	0.226	0.160
13 County Line Rd., Des Plaines River	0.108	0.177	0.083	0.127	0.436	0.198	0.236	0.175	0.286	0.296	0.275
17 Oakton St., Des Plaines River	0.075	0.100	0.075	0.108	0.103	0.210	0.150	0.125	0.224	0.164	0.153
19 Belmont Ave., Des Plaines River	0.116	0.222	0.171	0.184	0.276	0.300	0.199	0.177	0.275	0.210	0.278
20 Roosevelt Road, Des Plaines River	0.093	0.183	0.205	0.136	0.135	0.219	0.207	0.209	0.353	0.233	0.196
22 Ogden Ave., Des Plaines River	0.089	0.128	0.190	0.142	0.092	0.158	0.210	0.152	0.299	0.248	0.233
23 Willow Springs Rd., Des Plaines River	0.089	0.175	0.080	0.101	0.090	0.168	0.196	0.127	0.178	0.258	0.174
29 Lemont Stephen St., Des Plaines River	0.077	0.151	0.127	0.150	0.330	0.182	0.172	0.141	0.187	0.343	0.184

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-43

UN-IONIZED AMMONIA MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.007	0.009	0.020	0.007	0.007	0.006	0.006	0.003
31 County Line Rd., Md. Fork N. Branch	0.001	0.002	0.002	0.003	0.005	0.002	0.003	0.004	0.004	0.007	0.002
32 County line Rd., Skokie River	0.002	0.001	0.002	0.016	0.014	0.003	0.002	0.004	0.005	0.006	0.003
34 Dempster St., N.B. Chicago River	0.001	0.001	0.003	0.003	0.001	0.003	0.003	0.010	0.003	0.004	
74 Outer Dr. Bridge, Chicago River	0.005	0.007	0.003	0.002	0.001	0.004	0.003	0.001	0.002	0.003	0.002
35 Central Ave., N. Shore Channel	0.008	0.030	0.002	0.022	0.009	0.011	0.004	0.003	0.004	0.008	0.003
36 Touhy Ave., N. Shore Channel	0.021	0.035	0.027	0.035	0.017	0.029	0.017	0.034	0.027	0.011	0.005
37 Wilson Ave., N.B. Chicago River	0.033	0.052	0.050	0.045	0.015	0.030	0.012	0.041	0.040	0.016	0.011
73 Diversey Ave., N.B. Chicago River	0.015	0.082	0.053	0.095	0.012	0.009	0.035	0.032	0.031	0.031	0.010
46 Grand Ave., N.B. Chicago River	0.023	0.049	0.009	0.017	0.017	0.029	0.017	0.009	0.014	0.018	0.007
39 Madison St., S.B. Chicago River	0.051	0.023	0.007	0.010	0.007	0.006	0.017	0.005	0.030	0.008	0.009
40 Damen Ave., S.B. Chicago River	0.026	0.081	0.013	0.015	0.006	0.035	0.009	0.011	0.007	0.015	0.005
75 Cicero Ave., Chgo. San. and Ship Canal	0.031	0.051	0.051	0.022	0.005	0.029	0.007	0.025	0.005	0.020	0.007
41 Harlem Ave., Chgo. San. and Ship Canal	0.006	0.021	0.010	0.016	0.004	0.010	0.009	0.009	0.006	0.011	0.005
42 Hwy. 83 and Chgo. San. and Ship Canal	0.019	0.031	0.016	0.016	0.008	0.021	0.013	0.039	0.012	0.011	0.008
48 Lemont Bridge, Stephen Street (Comp)	0.015	0.020	0.009	0.017	0.028	0.060	0.033	0.059	0.025	0.018	0.007
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.003	0.001	0.000	0.004	0.001	0.001	0.000	0.002	0.002	0.004	0.004
54 Joe Orr Road, Thorn Creek	0.005	0.001	0.010	0.006	0.006	0.032	0.047	0.003	0.004	0.002	0.007
52 Wentworth Ave., Little Calumet River	0.007	0.010	0.003	0.052	0.010	0.005	0.006	0.007	0.017	0.003	0.005
57 135th and Ashland, Little Calumet River	0.012	0.007	0.020	0.003	0.007	0.004	0.006	0.003	0.004	0.007	0.004
86 Burnham Avenue, Grand Calumet River	0.028	0.009	0.003	0.120	0.028	0.031	0.019	0.018	0.021	0.017	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.015
49 92nd and Ewing Ave., Calumet River	0.003	0.003	0.000	0.006	0.001	0.001	0.001	ND	0.001	0.001	
55 130th Street, Calumet River	0.005	0.005	0.001	0.032	0.009	0.005	0.002	0.004	0.004	0.006	0.005
56 Indiana Ave., Calumet River	0.012	0.014	0.006	0.062	0.033	0.012	0.008	0.006	0.022	0.010	0.019
76 Halsted Street, Little Cal. River	0.009	0.007	0.017	0.011	0.032	0.025	0.025	0.045	0.051	0.034	0.019
58 Ashland Ave., Cal-Sag Channel	0.012	0.021	0.020	0.006	0.024	0.055	0.023	0.051	0.030	0.016	0.018
59 Cicero Ave., Cal-Sag Channel	0.015	0.012	0.022	0.030	0.024	0.030	0.025	0.035	0.021	0.024	
43 Hwy. 83 and Cal-Sag Channel	0.030	0.023	0.043	0.009	0.017	0.019	0.013	0.007	0.056	0.021	0.023
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.003	0.014	0.003	0.036	0.007	0.003	0.008	0.004	0.004	0.004	0.003
64 Lake St., Du Page River	0.018	0.035	0.008	0.020	0.005	0.006	0.007	0.015	0.034	0.007	0.010
89 Walnut Lane, West Branch Du Page River	0.018	0.006	0.002	0.015	0.004	0.002	0.003	0.004	0.006	0.004	0.003
90 Chicago-Elgin Rd., Poplar Creek	0.004	0.003	0.002	0.002	0.001	0.001	0.002	0.002	0.007	0.001	0.003
12 County Line Rd., Buffalo Creek	0.004	0.007	0.001	0.003	0.004	0.001	0.006	0.001	0.003	0.015	0.002
79 Higgins Rd., Salt Creek	0.007	0.011	0.002	0.005	0.046	0.003	0.005	0.002	0.010	0.002	0.001
80 Arlington Hts. Rd., Salt Creek	0.003	0.008	0.010	0.005	0.014	0.006	0.002	0.003	0.016	0.018	0.003
18 Devon Ave., Salt Creek	0.003	0.011	0.003	0.004	0.007	0.002	0.002	0.012	0.010	0.043	0.003
24 Wolf Road, Salt Creek	0.012	0.003	0.003	0.008	0.005	0.015	0.002	0.018	0.003	0.007	0.005
21 First Ave., Salt Creek	0.013	0.003	0.002	0.006	0.001	0.003	0.002	0.001	0.001	0.005	0.003
77 Elmhurst Rd., Higgins Creek	0.016	0.005	0.003	0.006	0.012	0.007	0.003	0.004	0.004	0.005	0.002
78 Wille Rd., Higgins Creek	0.022	0.007	0.059	0.006	0.014	0.011	0.007	0.005	0.006	0.007	0.001
13 County Line Rd., Des Plaines River	0.007	0.011	0.002	0.012	0.009	0.009	0.014	0.001	0.005	0.008	0.003
17 Oakton St., Des Plaines River	0.016	0.002	0.002	0.005	0.008	0.013	0.002	0.003	0.002	0.006	0.002
19 Belmont Ave., Des Plaines River	0.017	0.005	0.005	0.007	0.007	0.009	0.001	0.004	0.004	0.005	0.002
20 Roosevelt Road, Des Plaines River	0.014	0.003	0.002	0.005	0.004	0.006	0.001	0.003	0.005	0.005	0.002
22 Ogden Ave., Des Plaines River	0.011	0.003	0.027	0.004	0.001	0.008	0.004	0.001	0.002	0.005	0.002
23 Willow Springs Rd., Des Plaines River	0.010	0.004	0.003	0.007	0.006	0.014	0.004	0.007	0.003	0.008	0.002
29 Lemont Stephen St., Des Plaines River	0.010	0.005	0.004	0.011	0.022	0.016	0.003	0.006	0.005	0.005	0.003

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-44

ORGANIC NITROGEN MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	1.70	1.40	1.17	1.22	1.54	1.90	1.47	1.37
31 County Line Rd., Md. Fork N. Branch	1.09	0.93	1.11	0.98	0.96	1.12	0.91	1.10	1.14	1.05	1.62
32 County Line Rd., Skokie River	0.95	0.72	1.07	0.92	0.92	1.01	0.84	0.96	1.45	1.13	1.46
34 Dempster St., N.B. Chicago River	1.17	0.97	1.37	1.20	1.04	1.25	1.05	1.25	1.37	1.20	1.15
74 Outer Dr. Bridge, Chicago River	0.41	0.31	0.44	0.28	0.23	0.28	0.30	0.26	0.47	0.46	0.36
35 Central Ave., N. Shore Channel	0.92	0.42	0.36	1.06	0.39	0.31	0.41	0.33	0.38	0.80	0.47
36 Touhy Ave., N. Shore Channel	1.56	1.17	1.36	1.70	1.29	1.62	1.09	1.24	1.59	1.44	1.27
37 Wilson Ave., N.B. Chicago River	1.56	1.04	1.23	1.56	1.37	1.35	0.92	1.22	1.30	1.21	1.26
73 Diversey Ave., N.B. Chicago River	1.31	1.00	1.07	1.45	1.02	1.27	1.04	1.35	1.66	1.38	0.98
46 Grand Ave., N.B. Chicago River	1.23	0.95	0.99	1.26	1.23	1.21	0.85	1.12	1.04	1.02	1.05
39 Madison St., S.B. Chicago River	0.93	1.13	0.76	0.88	0.63	0.59	0.57	0.60	0.82	1.01	0.82
40 Damen Ave., S.B. Chicago River	0.95	0.79	0.93	0.94	0.85	0.83	0.64	0.71	0.89	0.89	0.90
75 Cicero Ave., Chgo. San. and Ship Canal	0.85	1.07	0.87	1.05	1.04	0.88	0.74	0.73	0.92	0.98	0.79
41 Harlem Ave., Chgo. San. and Ship Canal	1.07	1.01	1.33	1.54	1.22	1.21	0.97	1.10	1.25	1.18	1.31
42 Hwy. 83 and Chgo. San. and Ship Canal	1.09	1.22	1.30	1.38	1.21	1.34	0.80	1.11	1.25	1.23	1.40
48 Lemont Bridge, Stephen Street (Comp)	1.11	1.00	1.19	1.21	1.40	1.36	0.96	1.13	1.53	1.11	1.48
82 Lockport Trebler	1.33	1.37	1.45	1.64	0.63	1.62	ND	1.28	1.01	1.35	1.01
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.46	0.53	0.71	0.63	0.56	0.82	0.58	0.69	0.72	0.71	0.49
54 Joe Orr Road, Thorn Creek	1.37	1.19	1.25	1.43	1.27	1.69	1.31	1.28	1.23	1.44	1.31
52 Wentworth Ave., Little Calumet River	2.09	2.49	1.35	1.55	1.08	1.51	1.13	1.31	1.40	1.20	1.30
57 135th and Ashland, Little Calumet River	1.21	1.24	1.20	1.21	1.12	1.36	1.03	1.03	1.21	1.14	1.31
86 Burnham Avenue, Grand Calumet River	2.29	1.69	1.35	2.90	2.21	3.30	2.04	2.92	2.95	3.78	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.71
49 92nd and Ewing Ave., Calumet River	0.57	0.44	0.36	0.71	0.35	0.47	0.29	0.34	ND	0.50	0.28
55 130th Street, Calumet River	0.56	0.38	0.43	0.51	0.49	0.48	0.49	0.46	0.66	0.72	0.79
56 Indiana Ave., Calumet River	0.82	0.69	0.80	0.99	0.86	1.10	1.09	1.19	1.33	1.31	1.63
76 Halsted Street, Little Cal. River	1.05	0.92	1.17	1.41	1.20	1.55	1.21	1.37	1.64	1.64	1.57
58 Ashland Ave., Cal-Sag Channel	1.03	0.82	1.13	1.18	1.30	1.41	1.06	1.60	1.57	1.54	1.45
59 Cicero Ave., Cal-Sag Channel	1.06	1.04	1.31	1.26	1.28	1.47	1.14	1.54	1.62	1.47	1.59
43 Hwy. 83 and Cal-Sag Channel	1.05	0.94	1.26	1.60	1.15	1.55	1.24	1.27	1.47	1.26	2.09
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	1.68	1.52	1.60	1.82	1.72	1.62	1.20	1.30	1.33	1.24	1.63
64 Lake St., Du Page River	1.83	1.91	2.01	1.85	1.87	1.86	1.60	1.69	2.09	1.76	1.83
89 Walnut Lane, West Branch Du Page River	2.27	2.14	1.93	1.86	1.83	1.89	1.60	1.69	1.59	1.54	1.59
90 Chicago-Elgin Rd., Poplar Creek	1.71	0.66	1.14	1.07	1.05	1.01	1.11	0.87	0.87	0.77	1.29
12 County Line Rd., Buffalo Creek	1.04	0.90	1.18	1.20	1.04	1.30	1.56	1.12	1.31	1.60	1.65
79 Higgins Rd., Salt Creek	1.11	1.19	1.29	1.11	1.44	1.30	1.21	0.93	1.04	1.19	1.17
80 Arlington Mts. Rd., Salt Creek	1.37	1.27	1.44	1.38	1.41	1.29	1.02	1.08	1.24	1.17	1.45
18 Devon Ave., Salt Creek	1.38	1.09	1.37	1.66	1.70	1.40	1.06	1.17	1.17	1.21	1.51
24 Wolf Road, Salt Creek	1.10	0.96	1.43	1.81	1.51	1.54	1.26	1.22	1.37	1.19	2.16
21 First Ave., Salt Creek	1.32	0.92	1.38	1.39	1.31	1.43	1.27	1.13	1.50	1.16	1.82
77 Elmhurst Rd., Higgins Creek	1.17	0.66	0.81	1.04	1.12	1.25	0.85	0.84	1.04	1.17	0.99
78 Wille Rd., Higgins Creek	1.50	1.07	1.58	1.29	1.40	1.40	1.19	1.23	1.20	1.09	2.53
13 County Line Rd., Des Plaines River	1.12	1.08	1.25	1.00	1.17	1.52	1.24	1.17	1.39	1.35	1.45
17 Oakton St., Des Plaines River	1.11	1.14	1.28	1.38	1.56	1.05	1.13	1.28	1.43	1.30	1.56
19 Belmont Ave., Des Plaines River	1.01	1.03	1.37	1.40	1.45	1.66	1.16	1.31	1.50	1.32	1.79
20 Roosevelt Road, Des Plaines River	1.04	1.10	1.38	1.44	1.37	1.48	1.11	1.29	1.30	1.26	1.63
22 Ogden Ave., Des Plaines River	1.02	1.35	1.56	1.37	1.40	1.52	1.28	1.18	1.32	1.21	1.59
23 Willow Springs Rd., Des Plaines River	0.99	1.22	1.31	1.47	1.39	1.59	1.15	1.30	1.44	1.18	1.95
29 Lemont Stephen St., Des Plaines River	1.08	1.36	1.54	1.47	1.52	1.77	1.26	1.38	1.49	1.94	1.82

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-45

NITRITE PLUS NITRATE NITROGEN MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	No.	Name	Annual Means (mg/L)									
			99	98	97	96	95	94	93	92	91	90
<u>Chicago River System</u>												
30	County Line Rd., W. Fork N. Branch	ND	ND	ND	9.14	7.84	13.94	4.30	9.22	9.56	7.95	12.15
31	County Line Rd., Md. Fork N. Branch	0.41	0.51	0.43	0.37	0.47	0.38	0.42	0.51	0.61	2.41	0.73
32	County line Rd., Skokie River	0.55	0.58	0.80	0.50	0.68	1.03	0.86	1.53	0.71	1.80	0.82
34	Dempster St., N.B. Chicago River	4.93	3.85	5.13	5.01	3.39	4.44	3.44	4.69	4.33	3.55	4.99
74	Outer Dr. Bridge, Chicago River	1.08	0.96	0.39	0.42	0.31	0.34	0.40	0.36	0.38	1.45	0.44
35	Central Ave., N. Shore Channel	0.32	0.22	0.25	0.20	0.24	0.25	0.55	0.26	0.24	0.56	0.34
36	Touhy Ave., N. Shore Channel	5.67	5.74	5.56	4.85	4.16	4.39	5.02	4.01	4.73	3.96	4.90
37	Wilson Ave., N.B. Chicago River	6.28	6.38	5.87	5.61	4.99	4.51	4.91	3.86	3.72	3.25	4.25
73	Diversey Ave., N.B. Chicago River	6.23	5.45	5.16	5.44	4.51	5.17	4.42	4.98	5.34	4.27	5.74
46	Grand Ave., N.B. Chicago River	5.51	5.27	4.74	4.92	4.71	4.03	3.60	3.99	4.36	3.68	4.38
39	Madison St., S.B. Chicago River	4.33	3.41	2.39	2.58	2.19	2.04	2.40	2.17	2.32	2.90	2.86
40	Damen Ave., S.B. Chicago River	3.42	3.21	2.84	2.75	2.46	2.56	2.46	2.03	2.23	2.38	2.89
75	Cicero Ave., Chgo. San. and Ship Canal	3.58	3.04	2.89	2.54	2.52	2.34	2.37	2.05	2.55	2.23	2.85
41	Harlem Ave., Chgo. San. and Ship Canal	7.01	6.97	6.18	6.83	5.52	5.51	4.95	5.08	4.97	4.54	5.23
42	Hwy. 83 and Chgo. San. and Ship Canal	5.80	5.64	5.57	6.37	4.90	4.11	4.19	4.29	4.73	4.15	4.01
48	Lemont Bridge, Stephen Street (Comp)	5.10	5.10	5.07	5.20	4.43	3.84	3.86	3.61	3.94	3.48	4.03
82	Lockport Trebler	4.87	4.48	4.59	5.11	4.66	4.00	4.03	4.17	4.38	3.20	4.10
<u>Calumet River System</u>												
50	Wolf Lake, Burnham Ave.	0.78	0.12	0.23	0.16	0.10	0.09	0.15	0.82	0.09	0.11	0.16
54	Joe Orr Road, Thorn Creek	7.68	6.80	6.79	7.59	8.58	8.76	6.95	8.50	5.92	5.75	6.46
52	Wentworth Ave., Little Calumet River	4.53	3.82	3.75	4.20	3.89	3.76	2.62	2.97	2.14	2.57	3.37
57	135th and Ashland, Little Calumet River	3.71	2.82	3.64	3.56	3.65	3.61	2.56	3.13	2.78	2.95	2.93
86	Burnham Avenue, Grand Calumet River	8.48	12.32	11.89	8.16	6.74	3.71	6.23	12.69	4.49	4.55	ND
51	IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.22
49	92nd and Ewing Ave., Calumet River	0.36	0.34	0.31	0.33	0.28	0.28	0.33	0.53	ND	0.62	0.42
55	130th Street, Calumet River	0.53	0.48	0.52	0.48	0.39	0.48	0.64	0.55	0.68	1.35	0.66
56	Indiana Ave., Calumet River	1.79	3.18	4.04	1.64	1.04	1.04	2.19	1.53	1.19	1.01	1.01
76	Halsted Street, Little Cal. River	4.27	4.14	4.55	3.55	2.55	2.55	3.15	2.51	2.71	2.74	4.36
58	Ashland Ave., Cal-Sag Channel	3.32	3.59	3.78	3.34	2.53	2.39	2.60	2.74	2.43	2.60	3.89
59	Cicero Ave., Cal-Sag Channel	3.40	3.78	3.91	3.26	2.39	2.32	2.62	2.42	2.40	2.53	3.71
43	Hwy. 83 and Cal-Sag Channel	3.37	3.50	3.97	3.33	2.76	2.48	2.56	2.52	2.05	2.47	3.15
<u>Des Plaines River System</u>												
63	Longmeadow Lane, Du Page River	2.88	2.57	2.13	1.84	1.73	3.56	1.02	3.73	2.94	1.92	4.17
64	Lake St., Du Page River	6.86	8.52	7.87	8.24	8.72	9.83	5.33	8.16	7.53	8.16	9.68
89	Walnut Lane, West Branch Du Page River	8.01	8.34	8.89	7.91	8.58	10.73	5.71	8.76	8.00	8.43	9.87
90	Chicago-Elgin Rd., Poplar Creek	0.46	0.44	1.81	0.47	0.34	0.45	0.44	0.43	0.48	0.60	3.07
12	County Line Rd., Buffalo Creek	0.41	0.44	0.33	0.51	0.39	0.32	1.25	1.01	0.88	1.13	0.83
79	Higgins Rd., Salt Creek	0.26	0.51	0.29	0.33	0.29	0.25	0.35	1.27	0.68	0.62	0.49
80	Arlington Hts. Rd., Salt Creek	7.07	7.46	5.18	5.13	5.81	6.11	3.56	5.98	4.65	4.95	7.89
18	Devon Ave., Salt Creek	7.31	7.24	4.70	5.32	5.53	6.17	3.77	6.12	5.05	5.29	8.60
24	Wolf Road, Salt Creek	6.67	6.97	5.84	6.49	6.51	6.73	5.24	7.01	5.84	5.79	8.36
21	First Ave., Salt Creek	6.35	6.94	6.57	5.75	6.14	6.27	5.07	6.37	5.72	5.65	7.54
77	Elmhurst Rd., Higgins Creek	0.34	0.34	0.45	0.73	0.32	0.58	0.75	0.52	0.52	0.86	0.40
78	Wille Rd., Higgins Creek	4.99	6.96	5.85	4.41	5.02	5.42	4.04	5.18	3.86	3.81	4.89
13	County Line Rd., Des Plaines River	5.02	4.92	4.35	5.14	4.30	6.80	3.58	5.77	5.43	4.27	5.83
17	Oakton St., Des Plaines River	5.32	4.23	3.66	4.55	4.16	3.42	3.04	5.02	4.41	3.84	5.20
19	Belmont Ave., Des Plaines River	4.54	4.00	3.87	4.16	3.98	4.52	3.06	4.38	3.70	3.85	4.82
20	Roosevelt Road, Des Plaines River	4.26	3.83	3.75	4.03	3.88	4.41	2.85	4.06	3.60	3.80	4.40
22	Ogden Ave., Des Plaines River	5.02	4.75	4.45	4.20	4.35	4.61	3.44	4.66	3.83	4.19	5.25
23	Willow Springs Rd., Des Plaines River	4.77	4.58	4.44	4.29	4.16	4.25	3.49	4.25	3.82	4.06	4.76
29	Lemont Stephen St., Des Plaines River	4.61	4.64	4.55	4.26	4.51	4.26	3.59	4.16	3.76	3.96	4.67

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-46

TOTAL SOLIDS MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	811	696	567	800	714	737	780	707
31 County Line Rd., Md. Fork N. Branch	693	749	727	763	689	670	718	648	638	650	762
32 County Line Rd., Skokie River	704	772	840	819	693	758	699	718	667	765	805
34 Dempster St., N.B. Chicago River	726	729	859	860	692	760	673	707	706	660	661
74 Outer Dr. Bridge, Chicago River	297	320	235	237	230	216	320	226	252	251	203
35 Central Ave., N. Shore Channel	299	276	246	320	240	207	355	225	205	325	211
36 Touhy Ave., N. Shore Channel	573	529	512	511	552	488	435	567	441	462	533
37 Wilson Ave., N.B. Chicago River	663	596	585	557	611	522	665	428	469	470	573
73 Diversey Ave., N.B. Chicago River	655	592	622	590	565	514	577	446	514	490	558
46 Grand Ave., N.B. Chicago River	596	620	547	618	617	506	496	453	492	473	461
39 Madison St., S.B. Chicago River	484	492	370	418	391	355	405	346	388	441	469
40 Damen Ave., S.B. Chicago River	486	536	435	500	391	429	439	388	378	436	405
75 Cicero Ave., Chgo. San. and Ship Canal	478	547	435	525	499	424	432	338	421	466	418
41 Harlem Ave., Chgo. San. and Ship Canal	613	608	555	569	544	503	522	439	493	510	534
42 Hwy. 83 and Chgo. San. and Ship Canal	608	595	580	585	554	566	486	437	555	498	522
48 Lemont Bridge, Stephen Street (Comp)	581	623	617	628	580	596	608	507	630	546	531
82 Lockport Trebler	634	632	658	638	623	584	603	522	551	572	569
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	231	286	265	272	245	270	261	258	253	242	228
54 Joe Orr Road, Thorn Creek	1096	1182	1273	1090	943	844	834	875	860	813	743
52 Wentworth Ave., Little Calumet River	772	740	814	818	662	887	780	825	738	773	892
57 135th and Ashland, Little Calumet River	905	782	918	923	817	774	724	814	771	765	835
86 Burnham Avenue, Grand Calumet River	913	990	940	1364	1183	1113	968	1063	1037	904	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	844
49 92nd and Ewing Ave., Calumet River	260	327	222	262	240	257	247	299	ND	353	266
55 130th Street, Calumet River	342	341	328	344	349	306	369	384	390	410	364
56 Indiana Ave., Calumet River	461	514	523	516	459	571	607	494	554	499	524
76 Halsted Street, Little Cal. River	664	589	647	734	649	673	714	625	667	694	700
58 Ashland Ave., Cal-Sag Channel	641	605	739	748	646	643	710	674	667	700	711
59 Cicero Ave., Cal-Sag Channel	663	639	734	721	686	641	697	658	618	700	716
43 Hwy. 83 and Cal-Sag Channel	664	673	717	733	643	691	781	760	569	682	704
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	869	827	1020	963	1027	770	1372	871	677	848	1216
64 Lake St., Du Page River	630	684	709	772	742	681	771	690	686	731	783
89 Walnut Lane, West Branch Du Page River	622	615	628	755	692	660	700	659	632	673	690
90 Chicago-Elgin Rd., Poplar Creek	672	810	776	845	709	648	625	694	653	653	727
12 County Line Rd., Buffalo Creek	716	753	802	842	777	778	819	817	779	772	874
79 Higgins Rd., Salt Creek	734	776	852	959	906	909	803	821	670	650	861
80 Arlington Hts. Rd., Salt Creek	670	709	781	828	721	746	675	726	715	683	718
18 Devon Ave., Salt Creek	693	734	861	846	719	639	724	745	736	690	780
24 Wolf Road, Salt Creek	757	955	833	943	846	790	826	883	934	886	1045
21 First Ave., Salt Creek	731	854	816	872	827	783	744	886	918	881	1042
77 Elmhurst Rd., Higgins Creek	858	1015	930	1081	992	1297	922	1024	653	726	787
78 Wille Rd., Higgins Creek	700	786	833	828	758	675	752	719	657	729	751
13 County Line Rd., Des Plaines River	627	714	713	731	695	740	606	684	739	691	824
17 Oakton St., Des Plaines River	642	738	717	808	698	607	614	684	721	659	806
19 Belmont Ave., Des Plaines River	637	720	765	802	747	762	657	727	715	675	844
20 Roosevelt Road, Des Plaines River	639	724	775	793	750	750	638	743	715	683	858
22 Ogden Ave., Des Plaines River	665	745	804	805	779	705	637	769	762	717	906
23 Willow Springs Rd., Des Plaines River	673	761	772	815	742	703	629	764	794	730	846
29 Lemont Stephen St., Des Plaines River	671	768	846	850	789	718	678	745	791	746	907

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-47

TOTAL VOLATILE SOLIDS MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	11.7	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	ND	ND	4.3	6.6	ND	ND	ND	ND	ND	ND	ND
32 County line Rd., Skokie River	ND	ND	3.9	6.7	ND	ND	ND	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	ND	ND	5.8	5.0	ND	ND	ND	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	ND	ND	2.2	3.9	ND	ND	ND	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	ND	ND	2.8	4.5	ND	ND	ND	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	ND	4.6	5.0	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	3.6	4.4	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	3.3	4.5	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	3.3	4.7	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	2.3	3.5	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	3.1	3.5	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	3.2	5.8	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	3.7	4.8	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	3.0	3.5	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	3.6	3.8	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	112.8	135.8	15.2	14.0	ND	ND	135.0	129.9	126.0	133.1	132.8
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	ND	ND	4.3	4.7	ND	ND	ND	ND	ND	ND	ND
54 Joe Orr Road, Thorn Creek	ND	ND	3.1	3.3	ND	ND	ND	ND	ND	ND	ND
52 Wentworth Ave., Little Calumet River	ND	ND	9.3	9.0	ND	ND	ND	ND	ND	ND	ND
57 135th and Ashland, Little Calumet River	ND	ND	7.8	5.0	ND	ND	ND	ND	ND	ND	ND
86 Burnham Avenue, Grand Calumet River	ND	ND	6.1	63.1	ND	ND	ND	ND	ND	ND	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	ND	ND	2.0	2.6	ND	ND	ND	ND	ND	ND	ND
55 130th Street, Calumet River	ND	ND	2.8	2.7	ND	ND	ND	ND	ND	ND	ND
56 Indiana Ave., Calumet River	ND	ND	4.4	5.8	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	6.3	3.0	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	6.2	4.9	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	5.0	6.3	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	9.2	6.9	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	ND	ND	7.0	14.9	ND	ND	ND	ND	ND	ND	ND
64 Lake St., Du Page River	ND	ND	8.7	17.3	ND	ND	ND	ND	ND	ND	ND
89 Walnut Lane, West Branch Du Page River	ND	ND	5.9	15.8	ND	ND	ND	ND	ND	ND	ND
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	9.1	15.9	ND	ND	ND	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	ND	ND	7.1	13.4	ND	ND	ND	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	ND	ND	9.4	14.0	ND	ND	ND	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	ND	ND	4.4	7.2	ND	ND	ND	ND	ND	ND	ND
18 Devon Ave., Salt Creek	ND	ND	6.6	15.8	ND	ND	ND	ND	ND	ND	ND
24 Wolf Road, Salt Creek	ND	ND	8.6	13.8	ND	ND	ND	ND	ND	ND	ND
21 First Ave., Salt Creek	ND	ND	9.5	16.3	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	ND	ND	5.9	16.4	ND	ND	ND	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	ND	ND	4.5	10.0	ND	ND	ND	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	ND	ND	7.3	9.4	ND	ND	ND	ND	ND	ND	ND
17 Oakton St., Des Plaines River	ND	ND	8.6	12.8	ND	ND	ND	ND	ND	ND	ND
19 Belmont Ave., Des Plaines River	ND	ND	9.2	11.8	ND	ND	ND	ND	ND	ND	ND
20 Roosevelt Road, Des Plaines River	ND	ND	9.3	10.4	ND	ND	ND	ND	ND	ND	ND
22 Ogden Ave., Des Plaines River	ND	ND	9.6	10.8	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	ND	ND	7.5	13.8	ND	ND	ND	ND	ND	ND	ND
29 Lemont Stephen St., Des Plaines River	ND	ND	8.4	13.8	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 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	97.0	40.6	41.0	42.7	63.8	93.1	61.2	48.8
31 County Line Rd., Md. Fork N. Branch	24.7	36.2	22.7	32.0	30.9	20.3	47.7	31.0	63.2	39.7	85.5
32 County line Rd., Skokie River	24.0	15.2	13.2	23.9	32.6	13.9	47.9	33.5	44.2	32.4	88.3
34 Dempster St., N.B. Chicago River	29.6	31.8	27.4	22.5	31.0	20.8	38.5	40.3	25.0	30.3	58.3
74 Outer Dr. Bridge, Chicago River	6.0	5.3	8.6	14.9	11.2	6.3	19.1	10.2	8.8	10.4	11.2
35 Central Ave., N. Shore Channel	9.9	8.9	10.8	11.6	15.3	8.1	15.8	15.2	20.3	30.4	24.6
36 Touhy Ave., N. Shore Channel	10.3	10.3	9.4	11.5	13.7	12.2	12.0	17.7	13.3	11.5	30.8
37 Wilson Ave., N.B. Chicago River	13.0	10.6	12.3	13.1	14.8	9.6	13.8	13.9	17.9	15.3	16.7
73 Diversey Ave., N.B. Chicago River	16.5	14.9	11.8	18.7	16.3	10.0	21.8	16.2	11.5	35.7	13.6
46 Grand Ave., N.B. Chicago River	17.2	12.0	13.4	18.6	15.7	11.3	16.1	18.6	12.9	13.8	15.8
39 Madison St., S.B. Chicago River	16.3	12.3	11.1	14.8	21.1	11.4	18.2	17.0	14.0	12.5	10.0
40 Damen Ave., S.B. Chicago River	14.0	13.4	13.8	13.6	28.8	12.0	14.8	17.1	16.7	13.4	20.1
75 Cicero Ave., Chgo. San. and Ship Canal	18.5	13.7	14.2	16.8	18.5	16.1	19.7	17.9	15.8	19.4	20.3
41 Harlem Ave., Chgo. San. and Ship Canal	13.2	10.0	12.2	14.3	11.8	15.7	10.2	21.5	11.2	13.4	17.8
42 Hwy. 83 and Chgo. San. and Ship Canal	8.3	10.5	11.2	9.0	15.3	15.5	17.1	18.3	11.7	10.7	17.7
48 Lemont Bridge, Stephen Street (Comp)	11.5	15.3	15.9	17.5	29.3	18.5	29.3	29.8	19.2	22.4	19.6
82 Lockport Trebler	37.0	57.4	64.3	38.3	12.1	15.3	15.5	16.2	18.6	20.5	13.5
Calumet River System											
50 Wolf Lake, Burnham Ave.	5.4	10.7	8.2	14.3	14.2	22.3	8.1	12.9	8.1	9.8	6.5
54 Joe Orr Road, Thorn Creek	16.6	15.2	14.6	9.8	19.5	26.5	38.4	12.0	17.2	33.3	13.8
52 Wentworth Ave., Little Calumet River	67.3	94.4	67.2	64.1	33.6	74.3	55.3	43.5	111.8	40.9	63.4
57 135th and Ashland, Little Calumet River	34.9	57.3	42.0	31.9	32.0	54.2	44.7	30.1	93.7	27.0	47.9
86 Burnham Avenue, Grand Calumet River	16.4	18.2	14.6	182.6	30.9	38.1	38.8	64.2	17.5	26.6	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.4
49 92nd and Ewing Ave., Calumet River	12.3	15.3	10.8	14.5	27.7	17.8	10.5	17.6	ND	14.0	11.2
55 130th Street, Calumet River	8.6	10.4	12.3	12.8	10.7	15.8	11.3	7.3	13.9	14.4	15.9
56 Indiana Ave., Calumet River	26.4	18.0	24.5	37.3	53.4	43.2	40.1	33.7	34.0	25.3	30.9
76 Halsted Street, Little Cal. River	12.7	20.7	26.3	17.3	26.6	29.7	24.0	22.1	18.4	18.2	15.0
58 Ashland Ave., Cal-Sag Channel	18.2	18.9	35.4	29.7	29.2	35.5	38.2	19.3	76.3	23.5	25.3
59 Cicero Ave., Cal-Sag Channel	22.3	27.6	28.5	39.7	48.2	44.7	39.4	27.4	75.3	31.0	32.8
43 Hwy. 83 and Cal-Sag Channel	23.7	24.3	40.0	46.6	39.9	45.4	66.2	32.6	61.0	32.7	26.4
Des Plaines River System											
63 Longmeadow Lane, Du Page River	21.1	22.6	25.6	83.0	85.0	29.9	35.8	23.7	23.4	30.0	22.8
64 Lake St., Du Page River	35.5	32.8	37.7	86.5	48.7	42.3	44.1	32.4	40.6	36.7	25.3
89 Walnut Lane, West Branch Du Page River	19.6	13.5	16.8	74.1	55.0	27.3	28.3	18.9	19.3	11.8	8.7
90 Chicago-Elgin Rd., Poplar Creek	23.1	17.7	49.6	122.1	25.8	21.7	36.2	26.9	27.3	14.7	30.9
12 County Line Rd., Buffalo Creek	54.2	27.4	36.7	72.3	30.5	46.6	48.2	29.3	54.1	76.0	52.9
79 Higgins Rd., Salt Creek	33.7	29.0	41.0	77.5	37.4	34.9	43.1	27.5	42.6	31.7	21.6
80 Arlington Hts. Rd., Salt Creek	14.4	8.5	14.8	17.5	16.4	12.1	14.5	11.3	10.3	13.4	5.9
18 Devon Ave., Salt Creek	31.3	13.8	35.8	47.1	18.2	18.9	20.8	12.5	14.5	14.1	16.1
24 Wolf Road, Salt Creek	33.0	24.7	48.4	66.6	51.5	47.8	58.6	54.9	76.2	42.5	78.1
21 First Ave., Salt Creek	33.6	26.3	52.9	83.0	28.6	50.5	78.3	39.3	69.9	43.7	44.0
77 Elmhurst Rd., Higgins Creek	43.9	22.8	30.1	105.9	83.5	113.1	48.1	40.9	52.0	24.6	32.7
78 Wille Rd., Higgins Creek	5.0	11.9	12.8	42.3	34.7	26.0	18.1	11.6	13.4	5.3	6.8
13 County Line Rd., Des Plaines River	32.8	32.3	42.4	45.2	28.3	36.2	41.1	29.7	41.8	36.7	36.2
17 Oakton St., Des Plaines River	36.2	40.5	50.3	60.9	44.8	40.3	43.3	40.2	52.8	33.8	37.2
19 Belmont Ave., Des Plaines River	27.7	24.0	53.3	60.3	44.8	50.6	45.4	35.8	56.4	35.3	36.6
20 Roosevelt Road, Des Plaines River	27.3	25.0	50.1	51.1	37.1	41.1	49.3	35.0	44.2	34.4	35.8
22 Ogden Ave., Des Plaines River	29.7	27.6	56.9	52.2	36.0	45.9	61.1	35.3	51.2	36.3	72.8
23 Willow Springs Rd., Des Plaines River	30.5	37.9	44.1	59.9	39.3	46.3	41.3	38.4	44.3	44.3	47.8
29 Lemont Stephen St., Des Plaines River	39.4	38.6	46.1	70.0	42.6	56.4	57.4	49.8	55.8	47.5	51.0

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-49

VOLATILE SUSPENDED SOLIDS MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	7.22	9.50	15.83	11.08	13.64
31 County Line Rd., Md. Fork N. Branch	5.09	6.25	ND	ND	ND	ND	8.83	6.36	14.90	6.09	17.63
32 County line Rd., Skokie River	4.64	3.50	ND	ND	ND	ND	8.75	8.09	9.90	5.83	19.56
34 Dempster St., N.B. Chicago River	5.82	6.42	ND	ND	ND	ND	7.50	8.33	6.58	5.42	13.00
74 Outer Dr. Bridge, Chicago River	1.64	1.50	ND	ND	ND	ND	4.25	2.67	2.25	2.00	3.70
35 Central Ave., N. Shore Channel	2.80	2.33	ND	ND	ND	ND	2.83	2.73	3.55	4.91	3.63
36 Touhy Ave., N. Shore Channel	4.08	4.08	ND	ND	ND	ND	5.36	5.67	4.67	4.33	16.83
37 Wilson Ave., N.B. Chicago River	3.58	3.00	ND	ND	ND	ND	4.50	5.25	5.42	4.42	6.92
73 Diversey Ave., N.B. Chicago River	3.75	3.33	ND	ND	ND	ND	5.58	4.08	4.25	10.17	5.00
46 Grand Ave., N.B. Chicago River	3.67	2.83	ND	ND	ND	ND	4.58	4.67	4.08	3.67	5.42
39 Madison St., S.B. Chicago River	3.83	3.25	ND	ND	ND	ND	4.08	4.42	3.92	3.00	3.00
40 Damen Ave., S.B. Chicago River	3.18	3.17	ND	ND	ND	ND	3.67	4.08	3.50	3.42	5.67
75 Cicero Ave., Chgo. San. and Ship Canal	3.83	3.17	ND	ND	ND	ND	4.25	3.58	4.25	4.08	6.25
41 Harlem Ave., Chgo. San. and Ship Canal	3.64	3.17	ND	ND	ND	ND	3.42	5.25	3.58	4.00	7.00
42 Hwy. 83 and Chgo. San. and Ship Canal	2.75	3.08	ND	ND	ND	ND	4.67	5.67	3.42	3.08	6.25
48 Lemont Bridge, Stephen Street (Comp)	2.73	3.42	ND	ND	ND	ND	5.92	6.00	5.42	4.83	8.00
82 Lockport Trebler	7.39	12.08	ND	ND	5.34	6.29	6.43	6.06	5.49	5.62	4.49
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	2.25	4.33	ND	ND	ND	ND	4.50	5.42	4.92	5.42	3.55
54 Joe Orr Road, Thorn Creek	3.25	4.17	ND	ND	ND	ND	5.42	3.33	4.25	6.67	3.09
52 Wentworth Ave., Little Calumet River	19.73	17.00	ND	ND	ND	ND	8.00	6.58	13.75	6.42	7.60
57 135th and Ashland, Little Calumet River	5.91	9.33	ND	ND	ND	ND	6.27	6.08	12.55	4.73	7.80
86 Burnham Avenue, Grand Calumet River	5.55	7.83	ND	ND	ND	ND	13.75	9.42	8.58	12.33	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.67
49 92nd and Ewing Ave., Calumet River	2.05	2.21	ND	ND	ND	ND	2.33	3.00	ND	2.00	3.20
55 130th Street, Calumet River	1.94	1.96	ND	ND	ND	ND	3.67	2.00	2.64	2.75	4.18
56 Indiana Ave., Calumet River	4.74	3.39	ND	ND	ND	ND	7.67	5.08	6.08	4.36	6.90
76 Halsted Street, Little Cal. River	3.00	7.46	ND	ND	ND	ND	5.83	4.83	5.33	6.42	4.92
58 Ashland Ave., Cal-Sag Channel	3.63	3.44	ND	ND	ND	ND	7.33	4.00	10.92	5.25	6.25
59 Cicero Ave., Cal-Sag Channel	4.00	5.00	ND	ND	ND	ND	6.42	5.83	10.75	6.33	7.00
43 Hwy. 83 and Cal-Sag Channel	4.00	4.33	ND	ND	ND	ND	8.42	5.75	9.25	5.83	6.67
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	5.22	6.25	ND	ND	ND	ND	8.92	7.27	6.00	5.55	5.38
64 Lake St., Du Page River	7.82	8.17	ND	ND	ND	ND	9.58	7.50	10.58	6.00	5.08
89 Walnut Lane, West Branch Du Page River	5.91	5.50	ND	ND	ND	ND	6.83	4.58	6.25	2.92	3.17
90 Chicago-Elgin Rd., Poplar Creek	4.70	4.00	ND	ND	ND	ND	7.00	5.91	6.36	3.33	6.67
12 County Line Rd., Buffalo Creek	8.64	5.64	ND	ND	ND	ND	10.67	6.42	9.42	10.17	11.60
79 Higgins Rd., Salt Creek	10.30	8.70	ND	ND	ND	ND	9.36	6.45	8.40	7.27	6.50
80 Arlington Hts. Rd., Salt Creek	3.73	3.67	ND	ND	ND	ND	4.42	3.83	3.75	3.58	2.42
18 Devon Ave., Salt Creek	5.27	3.42	ND	ND	ND	ND	6.42	4.17	4.42	3.42	3.64
24 Wolf Road, Salt Creek	5.55	5.17	ND	ND	ND	ND	10.08	8.58	11.17	6.33	10.64
21 First Ave., Salt Creek	5.91	4.50	ND	ND	ND	ND	12.33	7.27	10.67	6.92	8.73
77 Elmhurst Rd., Higgins Creek	9.55	4.92	ND	ND	ND	ND	8.42	7.64	9.00	5.50	9.80
78 Wille Rd., Higgins Creek	2.55	3.83	ND	ND	ND	ND	4.67	3.92	3.55	2.08	3.42
13 County Line Rd., Des Plaines River	5.64	6.50	ND	ND	ND	ND	7.42	5.67	8.00	6.67	6.82
17 Oakton St., Des Plaines River	6.45	8.33	ND	ND	ND	ND	8.75	7.73	9.42	5.67	7.70
19 Belmont Ave., Des Plaines River	4.82	5.08	ND	ND	ND	ND	8.25	6.83	9.50	6.25	8.36
20 Roosevelt Road, Des Plaines River	5.00	4.50	ND	ND	ND	ND	8.67	6.67	7.75	5.75	8.64
22 Ogden Ave., Des Plaines River	5.09	5.42	ND	ND	ND	ND	11.00	6.50	8.83	6.33	9.00
23 Willow Springs Rd., Des Plaines River	5.64	7.25	ND	ND	ND	ND	8.25	8.83	9.25	8.08	13.10
29 Lemont Stephen St., Des Plaines River	7.45	8.42	ND	ND	ND	ND	11.08	10.50	10.92	8.25	11.55

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-50

TOTAL DISSOLVED SOLIDS MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
No. Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	729	655	526	757	651	644	718	658
31 County Line Rd., Md. Fork N. Branch	669	713	705	715	658	650	671	617	575	610	677
32 County line Rd., Skokie River	680	757	827	795	661	744	651	685	623	733	717
34 Dempster St., N.B. Chicago River	697	697	832	858	661	739	635	667	681	630	603
74 Outer Dr. Bridge, Chicago River	291	315	227	221	219	209	300	216	243	241	191
35 Central Ave., N. Shore Channel	289	267	235	316	225	198	339	210	185	294	186
36 Touhy Ave., N. Shore Channel	563	519	502	503	539	475	423	549	427	451	502
37 Wilson Ave., N.B. Chicago River	650	585	572	551	597	512	651	414	451	454	557
73 Diversey Ave., N.B. Chicago River	639	577	610	578	549	504	555	429	502	454	544
46 Grand Ave., N.B. Chicago River	579	608	533	610	601	495	480	434	479	459	445
39 Madison St., S.B. Chicago River	467	480	359	410	370	344	387	329	374	428	459
40 Damen Ave., S.B. Chicago River	472	522	421	501	362	417	424	370	361	422	385
75 Cicero Ave., Chgo. San. and Ship Canal	459	533	421	510	480	408	413	320	405	447	397
41 Harlem Ave., Chgo. San. and Ship Canal	600	598	543	557	532	488	512	417	481	497	516
42 Hwy. 83 and Chgo. San. and Ship Canal	600	585	569	578	538	550	468	419	544	487	505
48 Lemont Bridge, Stephen Street (Comp)	570	607	601	624	551	577	579	478	611	524	511
82 Lockport Trebler	597	574	594	599	611	568	ND	505	533	552	556
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	226	275	257	258	231	248	253	245	245	232	222
54 Joe Orr Road, Thorn Creek	1080	1167	1258	1080	923	818	795	863	843	780	729
52 Wentworth Ave., Little Calumet River	705	645	747	754	628	812	725	781	626	732	829
57 135th and Ashland, Little Calumet River	870	725	876	891	785	720	679	783	677	738	787
86 Burnham Avenue, Grand Calumet River	897	972	925	1181	1152	1075	930	999	1019	877	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	816
49 92nd and Ewing Ave., Calumet River	247	313	211	249	213	239	236	282	ND	339	255
55 130th Street, Calumet River	334	329	318	333	338	291	357	376	376	395	348
56 Indiana Ave., Calumet River	440	496	503	479	405	527	567	460	520	474	493
76 Halsted Street, Little Cal. River	651	564	626	717	622	643	690	603	648	676	685
58 Ashland Ave., Cal-Sag Channel	622	588	708	719	617	607	671	655	591	677	686
59 Cicero Ave., Cal-Sag Channel	639	614	706	682	636	596	658	630	543	669	683
43 Hwy. 83 and Cal-Sag Channel	638	649	675	688	604	646	715	727	508	649	677
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	848	804	994	880	942	740	1336	847	654	818	1193
64 Lake St., Du Page River	595	651	671	685	693	639	727	658	646	694	757
89 Walnut Lane, West Branch Du Page River	603	602	611	681	637	632	672	640	612	661	682
90 Chicago-Elgin Rd., Poplar Creek	649	792	726	723	683	626	588	667	626	638	696
12 County Line Rd., Buffalo Creek	662	726	765	769	747	731	771	788	724	696	822
79 Higgins Rd., Salt Creek	700	747	811	882	869	874	760	793	627	619	840
80 Arlington Hts. Rd., Salt Creek	655	701	766	811	704	734	660	715	704	669	712
18 Devon Ave., Salt Creek	662	721	825	799	701	620	703	733	721	676	764
24 Wolf Road, Salt Creek	724	931	785	877	794	742	767	828	858	844	967
21 First Ave., Salt Creek	697	828	763	789	798	733	666	847	848	837	998
77 Elmhurst Rd., Higgins Creek	814	992	900	975	909	1184	874	983	601	701	755
78 Wille Rd., Higgins Creek	695	774	821	786	723	649	734	708	644	724	744
13 County Line Rd., Des Plaines River	594	682	670	685	666	704	565	654	697	654	788
17 Oakton St., Des Plaines River	606	697	667	747	653	567	571	644	668	625	768
19 Belmont Ave., Des Plaines River	609	696	712	742	703	711	612	692	658	639	807
20 Roosevelt Road, Des Plaines River	611	699	725	742	713	709	589	708	671	648	822
22 Ogden Ave., Des Plaines River	635	718	747	753	743	659	576	734	711	680	833
23 Willow Springs Rd., Des Plaines River	642	723	728	755	703	657	588	726	750	686	798
29 Lemont Stephen St., Des Plaines River	632	729	800	780	747	662	621	695	736	699	856

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-51

TOTAL DISSOLVED VOLATILE SOLIDS MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32 County line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35 Central Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36 Touhy Ave., N. Shore Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75 Cicero Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41 Harlem Ave., Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
48 Lemont Bridge, Stephen Street (Comp)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	124	121	127	128
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	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
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
57 135th and Ashland, Little 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
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	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
56 Indiana Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
76 Halsted Street, Little Cal. River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
43 Hwy. 83 and Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Lake St., 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
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
79 Higgins Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
80 Arlington Hts. Rd., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Devon Ave., 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 Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
77 Elmhurst Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Wille Rd., Higgins Creek	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19 Belmont Ave., 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 Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29 Lemont Stephen St., 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 1999

<u>Sampling Station</u> No. Name	Annual Means ($\mu\text{g/L}$)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	10.5	11.6	7.0	15.4	7.4	15.5	16.1	6.7
31 County Line Rd., Md. Fork N. Branch	26.0	14.8	17.3	19.3	12.0	18.8	16.8	7.4	23.8	22.1	13.0
32 County Line Rd., Skokie River	21.0	13.4	15.8	14.8	13.1	13.9	19.9	7.5	24.6	15.9	13.7
34 Dempster St., N.B. Chicago River	16.0	9.6	11.2	11.8	9.6	11.8	14.0	6.6	15.8	18.0	10.7
74 Outer Dr. Bridge, Chicago River	9.2	9.3	7.0	7.2	5.5	9.9	6.5	5.9	4.7	7.3	2.9
35 Central Ave., N. Shore Channel	12.4	10.3	8.8	15.1	10.0	8.9	6.6	3.8	4.8	8.6	4.5
36 Touhy Ave., N. Shore Channel	20.4	13.4	13.5	12.3	9.3	12.9	14.3	7.8	10.9	8.6	9.4
37 Wilson Ave., N.B. Chicago River	18.7	11.4	12.6	13.0	9.5	13.9	13.0	7.8	12.3	12.9	12.0
73 Diversey Ave., N.B. Chicago River	17.8	12.1	13.2	11.3	9.3	11.1	14.2	7.6	11.5	13.4	9.6
46 Grand Ave., N.B. Chicago River	18.8	14.1	13.1	11.8	9.9	12.3	14.3	10.8	11.4	9.6	9.8
39 Madison St., S.B. Chicago River	15.8	12.7	9.3	8.0	6.8	7.0	11.6	6.5	9.2	12.1	7.2
40 Damen Ave., S.B. Chicago River	15.6	11.3	12.1	8.8	9.7	11.7	10.8	8.4	11.5	13.3	8.8
75 Cicero Ave., Chgo. San. and Ship Canal	16.0	13.6	11.1	10.4	11.8	9.8	9.8	7.6	11.6	12.3	7.7
41 Harlem Ave., Chgo. San. and Ship Canal	15.3	12.5	14.1	12.4	8.4	16.8	15.2	7.5	14.3	22.1	11.0
42 Hwy. 83 and Chgo. San. and Ship Canal	17.4	13.4	10.4	10.8	10.7	13.3	15.1	6.7	13.0	14.5	12.1
48 Lemont Bridge, Stephen Street (Comp)	17.9	14.9	12.7	11.6	13.5	14.8	17.8	9.4	17.3	20.1	13.9
82 Lockport Trebler	10.5	12.6	10.9	10.2	8.2	10.3	13.5	9.6	19.1	24.6	16.7
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	10.0	10.8	8.6	9.3	7.5	10.1	10.8	4.8	11.8	8.5	7.3
54 Joe Orr Road, Thorn Creek	18.8	11.2	15.2	14.4	10.4	14.3	18.7	7.8	16.2	15.9	12.1
52 Wentworth Ave., Little Calumet River	23.1	13.4	12.5	12.9	14.8	13.3	17.7	8.8	23.8	24.0	15.9
57 135th and Ashland, Little Calumet River	21.1	15.8	14.0	14.4	11.4	15.4	21.7	8.3	22.3	22.5	16.5
86 Burnham Avenue, Grand Calumet River	20.0	14.4	10.4	34.5	12.0	20.6	19.2	12.3	18.8	23.9	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.6
49 92nd and Ewing Ave., Calumet River	7.2	5.7	8.0	6.8	5.6	8.8	8.4	4.0	ND	5.0	5.2
55 130th Street, Calumet River	8.2	6.9	8.0	7.5	7.5	13.1	10.0	4.8	10.2	9.4	5.9
56 Indiana Ave., Calumet River	15.3	7.4	7.6	6.2	8.0	9.5	13.0	19.3	14.2	11.5	8.3
76 Halsted Street, Little Cal. River	46.6	13.8	12.8	13.3	12.1	17.4	53.0	12.7	26.3	31.0	16.8
58 Ashland Ave., Cal-Sag Channel	22.6	17.5	15.3	13.7	13.1	14.8	20.1	13.1	26.9	28.3	16.9
59 Cicero Ave., Cal-Sag Channel	26.3	15.4	14.2	20.0	13.1	15.7	23.9	14.8	27.7	30.4	19.2
43 Hwy. 83 and Cal-Sag Channel	21.5	16.1	12.7	13.8	12.3	14.6	22.9	11.7	28.3	26.5	16.7
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	18.8	14.3	14.4	17.9	9.6	19.6	14.3	9.2	19.6	23.7	13.4
64 Lake St., Du Page River	19.3	15.3	13.6	14.7	10.5	15.7	15.0	9.0	18.3	17.5	8.6
89 Walnut Lane, West Branch Du Page River	20.1	16.9	13.0	14.7	9.2	10.7	15.9	6.8	18.1	15.6	8.5
90 Chicago-Elgin Rd., Poplar Creek	16.3	14.2	16.1	11.1	8.8	10.1	13.7	7.0	21.3	25.3	12.2
12 County Line Rd., Buffalo Creek	20.1	15.0	12.9	13.2	7.9	12.2	13.2	7.7	19.6	23.3	15.0
79 Higgins Rd., Salt Creek	16.6	15.3	12.8	12.1	8.1	10.1	13.0	5.6	20.6	20.7	10.0
80 Arlington Hts. Rd., Salt Creek	20.3	13.2	12.8	12.0	8.9	11.1	14.8	7.0	16.7	16.5	8.7
18 Devon Ave., Salt Creek	19.5	13.7	13.3	22.0	9.8	10.3	14.2	7.3	16.0	19.0	7.4
24 Wolf Road, Salt Creek	16.3	9.5	12.7	10.2	9.6	11.6	14.8	7.1	16.5	16.3	9.2
21 First Ave., Salt Creek	16.3	11.9	11.5	10.5	9.6	11.0	14.3	7.2	17.2	17.8	9.9
77 Elmhurst Rd., Higgins Creek	21.6	14.4	17.0	12.8	9.1	9.2	13.8	6.2	19.1	21.8	12.4
78 Wille Rd., Higgins Creek	25.0	14.8	16.7	12.1	9.1	11.3	17.2	7.9	13.4	15.8	11.5
13 County Line Rd., Des Plaines River	16.7	12.4	12.6	10.2	7.2	8.9	16.2	8.1	15.6	22.7	12.5
17 Oakton St., Des Plaines River	17.0	12.6	12.9	10.2	9.3	3.7	17.2	7.5	14.3	20.2	10.7
19 Belmont Ave., Des Plaines River	17.9	13.5	13.3	10.4	8.7	12.4	16.5	9.3	18.0	19.3	11.4
20 Roosevelt Road, Des Plaines River	18.7	13.2	13.6	10.0	9.7	10.8	15.7	8.0	18.7	21.9	11.6
22 Ogden Ave., Des Plaines River	16.9	11.5	13.9	11.3	8.4	14.0	14.7	8.3	18.0	20.7	10.5
23 Willow Springs Rd., Des Plaines River	16.1	12.2	13.8	10.9	9.3	12.2	15.6	8.8	16.1	21.0	10.9
29 Lemont Stephen St., Des Plaines River	18.1	13.6	13.0	9.9	10.3	14.1	15.3	9.0	15.8	20.9	10.5

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-53

SULFATE MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)											
	99	98	97	96	95	94	93	92	91	90	89	
Chicago River System												
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	63.6	70.3	57.0	90.9	82.3	80.0	87.8	84.5	
31 County Line Rd., Md. Fork N. Branch	71.9	77.9	62.9	72.5	81.2	82.0	82.7	98.6	96.6	89.2	95.3	
32 County line Rd., Skokie River	79.2	87.6	78.6	89.2	78.0	90.1	90.8	106.8	106.1	101.3	106.8	
34 Dempster St., N.B. Chicago River	72.4	77.9	79.4	81.7	88.5	96.4	79.8	97.5	95.5	92.6	94.5	
74 Outer Dr. Bridge, Chicago River	32.6	29.9	24.8	28.1	40.2	34.9	40.9	37.4	41.2	36.7	36.2	
35 Central Ave., N. Shore Channel	34.3	34.1	32.1	34.3	39.4	36.8	42.8	38.8	41.2	44.4	35.4	
36 Touhy Ave., N. Shore Channel	51.3	54.2	45.0	51.4	55.1	56.9	57.5	54.9	66.0	63.7	62.1	
37 Wilson Ave., N.B. Chicago River	55.7	56.9	52.2	56.7	61.8	57.6	68.5	62.5	67.0	64.5	65.3	
73 Diversey Ave., N.B. Chicago River	68.5	56.5	48.8	61.1	64.7	56.5	65.2	68.1	67.9	64.3	65.4	
46 Grand Ave., N.B. Chicago River	59.2	60.1	53.1	60.2	76.6	58.7	65.3	62.9	69.3	60.4	68.3	
39 Madison St., S.B. Chicago River	51.3	47.2	37.1	39.7	50.1	46.6	57.4	47.8	60.9	59.8	55.1	
40 Damen Ave., S.B. Chicago River	51.1	50.5	45.0	47.5	46.1	48.0	55.8	54.9	61.9	59.7	57.3	
75 Cicero Ave., Chgo. San. and Ship Canal	50.0	45.5	39.0	47.1	60.9	50.6	55.3	54.7	68.1	60.8	59.4	
41 Harlem Ave., Chgo. San. and Ship Canal	75.6	75.7	64.5	74.0	71.6	66.8	72.3	69.6	74.4	78.0	74.5	
42 Hwy. 83 and Chgo. San. and Ship Canal	72.2	69.6	68.8	70.6	73.9	75.4	78.5	69.2	81.4	77.7	89.9	
48 Lemont Bridge, Stephen Street (Comp)	91.5	80.7	84.9	89.4	95.7	95.2	103.8	98.9	110.3	102.9	103.9	
82 Lockport Trebler	ND	ND	ND	ND	100.9	89.5	97.1	85.0	101.3	103.3	93.6	
Calumet River System												
50 Wolf Lake, Burnham Ave.	35.3	32.2	33.0	31.5	63.2	44.9	48.1	42.2	55.3	42.5	49.1	
54 Joe Orr Road, Thorn Creek	380.1	355.8	391.1	312.9	205.8	173.5	162.8	178.0	218.0	182.3	153.3	
52 Wentworth Ave., Little Calumet River	131.2	122.0	128.8	143.7	144.9	162.5	150.0	178.7	160.8	171.9	192.1	
57 135th and Ashland, Little Calumet River	229.8	158.0	179.7	216.8	174.1	161.0	138.7	177.1	180.9	179.5	178.9	
86 Burnham Avenue, Grand Calumet River	157.5	195.7	173.8	229.5	247.4	299.3	225.0	278.4	277.4	221.2	ND	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	233.7	
49 92nd and Ewing Ave., Calumet River	29.8	25.1	23.9	27.5	50.8	43.0	44.2	35.7	ND	56.0	36.8	
55 130th Street, Calumet River	50.6	43.4	52.2	46.1	72.4	53.1	70.8	84.9	86.3	81.5	69.9	
56 Indiana Ave., Calumet River	72.4	88.2	83.9	76.4	103.6	98.7	108.8	96.2	122.0	103.8	101.0	
76 Halsted Street, Little Cal. River	125.0	119.0	112.8	154.5	163.1	142.3	153.5	165.3	159.8	169.1	161.7	
58 Ashland Ave., Cal-Sag Channel	133.2	133.6	94.2	139.6	147.1	139.3	144.8	145.5	154.8	166.0	164.3	
59 Cicero Ave., Cal-Sag Channel	133.9	139.3	130.7	143.1	156.8	137.8	146.2	149.2	151.2	161.3	166.5	
43 Hwy. 83 and Cal-Sag Channel	132.4	135.7	126.7	134.4	127.0	141.5	146.4	151.7	152.7	153.4	157.0	
Des Plaines River System												
63 Longmeadow Lane, Du Page River	87.1	79.9	76.9	60.2	90.7	89.4	90.4	137.4	98.5	125.8	112.8	
64 Lake St., Du Page River	70.5	71.3	64.7	65.8	122.5	78.7	77.5	101.3	100.8	102.8	95.8	
89 Walnut Lane, West Branch Du Page River	68.7	67.9	61.0	61.0	79.2	75.1	76.4	87.8	86.9	96.7	86.8	
90 Chicago-Elgin Rd., Poplar Creek	58.0	71.2	54.6	58.9	85.6	82.4	81.0	114.8	106.8	112.8	103.8	
12 County Line Rd., Buffalo Creek	103.8	92.9	83.9	87.5	117.3	101.2	98.2	135.2	120.4	132.8	151.1	
79 Higgins Rd., Salt Creek	74.9	78.4	67.0	73.8	91.6	97.6	90.5	127.7	105.0	109.1	120.4	
80 Arlington Hts. Rd., Salt Creek	83.6	81.3	72.7	79.2	88.5	91.0	85.6	119.3	99.5	114.3	101.3	
18 Devon Ave., Salt Creek	74.5	76.3	77.0	68.9	97.4	92.9	86.8	114.8	106.3	113.8	101.5	
24 Wolf Road, Salt Creek	94.5	108.9	87.4	100.9	107.1	103.8	100.4	126.7	120.8	134.7	143.8	
21 First Ave., Salt Creek	90.1	104.4	87.2	81.2	112.5	102.5	92.7	124.1	121.6	132.3	142.6	
77 Elmhurst Rd., Higgins Creek	55.4	66.4	48.9	81.9	84.8	68.4	72.3	92.1	87.8	90.1	89.1	
78 Wille Rd., Higgins Creek	99.3	96.5	88.7	96.3	103.0	101.6	97.0	116.0	101.5	102.8	113.3	
13 County Line Rd., Des Plaines River	71.1	87.9	80.6	89.1	119.2	117.6	92.7	130.8	136.4	131.9	151.0	
17 Oakton St., Des Plaines River	73.4	83.3	75.3	88.2	114.0	80.5	84.2	121.5	124.8	121.8	144.2	
19 Belmont Ave., Des Plaines River	78.3	86.3	76.1	88.2	120.5	107.5	85.3	124.8	114.2	124.7	138.5	
20 Roosevelt Road, Des Plaines River	75.6	84.3	75.4	91.0	105.4	105.5	85.8	120.1	116.1	112.4	136.8	
22 Ogden Ave., Des Plaines River	77.7	87.7	78.2	84.2	112.5	94.0	86.3	122.5	121.3	125.6	137.6	
23 Willow Springs Rd., Des Plaines River	82.2	90.6	81.6	97.2	105.3	105.5	87.3	125.8	123.2	125.1	138.1	
29 Lemont Stephen St., Des Plaines River	79.6	90.0	87.2	95.1	106.6	104.4	95.3	129.3	122.4	122.4	139.1	

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-54

FATS, OILS, AND GREASES MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	4.50	7.44	4.00	9.89	6.73	6.50	10.83	11.91
31 County Line Rd., Md. Fork N. Branch	ND	11.63	5.49	3.13	5.50	10.40	13.25	10.45	5.00	7.09	14.13
32 County line Rd., Skokie River	ND	4.37	5.74	1.88	8.33	7.11	12.17	8.00	7.90	8.92	11.00
34 Dempster St., N.B. Chicago River	ND	3.63	6.06	2.42	8.20	5.82	12.50	7.33	6.08	6.67	6.64
74 Outer Dr. Bridge, Chicago River	ND	2.00	2.91	2.91	8.30	6.70	11.75	7.00	7.83	6.17	7.90
35 Central Ave., N. Shore Channel	ND	ND	6.01	2.00	5.38	5.00	13.83	8.09	9.09	6.27	8.25
36 Touhy Ave., N. Shore Channel	ND	3.97	6.50	1.92	9.33	9.27	12.00	7.42	8.50	7.17	6.42
37 Wilson Ave., N.B. Chicago River	ND	4.27	8.40	5.08	6.67	8.00	13.88	7.33	6.33	6.33	10.92
73 Diversey Ave., N.B. Chicago River	ND	2.45	7.27	3.08	6.00	6.75	12.42	11.08	10.17	6.42	9.17
46 Grand Ave., N.B. Chicago River	ND	2.75	9.51	4.25	13.14	7.67	13.17	15.67	10.58	9.50	7.42
39 Madison St., S.B. Chicago River	ND	4.85	3.65	2.17	7.36	4.40	10.58	6.92	8.17	8.25	10.36
40 Damen Ave., S.B. Chicago River	ND	5.25	3.87	2.67	8.67	8.42	13.67	7.00	11.58	5.58	6.75
75 Cicero Ave., Chgo. San. and Ship Canal	ND	2.55	7.41	3.42	9.92	6.17	11.83	7.33	11.50	6.50	4.92
41 Harlem Ave., Chgo. San. and Ship Canal	ND	2.65	6.26	1.92	7.67	6.67	9.67	6.42	10.33	6.73	11.33
42 Hwy. 83 and Chgo. San. and Ship Canal	ND	3.00	6.58	3.83	7.42	7.64	10.67	6.25	12.92	13.17	9.58
48 Lemont Bridge, Stephen Street (Comp)	ND	1.85	8.13	2.00	11.17	8.33	10.25	7.83	6.50	7.08	5.91
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	ND	4.63	7.42	2.25	5.82	6.83	10.58	6.00	9.25	8.25	2.82
54 Joe Orr Road, Thorn Creek	ND	12.80	8.18	2.73	7.91	5.58	10.50	8.75	6.58	9.50	7.30
52 Wentworth Ave., Little Calumet River	ND	3.60	6.83	1.67	5.00	5.45	12.92	5.75	11.17	8.58	9.80
57 135th and Ashland, Little Calumet River	ND	3.00	5.43	4.11	6.82	4.50	12.00	6.08	12.00	6.55	3.20
86 Burnham Avenue, Grand Calumet River	ND	3.20	11.05	8.91	7.00	6.92	10.67	7.00	9.75	11.17	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.08
49 92nd and Ewing Ave., Calumet River	ND	3.00	4.70	3.56	4.91	9.18	12.83	5.57	ND	8.00	5.20
55 130th Street, Calumet River	ND	2.33	5.42	3.80	5.18	6.91	11.00	5.08	7.73	14.67	5.64
56 Indiana Ave., Calumet River	ND	3.97	4.98	3.78	6.90	6.27	11.00	6.42	12.75	8.09	8.30
76 Halsted Street, Little Cal. River	ND	3.80	7.47	1.50	5.91	5.83	11.50	5.08	9.42	8.17	5.83
58 Ashland Ave., Cal-Sag Channel	ND	ND	7.50	2.91	6.00	5.42	10.42	4.67	11.00	6.58	3.92
59 Cicero Ave., Cal-Sag Channel	ND	5.07	4.82	5.73	5.36	6.17	13.42	4.42	10.67	7.92	3.33
43 Hwy. 83 and Cal-Sag Channel	ND	5.53	4.57	5.00	6.60	5.45	12.00	4.08	12.75	5.75	3.50
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	ND	3.50	8.50	4.55	7.00	7.30	12.55	7.73	8.18	8.73	9.00
64 Lake St., Du Page River	ND	5.30	7.49	7.55	5.92	7.00	10.83	6.42	10.42	14.25	5.08
89 Walnut Lane, West Branch Du Page River	ND	5.35	4.60	6.58	6.33	8.33	9.83	8.33	10.00	9.75	4.17
90 Chicago-Elgin Rd., Poplar Creek	ND	2.55	7.27	7.91	4.70	10.09	10.91	9.73	8.55	5.92	5.44
12 County Line Rd., Buffalo Creek	ND	3.05	8.94	7.92	7.08	6.40	10.67	8.42	11.03	20.83	3.00
79 Higgins Rd., Salt Creek	ND	2.50	7.07	6.10	5.50	8.20	9.55	7.45	10.40	5.55	4.70
80 Arlington Hts. Rd., Salt Creek	ND	14.20	6.21	8.42	5.18	6.90	9.83	8.25	10.25	4.00	2.33
18 Devon Ave., Salt Creek	ND	9.20	7.16	9.18	7.09	7.25	9.73	8.67	9.00	6.58	2.73
24 Wolf Road, Salt Creek	ND	5.55	5.30	5.58	6.08	5.73	10.92	9.25	9.58	5.83	5.64
21 First Ave., Salt Creek	ND	5.45	6.70	5.92	7.18	6.27	11.67	6.64	9.58	3.50	6.73
77 Elmhurst Rd., Higgins Creek	ND	3.35	4.25	10.58	11.42	7.18	11.33	6.73	13.64	2.50	11.90
78 Wille Rd., Higgins Creek	ND	4.05	4.67	9.83	7.08	7.09	13.42	9.17	9.45	3.25	11.08
13 County Line Rd., Des Plaines River	ND	4.15	6.26	7.25	7.73	6.89	9.75	8.42	10.25	7.00	4.82
17 Oakton St., Des Plaines River	ND	3.70	6.23	6.67	5.10	6.00	12.33	8.09	8.83	4.82	9.50
19 Belmont Ave., Des Plaines River	ND	5.45	4.75	6.50	5.58	6.17	10.00	7.33	9.25	4.33	9.82
20 Roosevelt Road, Des Plaines River	ND	6.40	4.65	5.58	6.58	7.42	10.42	7.50	8.83	3.42	8.36
22 Ogden Ave., Des Plaines River	ND	5.45	5.20	6.54	6.58	5.73	12.75	6.58	11.08	4.17	9.00
23 Willow Springs Rd., Des Plaines River	ND	4.80	6.09	5.18	6.18	6.00	12.25	6.08	13.00	6.75	7.40
29 Lemont Stephen St., Des Plaines River	ND	3.00	4.56	6.67	5.92	6.09	12.58	4.92	11.50	5.00	7.09

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-55

TOTAL PHOSPHORUS MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	2.365	2.019	3.165	1.067	2.251	2.588	2.082	3.395
31 County Line Rd., Md. Fork N. Branch	0.245	0.183	0.198	0.186	0.174	0.204	0.170	0.123	0.203	0.579	0.352
32 County line Rd., Skokie River	0.196	0.152	0.219	0.191	0.206	0.347	0.228	0.401	0.180	0.456	0.248
34 Dempster St., N.B. Chicago River	1.208	0.777	1.237	1.092	0.889	1.235	0.819	1.069	0.867	0.848	0.937
74 Outer Dr. Bridge, Chicago River	0.206	0.202	0.099	0.120	0.100	0.050	0.118	0.087	0.117	0.092	0.028
35 Central Ave., N. Shore Channel	0.215	0.129	0.067	0.392	0.140	0.035	0.108	0.085	0.065	0.212	0.190
36 Touhy Ave., N. Shore Channel	1.351	1.185	1.189	1.132	0.838	0.958	0.814	0.765	0.939	0.936	0.882
37 Wilson Ave., N.B. Chicago River	1.388	1.086	1.033	1.039	0.839	0.998	0.831	0.863	0.896	0.934	0.905
73 Diversey Ave., N.B. Chicago River	1.116	0.843	0.942	0.814	0.623	0.749	0.649	0.796	0.894	0.992	0.970
46 Grand Ave., N.B. Chicago River	1.120	0.863	0.870	0.938	0.761	0.798	0.717	0.777	0.862	0.668	1.095
39 Madison St., S.B. Chicago River	0.839	0.605	0.465	0.393	0.380	0.346	0.461	0.381	0.487	0.558	0.594
40 Damen Ave., S.B. Chicago River	0.727	0.528	0.570	0.406	0.375	0.542	0.402	0.479	0.502	0.442	0.600
75 Cicero Ave., Chgo. San. and Ship Canal	0.690	0.550	0.573	0.458	0.443	0.549	0.390	0.557	0.542	0.524	0.578
41 Harlem Ave., Chgo. San. and Ship Canal	1.044	0.853	0.887	0.757	0.731	0.798	0.533	0.583	0.730	0.555	0.653
42 Hwy. 83 and Chgo. San. and Ship Canal	0.642	0.661	0.678	0.548	0.552	0.771	0.488	0.510	0.647	0.439	0.517
48 Lemont Bridge, Stephen Street (Comp)	1.098	0.859	1.063	0.873	0.828	0.991	0.692	0.950	0.962	0.601	0.735
82 Lockport Trebler	1.545	1.211	1.236	1.165	1.088	1.099	0.898	0.984	0.963	0.944	0.902
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.234	0.056	0.095	0.094	0.074	0.061	0.054	0.069	0.032	0.025	0.028
54 Joe Orr Road, Thorn Creek	3.000	8.043	8.065	6.090	5.159	4.173	4.538	5.296	5.332	3.938	4.875
52 Wentworth Ave., Little Calumet River	1.168	0.815	0.553	0.528	0.478	0.565	0.376	0.556	0.538	0.252	0.565
57 135th and Ashland, Little Calumet River	1.522	1.619	1.992	1.736	1.409	1.626	0.946	1.428	1.477	1.223	1.201
86 Burnham Avenue, Grand Calumet River	0.857	0.704	0.465	1.038	0.513	0.662	0.767	1.649	0.591	0.533	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.762
49 92nd and Ewing Ave., Calumet River	0.145	0.081	0.088	0.155	0.143	0.054	0.030	0.020	ND	0.000	0.108
55 130th Street, Calumet River	0.197	0.151	0.094	0.092	0.074	0.066	0.069	0.037	0.595	0.401	0.244
56 Indiana Ave., Calumet River	0.324	0.214	0.152	0.143	0.156	0.230	0.262	0.215	0.205	0.119	0.204
76 Halsted Street, Little Cal. River	2.595	1.885	1.758	1.242	1.623	1.455	1.249	1.640	1.331	1.154	1.278
58 Ashland Ave., Cal-Sag Channel	2.190	1.947	1.445	1.470	1.587	1.389	0.946	1.884	1.203	1.104	1.266
59 Cicero Ave., Cal-Sag Channel	2.396	2.118	1.930	1.623	1.771	1.604	1.278	2.017	1.279	1.257	1.348
43 Hwy. 83 and Cal-Sag Channel	2.453	1.832	2.012	1.631	1.521	1.596	1.300	1.622	1.501	1.049	1.246
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.952	0.770	0.547	0.535	0.555	0.811	0.250	0.909	0.757	0.542	0.935
64 Lake St., Du Page River	2.205	2.385	2.007	1.811	1.979	2.025	1.317	2.142	2.108	2.137	2.668
89 Walnut Lane, West Branch Du Page River	2.742	2.903	2.453	2.162	2.271	2.318	1.399	2.420	2.180	2.224	2.723
90 Chicago-Elgin Rd., Poplar Creek	0.430	0.101	0.424	0.165	0.142	0.102	0.114	0.093	0.114	0.089	0.772
12 County Line Rd., Buffalo Creek	0.235	0.150	0.156	0.158	0.125	0.154	0.257	0.203	0.227	0.177	0.202
79 Higgins Rd., Salt Creek	0.128	0.176	0.169	0.148	0.139	0.109	0.114	0.324	0.191	0.187	0.134
80 Arlington Hts. Rd., Salt Creek	2.224	1.974	1.575	1.583	1.994	1.802	0.882	1.628	1.479	1.310	2.230
18 Devon Ave., Salt Creek	2.231	1.855	1.410	1.752	2.052	1.795	0.913	1.548	1.579	1.384	2.283
24 Wolf Road, Salt Creek	1.745	1.497	1.441	1.513	1.502	1.628	1.051	1.411	1.357	1.195	2.166
21 First Ave., Salt Creek	1.595	1.517	1.469	1.197	1.255	1.443	1.033	1.225	1.259	1.040	1.797
77 Elmhurst Rd., Higgins Creek	0.221	0.111	0.115	0.152	0.181	0.215	0.151	0.115	0.258	0.123	0.094
78 Wille Rd., Higgins Creek	0.671	1.058	0.988	0.525	0.592	0.551	0.393	0.726	0.544	0.382	0.942
13 County Line Rd., Des Plaines River	1.261	0.916	0.736	0.700	0.701	1.179	0.780	0.805	0.853	0.496	1.055
17 Oakton St., Des Plaines River	0.971	0.764	0.615	0.644	0.671	0.527	0.515	0.742	0.707	0.375	0.920
19 Belmont Ave., Des Plaines River	0.780	0.684	0.630	0.525	0.578	0.795	0.466	0.576	0.575	0.374	0.806
20 Roosevelt Road, Des Plaines River	0.701	0.660	0.667	0.598	0.553	0.751	0.450	0.567	0.553	0.380	0.752
22 Ogden Ave., Des Plaines River	0.963	0.849	0.885	0.702	0.738	0.935	0.653	0.792	0.713	0.545	0.982
23 Willow Springs Rd., Des Plaines River	0.887	0.797	0.816	0.718	0.688	0.858	0.584	0.696	0.689	0.516	0.899
29 Lemont Stephen St., Des Plaines River	0.940	0.788	0.862	0.763	0.828	0.893	0.626	0.737	0.703	0.614	0.976

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-56

SOLUBLE PHOSPHORUS MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	2.010	1.847	3.065	0.938	2.006	2.304	1.862	3.196
31 County Line Rd., Md. Fork N. Branch	0.109	0.116	0.127	0.162	0.100	0.106	0.058	0.053	0.101	0.457	0.146
32 County line Rd., Skokie River	0.108	0.095	0.158	0.117	0.104	0.251	0.112	0.311	0.088	0.323	0.099
34 Dempster St., N.B. Chicago River	0.920	0.705	0.994	0.857	0.795	1.129	0.676	0.897	0.737	0.601	0.785
74 Outer Dr. Bridge, Chicago River	0.157	0.150	0.057	0.089	0.065	0.020	0.031	0.048	0.098	0.065	0.019
35 Central Ave., N. Shore Channel	0.098	0.103	0.038	0.271	0.058	0.011	0.072	0.015	0.024	0.109	0.018
36 Touhy Ave., N. Shore Channel	1.066	1.058	0.955	0.872	0.687	0.833	0.741	0.647	0.747	0.728	0.756
37 Wilson Ave., N.B. Chicago River	1.160	0.977	0.887	0.801	0.738	0.913	0.709	0.761	0.769	0.760	0.821
73 Diversey Ave., N.B. Chicago River	0.917	0.743	0.761	0.606	0.559	0.678	0.530	0.697	0.755	0.817	0.849
46 Grand Ave., N.B. Chicago River	0.853	0.873	0.707	0.658	0.692	0.686	0.606	0.649	0.726	0.536	0.933
39 Madison St., S.B. Chicago River	0.646	0.501	0.345	0.273	0.270	0.298	0.387	0.303	0.398	0.388	0.497
40 Damen Ave., S.B. Chicago River	0.492	0.423	0.426	0.289	0.278	0.467	0.331	0.390	0.371	0.334	0.512
75 Cicero Ave., Chgo. San. and Ship Canal	0.459	0.378	0.402	0.320	0.348	0.421	0.282	0.451	0.438	0.366	0.493
41 Harlem Ave., Chgo. San. and Ship Canal	0.754	0.737	0.636	0.527	0.634	0.707	0.433	0.482	0.564	0.425	0.517
42 Hwy. 83 and Chgo. San. and Ship Canal	0.477	0.502	0.512	0.417	0.451	0.664	0.400	0.409	0.498	0.332	0.442
48 Lemont Bridge, Stephen Street (Comp)	0.798	0.717	0.887	0.647	0.689	0.876	0.590	0.790	0.767	0.485	0.581
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.064	0.041	0.063	0.075	0.047	0.029	0.035	0.032	0.013	0.008	0.018
54 Joe Orr Road, Thorn Creek	2.556	7.365	6.852	5.017	4.926	4.028	4.358	5.121	4.889	3.732	4.765
52 Wentworth Ave., Little Calumet River	0.398	0.296	0.313	0.312	0.269	0.346	0.171	0.328	0.248	0.097	0.315
57 135th and Ashland, Little Calumet River	1.229	1.275	1.697	1.467	1.231	1.424	0.792	1.272	1.193	1.096	1.021
86 Burnham Avenue, Grand Calumet River	0.191	0.329	0.222	0.258	0.127	0.201	0.219	0.448	0.206	0.139	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	- ND	ND	ND	ND	0.255
49 92nd and Ewing Ave., Calumet River	0.060	0.041	0.059	0.156	0.090	0.025	0.014	0.009	ND	0.000	0.076
55 130th Street, Calumet River	0.080	0.062	0.058	0.093	0.062	0.031	0.021	0.013	0.539	0.350	0.172
56 Indiana Ave., Calumet River	0.110	0.161	0.076	0.110	0.061	0.122	0.141	0.123	0.082	0.044	0.084
76 Halsted Street, Little Cal. River	2.684	1.533	1.276	1.033	1.457	1.337	1.103	1.503	1.043	0.967	1.036
58 Ashland Ave., Cal-Sag Channel	2.077	1.736	1.045	0.906	1.391	1.217	0.797	1.704	0.856	0.922	1.058
59 Cicero Ave., Cal-Sag Channel	2.314	1.888	1.586	1.124	1.511	1.393	1.091	1.817	0.925	0.999	1.162
43 Hwy. 83 and Cal-Sag Channel	2.348	1.834	1.738	1.186	1.315	1.388	1.087	1.448	1.204	0.860	1.042
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.729	0.684	0.608	0.401	0.360	0.725	0.172	0.843	0.674	0.444	0.741
64 Lake St., Du Page River	1.712	2.048	1.772	1.461	1.708	1.849	1.143	1.894	1.807	1.972	2.523
89 Walnut Lane, West Branch Du Page River	2.243	2.198	2.120	1.727	2.031	2.162	1.272	2.214	2.051	2.085	2.636
90 Chicago-Elgin Rd., Poplar Creek	0.070	0.074	0.330	0.117	0.070	0.048	0.029	0.028	0.043	0.013	0.666
12 County Line Rd., Buffalo Creek	0.081	0.062	0.075	0.083	0.066	0.048	0.112	0.051	0.072	0.092	0.084
79 Higgins Rd., Salt Creek	0.074	0.109	0.068	0.086	0.056	0.039	0.021	0.271	0.098	0.121	0.043
80 Arlington Hts. Rd., Salt Creek	1.843	1.751	1.227	1.294	1.743	1.744	0.800	1.254	1.361	1.222	2.129
18 Devon Ave., Salt Creek	1.868	1.686	1.098	1.440	1.778	1.706	0.830	1.435	1.478	1.303	2.148
24 Wolf Road, Salt Creek	1.369	1.240	1.150	1.058	1.241	1.445	0.861	1.227	1.090	1.049	1.622
21 First Ave., Salt Creek	1.275	1.300	1.187	0.848	1.066	1.259	0.803	1.045	0.989	0.938	1.540
77 Elmhurst Rd., Higgins Creek	0.071	0.072	0.104	0.078	0.068	0.047	0.068	0.012	0.138	0.044	0.030
78 Wille Rd., Higgins Creek	0.506	0.823	0.712	0.363	0.480	0.495	0.327	0.640	0.441	0.337	0.613
13 County Line Rd., Des Plaines River	1.047	0.736	0.575	0.552	0.603	1.066	0.492	0.690	0.724	0.386	0.941
17 Oakton St., Des Plaines River	0.741	0.563	0.440	0.458	0.505	0.440	0.390	0.578	0.480	0.265	0.762
19 Belmont Ave., Des Plaines River	0.609	0.503	0.448	0.387	0.420	0.622	0.331	0.438	0.387	0.266	0.619
20 Roosevelt Road, Des Plaines River	0.562	0.523	0.462	0.387	0.407	0.615	0.308	0.421	0.408	0.282	0.614
22 Ogden Ave., Des Plaines River	0.769	0.688	0.634	0.459	0.596	0.759	0.469	0.596	0.541	0.428	0.815
23 Willow Springs Rd., Des Plaines River	0.679	0.629	0.621	0.459	0.511	0.671	0.432	0.515	0.487	0.394	0.674
29 Lemont Stephen St., Des Plaines River	0.664	0.587	0.641	0.484	0.644	0.698	0.438	0.511	0.490	0.450	0.735

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-57

TOTAL CYANIDE MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.007	0.008	0.010	0.006	0.012	0.014	0.018	0.015
31 County Line Rd., Md. Fork N. Branch	0.002	0.002	0.002	0.006	0.002	0.004	0.003	0.002	0.002	0.008	0.003
32 County line Rd., Skokie River	0.003	0.001	0.002	0.001	0.002	0.003	0.003	0.004	0.003	0.007	0.003
34 Dempster St., N.B. Chicago River	0.005	0.004	0.005	0.004	0.003	0.005	0.005	0.005	0.005	0.005	0.006
74 Outer Dr. Bridge, Chicago River	0.001	0.002	0.000	0.001	0.000	0.002	0.002	0.001	0.001	0.002	0.003
35 Central Ave., N. Shore Channel	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.001
36 Touhy Ave., N. Shore Channel	0.005	0.006	0.007	0.005	0.004	0.006	0.006	0.006	0.006	0.010	0.007
37 Wilson Ave., N.B. Chicago River	0.007	0.006	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.007	0.008
73 Diversey Ave., N.B. Chicago River	0.008	0.005	0.008	0.005	0.004	0.006	0.007	0.006	0.006	0.007	0.008
46 Grand Ave., N.B. Chicago River	0.007	0.007	0.005	0.005	0.004	0.008	0.009	0.007	0.007	0.008	0.014
39 Madison St., S.B. Chicago River	0.005	0.004	0.003	0.002	0.002	0.004	0.006	0.006	0.004	0.006	0.008
40 Damen Ave., S.B. Chicago River	0.005	0.004	0.004	0.004	0.003	0.004	0.005	0.005	0.005	0.005	0.007
75 Cicero Ave., Chgo. San. and Ship Canal	0.005	0.004	0.003	0.004	0.003	0.004	0.006	0.004	0.005	0.006	0.006
41 Harlem Ave., Chgo. San. and Ship Canal	0.006	0.007	0.006	0.007	0.005	0.007	0.008	0.007	0.007	0.009	0.008
42 Hwy. 83 and Chgo. San. and Ship Canal	0.007	0.007	0.007	0.006	0.007	0.007	0.007	0.007	0.008	0.008	0.008
48 Lemont Bridge, Stephen Street (Comp)	0.007	0.009	0.007	0.008	0.008	0.008	0.007	0.008	0.009	0.011	0.010
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.001	0.001	0.001	0.001	0.003	0.003	0.002	0.002	0.002	0.004	0.002
54 Joe Orr Road, Thorn Creek	0.007	0.008	0.007	0.007	0.007	0.008	0.008	0.010	0.011	0.016	0.017
52 Wentworth Ave., Little Calumet River	0.040	0.027	0.005	0.015	0.014	0.014	0.009	0.011	0.007	0.009	0.015
57 135th and Ashland, Little Calumet River	0.009	0.008	0.005	0.007	0.009	0.009	0.007	0.006	0.007	0.012	0.009
86 Burnham Avenue, Grand Calumet River	0.008	0.011	0.010	0.009	0.013	0.010	0.009	0.013	0.020	0.023	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.018
49 92nd and Ewing Ave., Calumet River	0.001	0.001	0.003	0.001	0.002	0.003	0.002	0.002	ND	0.003	0.004
55 130th Street, Calumet River	0.001	0.001	0.002	0.001	0.001	0.003	0.003	0.002	0.002	0.004	0.004
56 Indiana Ave., Calumet River	0.003	0.003	0.003	0.003	0.002	0.005	0.005	0.004	0.007	0.005	0.007
76 Halsted Street, Little Cal. River	0.010	0.008	0.006	0.013	0.013	0.014	0.019	0.016	0.019	0.020	0.022
58 Ashland Ave., Cal-Sag Channel	0.009	0.008	0.005	0.010	0.012	0.011	0.010	0.014	0.015	0.016	0.020
59 Cicero Ave., Cal-Sag Channel	0.008	0.009	0.006	0.009	0.013	0.012	0.011	0.015	0.015	0.014	0.020
43 Hwy. 83 and Cal-Sag Channel	0.007	0.009	0.006	0.008	0.010	0.010	0.010	0.012	0.021	0.012	0.019
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.007	0.005	0.004	0.005	0.006	0.007	0.008	0.007	0.007	0.006	0.013
64 Lake St., Du Page River	0.009	0.009	0.008	0.008	0.009	0.011	0.009	0.010	0.010	0.012	0.013
89 Walnut Lane, West Branch Du Page River	0.012	0.011	0.010	0.008	0.011	0.011	0.008	0.011	0.013	0.015	0.019
90 Chicago-Elgin Rd., Poplar Creek	0.002	0.002	0.003	0.002	0.003	0.002	0.003	0.002	0.002	0.003	0.006
12 County Line Rd., Buffalo Creek	0.003	0.002	0.001	0.002	0.002	0.002	0.004	0.003	0.003	0.003	0.003
79 Higgins Rd., Salt Creek	0.004	0.002	0.002	0.003	0.004	0.002	0.005	0.003	0.003	0.003	0.003
80 Arlington Hts. Rd., Salt Creek	0.010	0.009	0.006	0.007	0.007	0.007	0.006	0.007	0.008	0.008	0.013
18 Devon Ave., Salt Creek	0.009	0.008	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.011
24 Wolf Road, Salt Creek	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.009
21 First Ave., Salt Creek	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.007	0.006	0.007	0.008
77 Elmhurst Rd., Higgins Creek	0.003	0.003	0.003	0.004	0.002	0.004	0.005	0.003	0.003	0.004	0.003
78 Wille Rd., Higgins Creek	0.011	0.008	0.008	0.005	0.008	0.010	0.007	0.010	0.010	0.009	0.016
13 County Line Rd., Des Plaines River	0.010	0.005	0.005	0.005	0.006	0.007	0.011	0.007	0.008	0.006	0.007
17 Oakton St., Des Plaines River	0.009	0.005	0.004	0.004	0.006	0.003	0.006	0.009	0.006	0.005	0.007
19 Belmont Ave., Des Plaines River	0.005	0.004	0.005	0.005	0.006	0.005	0.005	0.007	0.006	0.006	0.007
20 Roosevelt Road, Des Plaines River	0.005	0.004	0.004	0.004	0.005	0.006	0.005	0.008	0.006	0.006	0.008
22 Ogden Ave., Des Plaines River	0.006	0.005	0.005	0.004	0.004	0.005	0.006	0.005	0.006	0.006	0.008
23 Willow Springs Rd., Des Plaines River	0.005	0.005	0.005	0.005	0.005	0.008	0.005	0.006	0.006	0.006	0.007
29 Lemont Stephen St., Des Plaines River	0.005	0.006	0.005	0.005	0.006	0.005	0.006	0.006	0.005	0.005	0.007

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-58

WEAK ACID DISSOCIABLE CYANIDE MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.001	ND						
31 County Line Rd., Md. Fork N. Branch	0.000	0.000	0.001	0.001	ND						
32 County line Rd., Skokie River	0.000	0.000	0.001	0.001	ND						
34 Dempster St., N.B. Chicago River	0.000	0.000	0.001	0.001	ND						
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.000	0.000	ND						
35 Central Ave., N. Shore Channel	0.000	0.000	0.000	0.000	ND						
36 Touhy Ave., N. Shore Channel	0.001	0.001	0.001	0.001	ND						
37 Wilson Ave., N.B. Chicago River	0.001	0.000	0.001	0.001	ND						
73 Diversey Ave., N.B. Chicago River	0.001	0.000	0.002	0.001	ND						
46 Grand Ave., N.B. Chicago River	0.001	0.001	0.001	0.001	ND						
39 Madison St., S.B. Chicago River	0.001	0.001	0.001	0.001	ND						
40 Damen Ave., S.B. Chicago River	0.001	0.001	0.001	0.001	ND						
75 Cicero Ave., Chgo. San. and Ship Canal	0.001	0.001	0.001	0.001	ND						
41 Harlem Ave., Chgo. San. and Ship Canal	0.001	0.001	0.001	0.001	ND						
42 Hwy. 83 and Chgo. San. and Ship Canal	0.001	0.001	0.001	0.001	ND						
48 Lemont Bridge, Stephen Street (Comp)	0.001	0.001	0.001	0.001	ND						
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.000	0.000	0.000	0.001	ND						
54 Joe Orr Road, Thorn Creek	0.002	0.001	0.001	0.001	ND						
52 Wentworth Ave., Little Calumet River	0.008	0.004	0.001	0.004	ND						
57 135th and Ashland, Little Calumet River	0.003	0.001	0.001	0.002	ND						
86 Burnham Avenue, Grand Calumet River	0.001	0.001	0.001	0.001	ND						
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0.000	0.000	0.000	0.001	ND						
55 130th Street, Calumet River	0.000	0.000	0.000	0.001	ND						
56 Indiana Ave., Calumet River	0.000	0.000	0.001	0.001	ND						
76 Halsted Street, Little Cal. River	0.003	0.001	0.001	0.003	ND						
58 Ashland Ave., Cal-Sag Channel	0.001	0.001	0.001	0.002	ND						
59 Cicero Ave., Cal-Sag Channel	0.001	0.001	0.001	0.002	ND						
43 Hwy. 83 and Cal-Sag Channel	0.001	0.001	0.001	0.002	ND						
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.001	0.001	0.001	0.001	ND						
64 Lake St., Du Page River	0.001	0.001	0.001	0.001	ND						
89 Walnut Lane, West Branch Du Page River	0.002	0.001	0.002	0.001	ND						
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.000	0.001	0.001	ND						
12 County Line Rd., Buffalo Creek	0.001	0.000	0.000	0.001	ND						
79 Higgins Rd., Salt Creek	0.002	0.000	0.001	0.001	ND						
80 Arlington Hts. Rd., Salt Creek	0.002	0.002	0.001	0.002	ND						
18 Devon Ave., Salt Creek	0.001	0.001	0.001	0.002	ND						
24 Wolf Road, Salt Creek	0.001	0.001	0.001	0.001	ND						
21 First Ave., Salt Creek	0.000	0.001	0.001	0.001	ND						
77 Elmhurst Rd., Higgins Creek	0.000	0.001	0.001	0.001	ND						
78 Wille Rd., Higgins Creek	0.005	0.001	0.002	0.001	ND						
13 County Line Rd., Des Plaines River	0.004	0.000	0.001	0.001	ND						
17 Oakton St., Des Plaines River	0.006	0.000	0.000	0.001	ND						
19 Belmont Ave., Des Plaines River	0.000	0.000	0.001	0.001	ND						
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.001	0.001	ND						
22 Ogden Ave., Des Plaines River	0.000	0.000	0.001	0.001	ND						
23 Willow Springs Rd., Des Plaines River	0.000	0.000	0.001	0.001	ND						
29 Lemont Stephen St., Des Plaines River	0.000	0.001	0.001	0.001	ND						

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-59

FLUORIDE MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
No. Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.572	0.609	0.820	0.470	0.626	0.682	0.635	0.811
31 County Line Rd., Md. Fork N. Branch	0.312	0.306	0.430	0.337	0.277	0.373	0.327	0.355	0.336	0.361	0.421
32 County line Rd., Skokie River	0.373	0.286	0.391	0.342	0.331	0.359	0.355	0.340	0.342	0.350	0.417
34 Dempster St., N.B. Chicago River	0.604	0.488	0.625	0.525	0.468	0.594	0.437	0.512	0.492	0.458	0.589
74 Outer Dr. Bridge, Chicago River	0.235	0.195	0.260	0.136	0.122	0.124	0.247	0.197	0.168	0.246	0.266
35 Central Ave., N. Shore Channel	0.184	0.158	0.200	0.187	0.134	0.110	0.215	0.165	0.145	0.211	0.287
36 Touhy Ave., N. Shore Channel	0.781	0.778	0.705	0.760	0.562	0.767	0.570	0.625	0.618	0.589	0.646
37 Wilson Ave., N.B. Chicago River	0.758	0.748	0.728	0.725	0.604	0.683	0.709	0.620	0.608	0.599	0.697
73 Diversey Ave., N.B. Chicago River	0.765	0.740	0.633	0.730	0.601	0.704	0.613	0.603	0.632	0.589	0.688
46 Grand Ave., N.B. Chicago River	0.767	0.697	0.752	0.712	0.621	0.744	0.665	0.656	0.651	0.613	0.772
39 Madison St., S.B. Chicago River	0.607	0.475	0.372	0.380	0.380	0.426	0.388	0.402	0.404	0.515	0.481
40 Damen Ave., S.B. Chicago River	0.537	0.468	0.456	0.427	0.408	0.526	0.423	0.412	0.409	0.457	0.548
75 Cicero Ave., Chgo. San. and Ship Canal	0.512	0.434	0.437	0.448	0.400	0.478	0.446	0.417	0.459	0.479	0.572
41 Harlem Ave., Chgo. San. and Ship Canal	0.743	0.705	0.701	0.667	0.594	0.691	0.592	0.623	0.613	0.678	0.777
42 Hwy. 83 and Chgo. San. and Ship Canal	0.778	0.742	0.726	0.724	0.635	0.726	0.647	0.658	0.670	0.671	0.793
48 Lemont Bridge, Stephen Street (Comp)	0.729	0.697	0.742	0.682	0.633	0.750	0.650	0.647	0.673	0.640	0.805
82 Lockport Trebler	0.865	0.791	0.725	0.744	0.789	0.765	0.699	0.627	0.624	0.748	0.689
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.237	0.198	0.267	0.177	0.213	0.401	0.272	0.295	0.328	0.305	0.286
54 Joe Orr Road, Thorn Creek	0.596	0.594	0.747	0.692	0.639	0.663	0.593	0.682	0.530	0.624	0.709
52 Wentworth Ave., Little Calumet River	1.980	1.061	1.534	1.146	1.507	1.912	1.009	0.679	0.641	0.927	1.372
57 135th and Ashland, Little Calumet River	0.722	0.730	0.784	0.628	0.747	0.772	0.563	0.547	0.537	0.768	0.825
86 Burnham Avenue, Grand Calumet River	0.711	0.845	0.940	0.927	0.935	0.851	0.697	0.760	0.712	0.744	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.397
49 92nd and Ewing Ave., Calumet River	0.135	0.216	0.187	0.136	0.125	0.153	0.236	0.174	ND	0.300	0.220
55 130th Street, Calumet River	0.301	0.243	0.238	0.199	0.207	0.223	0.343	0.272	0.273	0.319	0.291
56 Indiana Ave., Calumet River	0.317	0.422	0.439	0.314	0.281	0.446	0.437	0.383	0.354	0.349	0.437
76 Halsted Street, Little Cal. River	0.759	0.760	0.790	0.752	0.756	0.798	0.713	0.815	0.598	0.747	0.865
58 Ashland Ave., Cal-Sag Channel	0.631	0.750	0.809	0.799	0.685	0.705	0.600	0.752	0.558	0.700	0.868
59 Cicero Ave., Cal-Sag Channel	0.647	0.737	0.678	0.715	0.715	0.733	0.667	0.722	0.533	0.708	0.782
43 Hwy. 83 and Cal-Sag Channel	0.650	0.652	0.726	0.681	0.596	0.681	0.609	0.642	0.508	0.647	0.738
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.419	0.453	0.235	0.300	0.375	0.334	0.302	0.474	0.370	0.333	0.649
64 Lake St., Du Page River	0.598	1.061	0.538	0.557	0.657	0.680	0.495	0.720	0.656	0.605	0.949
89 Walnut Lane, West Branch Du Page River	0.719	0.844	0.650	0.572	0.718	0.702	0.533	0.708	0.737	0.627	0.952
90 Chicago-Elgin Rd., Poplar Creek	0.192	0.191	0.236	0.185	0.190	0.165	0.197	0.222	0.209	0.201	0.377
12 County Line Rd., Buffalo Creek	0.207	0.346	0.180	0.199	0.189	0.182	0.279	0.288	0.264	0.232	0.369
79 Higgins Rd., Salt Creek	0.282	0.327	0.203	0.215	0.217	0.220	0.255	0.370	0.246	0.251	0.324
80 Arlington Hts. Rd., Salt Creek	0.595	0.851	0.617	0.576	0.597	0.538	0.354	0.491	0.414	0.393	0.634
18 Devon Ave., Salt Creek	0.628	0.744	0.474	0.576	0.572	0.528	0.356	0.481	0.438	0.416	0.664
24 Wolf Road, Salt Creek	0.600	0.586	0.504	0.583	0.591	0.532	0.411	0.570	0.489	0.431	0.680
21 First Ave., Salt Creek	0.607	0.753	0.530	0.551	0.600	0.520	0.416	0.522	0.514	0.452	0.702
77 Elmhurst Rd., Higgins Creek	0.207	0.257	0.184	0.185	0.211	0.186	0.224	0.319	0.255	0.309	0.380
78 Wille Rd., Higgins Creek	0.745	0.773	0.750	0.635	0.813	0.833	0.663	0.769	0.655	0.602	0.909
13 County Line Rd., Des Plaines River	0.458	0.560	0.450	0.466	0.427	0.530	0.355	0.428	0.404	0.327	0.611
17 Oakton St., Des Plaines River	0.472	0.497	0.328	0.397	0.380	0.260	0.355	0.434	0.376	0.328	0.569
19 Belmont Ave., Des Plaines River	0.506	0.563	0.384	0.435	0.465	0.507	0.371	0.453	0.378	0.347	0.643
20 Roosevelt Road, Des Plaines River	0.455	0.546	0.384	0.451	0.455	0.512	0.339	0.461	0.379	0.338	0.658
22 Ogden Ave., Des Plaines River	0.514	0.524	0.418	0.446	0.483	0.502	0.363	0.488	0.393	0.387	0.641
23 Willow Springs Rd., Des Plaines River	0.488	0.485	0.415	0.478	0.483	0.480	0.379	0.457	0.441	0.361	0.603
29 Lemont Stephen St., Des Plaines River	0.514	0.543	0.429	0.461	0.525	0.498	0.391	0.446	0.419	0.398	0.582

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-60

TOTAL ORGANIC CARBON MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	10.75	8.56	8.00	16.56	11.33	13.17	19.83	17.64
31 County Line Rd., Md. Fork N. Branch	13.36	11.67	11.40	15.25	10.70	10.90	10.83	11.73	16.00	22.36	16.13
32 County line Rd., Skokie River	11.27	13.83	12.80	13.75	10.89	11.00	9.83	10.82	16.30	22.33	16.67
34 Dempster St., N.B. Chicago River	9.82	11.58	12.82	12.83	8.90	9.27	9.17	9.83	13.17	19.00	15.91
74 Outer Dr. Bridge, Chicago River	4.91	5.17	7.91	6.27	4.70	4.20	4.25	5.25	6.67	9.33	10.78
35 Central Ave., N. Shore Channel	6.30	7.00	7.70	9.11	5.00	4.25	4.33	4.91	6.45	15.45	5.13
36 Touhy Ave., N. Shore Channel	9.92	9.08	14.00	11.92	8.17	8.73	8.18	9.25	10.50	13.25	14.83
37 Wilson Ave., N.B. Chicago River	9.08	9.25	11.92	13.00	8.25	8.08	9.25	10.17	11.50	13.50	15.67
73 Diversey Ave., N.B. Chicago River	9.25	9.17	13.25	12.08	8.42	8.33	8.58	9.17	11.83	11.67	15.42
46 Grand Ave., N.B. Chicago River	8.83	9.00	10.36	12.17	9.00	8.91	11.17	9.25	9.42	14.33	15.75
39 Madison St., S.B. Chicago River	8.00	7.33	7.82	9.92	6.00	8.40	7.42	7.00	10.18	14.42	13.70
40 Damen Ave., S.B. Chicago River	8.00	7.83	10.67	10.50	7.00	6.75	7.33	7.75	9.58	13.58	14.33
75 Cicero Ave., Chgo. San. and Ship Canal	7.25	10.33	9.45	10.67	7.00	6.92	7.17	7.42	10.00	13.75	14.58
41 Harlem Ave., Chgo. San. and Ship Canal	8.45	13.67	11.18	12.17	7.67	8.25	8.58	8.83	10.83	14.82	15.67
42 Hwy. 83 and Chgo. San. and Ship Canal	8.83	11.83	15.00	12.33	7.83	8.80	8.67	8.83	11.58	14.17	16.50
48 Lemont Bridge, Stephen Street (Comp)	9.36	12.08	11.82	12.25	9.00	9.00	9.58	9.58	12.75	12.42	17.82
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	6.42	6.67	8.25	8.67	7.33	8.25	7.42	8.50	8.42	8.63	10.45
54 Joe Orr Road, Thorn Creek	10.25	11.17	13.50	16.17	12.00	11.92	12.08	12.17	11.00	14.58	17.55
52 Wentworth Ave., Little Calumet River	11.64	11.75	18.25	15.44	11.10	11.09	11.42	12.75	12.50	14.58	15.70
57 135th and Ashland, Little Calumet River	11.09	10.08	13.42	14.44	10.55	11.00	10.91	12.25	12.18	15.00	16.10
86 Burnham Avenue, Grand Calumet River	12.18	11.17	18.25	19.45	14.31	15.33	13.33	15.42	14.17	19.25	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.92
49 92nd and Ewing Ave., Calumet River	4.00	4.39	7.32	6.67	4.91	4.36	4.33	5.00	ND	6.00	7.80
55 130th Street, Calumet River	5.61	5.61	7.43	6.87	5.45	5.00	5.58	6.25	6.18	8.50	8.09
56 Indiana Ave., Calumet River	6.68	6.73	11.24	9.27	6.91	7.73	8.33	7.83	8.25	10.00	10.80
76 Halsted Street, Little Cal. River	9.26	9.13	13.52	13.75	9.42	9.92	10.00	10.92	13.83	13.33	15.92
58 Ashland Ave., Cal-Sag Channel	9.42	8.67	14.47	11.94	9.64	9.33	9.75	11.25	11.50	12.83	16.42
59 Cicero Ave., Cal-Sag Channel	9.74	10.00	13.38	12.75	11.08	10.42	10.25	11.33	11.83	12.83	17.58
43 Hwy. 83 and Cal-Sag Channel	9.37	9.65	12.29	11.88	11.08	10.00	10.00	10.75	11.00	12.67	15.75
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	12.67	14.43	14.40	15.18	12.00	13.30	12.83	14.00	12.82	14.82	16.88
64 Lake St., Du Page River	10.73	12.00	12.73	13.36	10.75	11.82	11.58	12.00	15.08	14.00	16.83
89 Walnut Lane, West Branch Du Page River	11.45	14.09	12.36	14.17	11.00	11.75	11.75	11.83	15.08	13.42	15.67
90 Chicago-Elgin Rd., Poplar Creek	8.70	9.90	10.88	13.73	11.40	10.27	10.82	10.91	15.27	11.83	14.89
12 County Line Rd., Buffalo Creek	10.00	12.30	12.20	15.17	11.92	11.10	11.67	11.50	15.33	13.33	16.40
79 Higgins Rd., Salt Creek	10.50	11.22	12.10	15.60	10.80	10.90	9.73	10.36	12.40	11.64	13.90
80 Arlington Hts. Rd., Salt Creek	9.82	11.00	12.27	13.58	10.50	9.90	9.92	10.58	12.83	11.58	14.25
18 Devon Ave., Salt Creek	9.91	10.82	12.55	14.09	10.08	9.92	10.00	10.67	9.92	11.75	13.91
24 Wolf Road, Salt Creek	8.64	10.50	10.09	13.33	9.75	9.55	9.33	10.17	9.92	11.25	15.00
21 First Ave., Salt Creek	8.27	10.00	9.90	12.67	9.42	9.55	8.83	10.18	11.42	11.50	15.09
77 Elmhurst Rd., Higgins Creek	10.82	11.00	11.00	14.50	10.50	11.09	8.50	10.55	11.18	15.00	14.80
78 Wille Rd., Higgins Creek	10.18	12.00	12.82	13.00	11.25	10.73	10.17	10.58	12.00	11.50	15.33
13 County Line Rd., Des Plaines River	9.73	11.00	12.80	13.33	11.67	10.44	10.50	12.00	13.33	13.17	15.91
17 Oakton St., Des Plaines River	9.82	10.82	12.80	13.50	11.00	9.67	10.00	11.64	12.58	12.75	15.20
19 Belmont Ave., Des Plaines River	9.55	11.18	11.73	14.00	10.75	10.83	10.00	11.92	12.42	13.67	18.00
20 Roosevelt Road, Des Plaines River	9.91	11.36	11.91	14.17	11.08	10.92	9.75	13.08	13.42	12.92	16.00
22 Ogden Ave., Des Plaines River	9.73	10.82	12.36	14.23	10.50	10.18	9.83	11.08	13.00	12.92	15.18
23 Willow Springs Rd., Des Plaines River	9.27	10.55	12.10	11.91	9.91	10.64	9.33	10.67	13.42	12.42	17.40
29 Lemont Stephen St., Des Plaines River	9.09	11.36	13.45	13.58	10.55	10.45	9.58	10.42	13.00	11.75	15.55

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-61

FECAL COLIFORM MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Geometric Means (#/100 ml)											
	99	98	97	96	95	94	93	92	91	90	89	
<u>Chicago River System</u>												
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	2228	2476	3098	3103	670	221	590	61	
31 County Line Rd., Md. Fork N. Branch	1697	1210	2139	1556	1815	2089	1799	1433	2756	1312	1769	
32 County line Rd., Skokie River	1919	1718	2903	2578	6993	8480	25862	5746	11391	7493	8826	
34 Dempster St., N.B. Chicago River	1498	878	769	1851	1507	1083	1459	1329	807	948	999	
74 Outer Dr. Bridge, Chicago River	23	62	37	38	59	54	47	34	19	48	22	
35 Central Ave., N. Shore Channel	130	241	88	366	642	107	200	32	116	1374	144	
36 Touhy Ave., N. Shore Channel	7866	6963	10671	12203	11261	12771	7266	10352	10058	15866	8809	
37 Wilson Ave., N.B. Chicago River	7686	7000	7034	7007	10755	10780	7966	12231	11722	17764	13480	
73 Diversey Ave., N.B. Chicago River	4607	3796	4454	4773	5378	8197	8528	8180	10083	15323	7766	
46 Grand Ave., N.B. Chicago River	1522	1636	3288	1711	2413	2986	5927	3029	2039	4257	3874	
39 Madison St., S.B. Chicago River	642	800	838	380	1491	1110	2188	1279	712	2887	1436	
40 Damen Ave., S.B. Chicago River	282	510	543	441	1444	369	1169	1307	538	1694	631	
75 Cicero Ave., Chgo. San. and Ship Canal	327	352	245	481	1037	352	1053	1317	302	901	565	
41 Harlem Ave., Chgo. San. and Ship Canal	4970	5427	5730	5361	3750	3231	8150	5962	4330	5955	5781	
42 Hwy. 83 and Chgo. San. and Ship Canal	886	1300	1941	951	1815	1407	1520	1716	732	888	1167	
48 Lemont Bridge, Stephen Street (Comp)	781	849	867	948	1160	1154	1197	2379	1022	1021	856	
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<u>Calumet River System</u>												
50 Wolf Lake, Burnham Ave.	15	13	18	9	13	18	15	16	35	19	13	
54 Joe Orr Road, Thorn Creek	2173	1132	6513	3287	3992	2555	3651	7213	24375	2580	628	
52 Wentworth Ave., Little Calumet River	1701	2033	1402	1242	1264	1416	4149	2452	9966	3777	3168	
57 135th and Ashland, Little Calumet River	5189	1724	2531	1683	1328	2040	3258	759	3678	2406	1369	
86 Burnham Avenue, Grand Calumet River	4100	4325	1849	3383	3551	2874	3904	2431	11975	6460	ND	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15094	
49 92nd and Ewing Ave., Calumet River	12	27	13	21	49	66	36	12	ND	10	38	
55 130th Street, Calumet River	23	26	30	47	54	118	40	17	37	58	29	
56 Indiana Ave., Calumet River	55	130	78	167	120	192	265	75	293	193	531	
76 Halsted Street, Little Cal. River	3792	3747	2927	7302	4806	6861	7964	6254	10473	10326	9949	
58 Ashland Ave., Cal-Sag Channel	2660	2220	4858	4189	6904	4932	5363	4224	7368	8342	5597	
59 Cicero Ave., Cal-Sag Channel	673	749	2165	2823	1964	3140	2911	2848	4999	5249	3434	
43 Hwy. 83 and Cal-Sag Channel	87	201	227	654	466	629	1054	437	1852	1059	707	
<u>Des Plaines River System</u>												
63 Longmeadow Lane, Du Page River	386	603	1624	6965	1113	1478	1575	445	604	902	236	
64 Lake St., Du Page River	658	1083	1564	6738	1750	3409	3522	973	1696	465	108	
89 Walnut Lane, West Branch Du Page River	590	666	1816	7295	1903	2319	2612	518	881	373	24	
90 Chicago-Elgin Rd., Poplar Creek	146	136	355	388	776	410	417	125	198	126	76	
12 County Line Rd., Buffalo Creek	230	186	504	722	402	718	301	97	360	147	178	
79 Higgins Rd., Salt Creek	45	52	97	307	69	112	1041	138	298	136	57	
80 Arlington Hts. Rd., Salt Creek	265	260	725	632	1050	552	490	640	465	354	35	
18 Devon Ave., Salt Creek	687	1154	845	2137	1431	2030	1248	894	1235	489	306	
24 Wolf Road, Salt Creek	468	1038	2552	2257	2166	1198	2655	705	1924	574	257	
21 First Ave., Salt Creek	1320	653	1211	2706	1070	1282	7453	1341	6146	2575	4434	
77 Elmhurst Rd., Higgins Creek	369	267	498	2404	1333	1016	795	120	1142	265	155	
78 Wille Rd., Higgins Creek	223	181	489	1019	399	804	858	100	437	244	24	
13 County Line Rd., Des Plaines River	350	392	735	945	698	637	780	82	384	260	148	
17 Oakton St., Des Plaines River	765	360	876	1652	613	894	1377	208	1054	307	2664	
19 Belmont Ave., Des Plaines River	1210	574	1780	4059	3442	2511	3047	963	8629	896	1950	
20 Roosevelt Road, Des Plaines River	1224	725	1979	3175	3101	1762	5012	1178	4915	3309	2879	
22 Ogden Ave., Des Plaines River	609	538	1722	4029	1666	848	5337	1162	3199	2355	1820	
23 Willow Springs Rd., Des Plaines River	367	423	533	1020	458	696	2856	678	1786	1430	1111	
29 Lemont Stephen St., Des Plaines River	270	241	921	405	305	325	2006	335	633	845	180	

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-62

CALCIUM MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	71.0	61.3	127.0	82.1	74.8	65.7	71.5	63.5
31 County Line Rd., Md. Fork N. Branch	69.1	71.3	65.5	73.1	62.6	76.6	70.6	75.6	69.8	70.8	70.5
32 County line Rd., Skokie River	70.0	82.2	76.6	83.8	64.9	79.8	79.2	79.5	74.6	78.5	80.8
34 Dempster St., N.B. Chicago River	64.7	69.0	70.2	71.5	62.2	72.8	65.5	74.8	68.3	66.5	62.0
74 Outer Dr. Bridge, Chicago River	39.9	41.1	39.3	40.7	37.2	39.8	37.1	37.5	37.4	40.5	35.4
35 Central Ave., N. Shore Channel	43.4	45.1	42.6	48.2	39.6	39.0	39.3	37.5	37.2	49.9	35.5
36 Touhy Ave., N. Shore Channel	56.5	58.7	55.3	56.0	55.7	59.0	55.2	53.1	52.1	56.2	50.7
37 Wilson Ave., N.B. Chicago River	57.8	62.8	58.6	59.8	58.4	60.6	58.9	55.8	53.1	56.0	51.4
73 Diversey Ave., N.B. Chicago River	58.5	62.5	58.2	61.1	58.0	61.5	57.6	57.4	56.4	57.2	53.3
46 Grand Ave., N.B. Chicago River	56.5	61.9	57.4	58.2	62.2	61.3	55.9	57.8	55.8	55.7	51.5
39 Madison St., S.B. Chicago River	55.7	54.3	48.5	52.1	45.2	50.2	48.8	47.6	48.0	54.1	45.8
40 Damen Ave., S.B. Chicago River	56.5	55.0	51.7	52.4	44.8	53.8	50.5	48.4	48.3	53.4	46.6
75 Cicero Ave., Chgo. San. and Ship Canal	54.4	52.8	52.6	50.7	48.5	54.6	49.8	47.2	50.4	53.3	47.6
41 Harlem Ave., Chgo. San. and Ship Canal	56.8	56.1	56.0	54.0	53.3	59.3	50.2	55.7	52.0	57.9	49.8
42 Hwy. 83 and Chgo. San. and Ship Canal	54.9	56.1	56.9	56.6	54.3	63.0	55.2	53.4	54.3	56.8	53.8
48 Lemont Bridge, Stephen Street (Comp)	57.4	57.8	61.5	60.2	57.0	63.7	59.0	58.6	60.4	60.4	58.4
82 Lockport Trebler	ND	ND	ND	ND	65.2	66.5	84.8	68.6	66.1	55.7	49.0
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	32.5	35.8	38.2	37.3	33.9	42.8	35.5	38.0	35.3	33.9	30.2
54 Joe Orr Road, Thorn Creek	75.6	76.9	80.0	84.1	81.3	87.8	84.0	82.8	79.4	77.8	70.2
52 Wentworth Ave., Little Calumet River	75.0	80.5	88.5	97.3	82.0	101.1	90.8	103.8	80.3	89.6	96.0
57 135th and Ashland, Little Calumet River	75.2	72.8	81.9	91.1	86.5	89.2	81.4	95.5	77.3	85.0	85.7
86 Burnham Avenue, Grand Calumet River	71.0	73.4	75.0	96.7	84.1	88.0	82.8	86.4	82.9	78.4	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	78.8
49 92nd and Ewing Ave., Calumet River	39.5	39.0	38.6	40.7	38.9	41.1	37.8	35.1	ND	43.0	37.6
55 130th Street, Calumet River	43.4	43.9	44.8	45.7	43.9	45.8	46.1	44.4	47.5	50.2	44.9
56 Indiana Ave., Calumet River	50.4	54.2	55.3	53.9	52.2	57.2	62.1	52.4	59.2	54.7	53.4
76 Halsted Street, Little Cal. River	62.1	63.7	66.8	70.3	68.8	71.7	73.7	69.2	71.3	70.9	67.3
58 Ashland Ave., Cal-Sag Channel	64.0	61.0	68.7	71.3	70.9	70.9	74.0	70.7	71.3	72.7	69.1
59 Cicero Ave., Cal-Sag Channel	65.2	66.6	68.8	73.1	73.8	69.2	75.1	74.0	67.6	71.8	68.7
43 Hwy. 83 and Cal-Sag Channel	66.1	65.7	70.5	72.1	70.6	73.2	75.8	71.8	67.2	70.8	67.3
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	76.9	76.9	79.3	65.6	84.4	76.8	74.6	83.2	61.0	78.6	77.4
64 Lake St., Du Page River	60.9	65.3	63.8	63.1	68.1	69.3	63.7	69.3	63.6	72.0	66.1
89 Walnut Lane, West Branch Du Page River	61.9	61.2	60.0	59.9	67.3	69.4	67.0	67.3	58.2	68.1	59.3
90 Chicago-Elgin Rd., Poplar Creek	74.1	80.4	70.6	78.2	79.4	80.5	69.8	80.9	72.5	77.7	76.1
12 County Line Rd., Buffalo Creek	70.5	75.2	73.5	75.5	82.1	86.8	76.2	82.7	72.5	81.4	77.4
79 Higgins Rd., Salt Creek	60.0	69.6	65.1	70.8	74.5	77.7	68.6	76.8	60.0	65.1	73.6
80 Arlington Hts. Rd., Salt Creek	58.4	63.1	63.7	67.6	68.8	69.5	63.8	69.1	65.8	65.3	63.4
18 Devon Ave., Salt Creek	60.1	63.7	67.2	66.1	68.3	66.8	62.8	69.0	66.2	65.8	64.2
24 Wolf Road, Salt Creek	66.9	85.3	69.0	77.9	76.8	76.5	71.0	80.8	78.5	80.7	84.2
21 First Ave., Salt Creek	65.1	75.8	68.0	75.3	76.8	74.5	66.5	82.3	77.6	80.9	83.5
77 Elmhurst Rd., Higgins Creek	67.5	79.4	66.5	68.8	75.4	74.4	61.6	80.2	57.1	67.6	73.8
78 Wille Rd., Higgins Creek	72.3	80.1	73.6	74.3	74.2	70.9	70.7	79.6	67.7	74.1	69.0
13 County Line Rd., Des Plaines River	60.5	73.9	70.7	75.5	78.3	83.3	69.5	77.8	77.5	79.3	82.0
17 Oakton St., Des Plaines River	63.7	76.4	70.0	77.1	75.3	70.3	67.2	76.8	71.7	73.3	81.0
19 Belmont Ave., Des Plaines River	62.1	73.4	71.4	75.3	79.5	140.5	65.4	79.1	71.0	74.8	79.8
20 Roosevelt Road, Des Plaines River	61.5	73.6	72.0	76.3	76.7	75.0	64.5	79.0	69.8	75.8	79.7
22 Ogden Ave., Des Plaines River	63.6	74.1	70.8	76.0	79.3	73.2	65.1	75.9	73.3	75.2	80.6
23 Willow Springs Rd., Des Plaines River	62.6	74.2	70.9	76.0	76.5	70.6	65.2	78.8	75.3	76.3	79.4
29 Lemont Stephen St., Des Plaines River	63.1	75.1	75.3	77.3	75.4	73.9	70.7	79.5	76.1	75.9	81.9

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-63

MAGNESIUM MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>		Annual Means (mg/L)										
No.	Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>												
30	County Line Rd., W. Fork N. Branch	ND	ND	ND	29.0	24.9	46.0	44.1	32.4	27.2	28.1	25.9
31	County Line Rd., Md. Fork N. Branch	31.6	33.3	30.8	33.5	28.0	29.3	30.8	34.5	28.2	29.5	33.1
32	County line Rd., Skokie River	31.4	37.8	35.2	39.3	26.6	32.4	36.8	36.5	31.8	30.5	37.4
34	Dempster St., N.B. Chicago River	27.8	31.9	31.7	30.7	26.7	27.9	27.4	33.7	28.5	27.7	27.0
74	Outer Dr. Bridge, Chicago River	13.4	14.3	12.9	13.6	11.8	11.7	12.2	12.2	11.6	12.4	11.4
35	Central Ave., N. Shore Channel	15.4	14.9	14.4	15.9	13.6	11.3	12.0	12.2	11.7	16.6	11.6
36	Touhy Ave., N. Shore Channel	19.9	21.8	20.3	19.8	19.2	18.3	19.3	17.8	17.8	18.8	17.5
37	Wilson Ave., N.B. Chicago River	21.5	24.9	22.3	22.0	20.9	19.6	21.4	20.3	18.7	19.2	18.3
73	Diversey Ave., N.B. Chicago River	21.6	24.4	21.7	22.5	20.8	19.5	20.5	21.2	19.5	19.8	19.3
46	Grand Ave., N.B. Chicago River	20.9	24.2	21.5	21.2	22.1	19.4	20.5	19.6	19.4	19.0	18.7
39	Madison St., S.B. Chicago River	20.5	20.7	17.4	18.3	15.8	14.0	17.8	15.8	16.5	19.1	15.9
40	Damen Ave., S.B. Chicago River	21.3	21.4	18.5	18.7	16.0	16.5	18.5	16.8	16.4	18.0	16.5
75	Cicero Ave., Chgo. San. and Ship Canal	20.3	20.0	18.7	17.8	16.8	16.5	18.3	16.5	17.1	18.1	17.0
41	Harlem Ave., Chgo. San. and Ship Canal	21.0	21.8	20.1	19.3	18.7	17.5	18.6	18.8	18.0	19.8	17.8
42	Hwy. 83 and Chgo. San. and Ship Canal	20.2	21.5	20.4	20.1	19.0	19.8	19.9	18.4	19.2	19.4	18.8
48	Lemont Bridge, Stephen Street (Comp)	21.2	22.4	22.6	21.6	19.7	20.8	23.3	20.4	21.5	20.3	20.6
82	Lockport Trebler	ND	ND	ND	ND	24.8	25.1	27.1	21.5	20.1	19.9	16.5
<u>Calumet River System</u>												
50	Wolf Lake, Burnham Ave.	13.2	13.3	12.9	13.0	11.6	13.0	11.9	12.3	11.8	11.3	11.7
54	Joe Orr Road, Thorn Creek	36.3	36.0	36.8	38.2	36.5	35.8	36.3	37.0	32.8	31.7	31.7
52	Wentworth Ave., Little Calumet River	40.1	34.0	36.8	38.2	32.0	38.5	36.2	42.2	30.8	35.3	41.0
57	135th and Ashland, Little Calumet River	33.8	32.2	36.5	40.1	36.0	36.0	33.1	41.6	31.9	34.5	38.2
86	Burnham Avenue, Grand Calumet River	54.5	59.8	51.2	69.4	77.3	80.8	52.6	55.3	60.6	48.4	ND
51	IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.8
49	92nd and Ewing Ave., Calumet River	13.4	13.4	12.9	13.2	12.1	12.1	11.9	11.4	ND	12.0	12.0
55	130th Street, Calumet River	15.0	14.9	15.4	14.6	13.5	13.5	15.8	14.6	15.5	17.2	14.5
56	Indiana Ave., Calumet River	21.6	27.8	26.5	24.0	23.1	28.0	29.4	22.4	25.9	20.5	18.7
76	Halsted Street, Little Cal. River	22.4	25.7	25.6	24.0	23.5	25.0	26.8	23.8	25.5	23.3	22.1
58	Ashland Ave., Cal-Sag Channel	24.5	24.3	26.5	25.9	25.0	26.6	29.1	25.3	26.2	24.8	24.3
59	Cicero Ave., Cal-Sag Channel	24.8	26.8	26.8	26.5	25.8	25.3	28.9	27.0	25.0	24.8	24.2
43	Hwy. 83 and Cal-Sag Channel	25.4	26.9	28.0	26.4	24.6	26.8	28.8	27.4	24.7	24.3	24.5
<u>Des Plaines River System</u>												
63	Longmeadow Lane, Du Page River	51.0	31.1	30.9	23.3	31.8	25.7	25.8	33.0	22.2	28.8	28.1
64	Lake St., Du Page River	24.0	25.2	25.6	23.5	25.5	22.1	23.2	26.5	23.7	27.2	25.0
89	Walnut Lane, West Branch Du Page River	24.7	23.2	23.3	22.2	24.9	22.1	24.8	26.3	21.7	25.3	22.1
90	Chicago-Elgin Rd., Poplar Creek	36.5	37.9	31.8	35.0	35.3	32.0	30.1	37.4	32.2	32.5	34.0
12	County Line Rd., Buffalo Creek	34.5	34.4	34.9	34.0	37.9	33.9	34.2	38.3	33.3	34.8	38.0
79	Higgins Rd., Salt Creek	27.8	30.6	28.9	30.1	31.7	29.5	27.8	33.2	24.4	26.5	32.9
80	Arlington Hts. Rd., Salt Creek	23.5	25.1	26.1	26.6	26.1	24.2	24.3	27.3	25.1	25.0	24.5
18	Devon Ave., Salt Creek	24.1	25.8	27.7	25.8	25.8	22.9	24.7	28.1	26.1	25.1	24.7
24	Wolf Road, Salt Creek	28.7	34.2	28.8	30.9	29.9	26.2	28.8	31.9	30.6	31.4	34.8
21	First Ave., Salt Creek	28.0	32.0	29.2	29.9	30.8	24.5	26.5	33.1	30.1	31.4	34.4
77	Elmhurst Rd., Higgins Creek	28.5	33.7	26.8	26.8	30.9	22.5	23.6	31.3	21.9	25.6	32.6
78	Wille Rd., Higgins Creek	28.2	29.5	28.6	28.7	27.8	21.8	26.8	28.8	24.4	26.8	25.2
13	County Line Rd., Des Plaines River	27.7	33.4	32.8	34.0	35.2	31.6	30.7	36.7	33.5	34.2	36.3
17	Oakton St., Des Plaines River	28.6	34.8	32.4	33.9	34.1	27.0	30.3	34.9	31.0	31.6	35.9
19	Belmont Ave., Des Plaines River	27.6	33.1	32.1	32.7	33.8	53.3	28.3	34.1	28.3	31.8	34.1
20	Roosevelt Road, Des Plaines River	27.6	34.2	32.3	33.3	33.1	27.3	27.4	34.5	29.8	32.2	33.7
22	Ogden Ave., Des Plaines River	28.4	32.7	31.0	32.8	33.3	25.8	27.8	33.4	29.4	31.3	34.0
23	Willow Springs Rd., Des Plaines River	28.3	33.4	32.0	33.0	33.5	25.8	27.5	33.8	30.7	31.7	34.0
29	Lemont Stephen St., Des Plaines River	28.0	33.8	33.3	32.9	31.4	27.0	29.7	34.5	31.0	31.3	35.0

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-64

HARDNESS MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	297	256	507	387	320	276	294	265
31 County Line Rd., Md. Fork N. Branch	303	315	290	321	272	312	303	331	290	298	312
32 County line Rd., Skokie River	304	361	336	371	272	333	349	349	317	322	356
34 Dempster St., N.B. Chicago River	276	304	306	305	265	297	276	325	288	280	266
74 Outer Dr. Bridge, Chicago River	155	162	151	158	142	148	143	144	141	152	135
35 Central Ave., N. Shore Channel	172	174	166	186	155	144	147	144	141	193	137
36 Touhy Ave., N. Shore Channel	223	236	221	222	218	223	217	206	203	218	199
37 Wilson Ave., N.B. Chicago River	233	260	238	240	232	232	235	223	209	219	204
73 Diversey Ave., N.B. Chicago River	235	257	234	245	230	234	228	231	221	224	212
46 Grand Ave., N.B. Chicago River	227	254	232	232	247	233	224	225	219	217	205
39 Madison St., S.B. Chicago River	223	221	192	205	178	183	195	184	188	214	180
40 Damen Ave., S.B. Chicago River	229	226	205	208	178	202	202	190	188	208	184
75 Cicero Ave., Chgo. San. and Ship Canal	219	214	208	200	190	204	200	186	196	208	189
41 Harlem Ave., Chgo. San. and Ship Canal	228	230	223	214	210	220	202	217	204	226	198
42 Hwy. 83 and Chgo. San. and Ship Canal	220	229	226	224	214	239	220	209	214	222	212
48 Lemont Bridge, Stephen Street (Comp)	230	237	247	239	223	245	243	230	239	235	231
82 Lockport Trebler	ND	ND	ND	ND	265	269	323	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	136	144	148	147	132	160	138	145	137	131	124
54 Joe Orr Road, Thorn Creek	338	340	351	367	353	366	359	359	334	325	306
52 Wentworth Ave., Little Calumet River	352	341	372	400	337	411	376	433	327	369	409
57 135th and Ashland, Little Calumet River	327	314	355	393	364	371	339	410	324	354	371
86 Burnham Avenue, Grand Calumet River	402	430	398	527	528	553	423	443	457	395	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	328
49 92nd and Ewing Ave., Calumet River	154	153	150	156	147	152	143	135	ND	157	143
55 130th Street, Calumet River	170	171	175	174	165	170	180	171	163	196	172
56 Indiana Ave., Calumet River	215	250	247	233	225	258	276	223	254	221	210
76 Halsted Street, Little Cal. River	247	265	272	274	269	282	294	271	283	273	259
58 Ashland Ave., Cal-Sag Channel	261	252	281	285	280	287	305	281	286	284	273
59 Cicero Ave., Cal-Sag Channel	265	276	282	292	291	277	307	296	272	281	271
43 Hwy. 83 and Cal-Sag Channel	270	275	291	289	277	293	308	292	269	277	269
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	402	320	325	260	342	298	293	344	244	315	309
64 Lake St., Du Page River	251	267	265	254	275	264	254	282	256	292	268
89 Walnut Lane, West Branch Du Page River	256	248	246	241	271	264	269	277	234	274	239
90 Chicago-Elgin Rd., Poplar Creek	335	357	307	339	344	333	298	356	314	328	330
12 County Line Rd., Buffalo Creek	318	329	327	329	361	356	331	364	318	346	350
79 Higgins Rd., Salt Creek	264	300	282	301	317	315	286	328	250	271	319
80 Arlington Hts. Rd., Salt Creek	242	261	266	278	279	273	259	285	268	266	259
18 Devon Ave., Salt Creek	249	265	282	271	277	261	258	288	273	268	262
24 Wolf Road, Salt Creek	285	354	291	322	315	299	296	333	322	331	354
21 First Ave., Salt Creek	278	321	290	311	318	287	275	342	318	331	350
77 Elmhurst Rd., Higgins Creek	286	337	276	282	316	278	251	329	233	274	319
78 Wille Rd., Higgins Creek	297	321	301	303	300	267	287	317	269	295	276
13 County Line Rd., Des Plaines River	265	322	312	329	340	338	300	345	331	339	354
17 Oakton St., Des Plaines River	277	334	308	332	328	287	293	336	307	313	350
19 Belmont Ave., Des Plaines River	269	320	310	323	338	570	280	338	294	318	340
20 Roosevelt Road, Des Plaines River	267	324	313	328	328	299	274	339	297	322	338
22 Ogden Ave., Des Plaines River	276	320	304	325	335	289	277	327	304	316	341
23 Willow Springs Rd., Des Plaines River	273	323	309	326	329	283	276	336	314	321	338
29 Lemont Stephen St., Des Plaines River	273	326	325	329	318	296	299	341	318	319	349

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-65

GROSS ALPHA RADIOACTIVITY MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (pCi/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	0.93	1.30	1.38	0.53
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	1.27	1.27	1.16	1.38
32 County line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	0.98	1.11	1.04	1.50
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.86	0.75	0.94	1.01
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	0.17	0.29	0.38	0.03
35 Central Ave., N. Shore Channel	3.40	ND	2.44	3.55	0.19	0.05	0.24	0.17	0.26	0.65	0.18
36 Touhy Ave., N. Shore Channel	3.49	ND	3.09	3.13	0.28	0.29	0.26	0.14	0.33	0.37	0.32
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.43	0.25	0.59	0.44
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.34	0.42	0.58	0.31
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.37	0.35	0.50	0.30
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.32	0.36	0.39	0.26
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	0.40	0.28	0.51	0.18
75 Cicero Ave., Chgo. San. and Ship Canal	3.96	ND	2.90	2.94	0.31	0.26	0.36	0.37	0.29	0.58	0.21
41 Harlem Ave., Chgo. San. and Ship Canal	3.64	ND	3.07	3.12	0.31	0.32	0.34	0.34	0.27	0.42	0.27
42 Hwy. 83 and Chgo. San. and Ship Canal	3.57	ND	3.31	3.47	0.22	0.23	0.63	0.38	0.26	0.52	0.16
48 Lemont Bridge, Stephen Street (Comp)	3.53	ND	3.06	3.35	0.49	0.34	0.49	0.45	0.41	0.74	0.30
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	ND	ND	ND	0.33	0.27	0.76	0.21
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	0.21	0.68	0.65	0.38
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	2.08	1.84	1.07	1.27
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	0.87	1.86	1.03	0.85
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	0.86	0.53	0.33	ND
51 IHRR.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	0.31	ND	0.43	0.12
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	0.32	0.43	0.30	0.35
56 Indiana Ave., Calumet River	3.51	ND	2.95	3.09	0.36	0.72	0.56	0.32	0.62	0.57	0.47
76 Halsted Street, Little Cal. River	3.70	ND	3.17	2.43	0.36	0.42	0.44	0.37	0.63	0.58	0.53
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	0.49	1.39	0.66	0.52
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	0.41	1.45	0.73	0.61
43 Hwy. 83 and Cal-Sag Channel	3.62	ND	3.59	3.32	0.38	0.79	1.07	0.53	1.27	1.71	0.71
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	4.14	ND	4.15	5.07	2.07	0.81	1.96	1.41	1.17	1.55	0.81
64 Lake St., Du Page River	ND	ND	ND	ND	ND	ND	ND	0.94	0.81	0.38	0.45
89 Walnut Lane, West Branch Du Page River	3.59	ND	3.87	3.53	0.51	0.50	0.72	0.55	0.71	0.53	0.26
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	0.65	0.86	0.79	0.96
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	1.14	1.46	1.64	1.10
79 Higgins Rd., Salt Creek	3.64	ND	4.00	4.71	1.16	0.91	1.25	1.11	1.43	1.38	1.12
80 Arlington Hts. Rd., Salt Creek	3.53	ND	4.04	3.55	0.39	0.64	0.64	0.63	0.69	0.87	0.31
18 Devon Ave., Salt Creek	ND	ND	2.79	ND	ND	ND	ND	0.88	0.69	0.81	0.63
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	1.25	1.73	1.33	1.46
21 First Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	1.24	1.76	1.30	1.18
77 Elmhurst Rd., Higgins Creek	3.77	ND	4.37	4.85	1.68	3.93	1.18	1.04	0.86	0.73	1.11
78 Wille Rd., Higgins Creek	3.69	ND	3.42	3.69	0.72	0.71	0.62	0.35	0.50	0.59	0.34
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.88	1.02	1.01	0.77
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.78	1.14	1.01	0.97
19 Belmont Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	1.03	0.91	1.02	0.72
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	0.96	0.89	1.01	0.96
22 Ogden Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	1.07	1.20	1.08	0.82
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	1.01	1.11	1.18	1.10
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	1.42	1.26	1.15	1.18

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-66

GROSS BETA RADIOACTIVITY MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (pCi/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	10.87	13.01	13.09	12.37
31 County Line Rd., Md. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	7.64	8.44	8.41	8.55
32 County line Rd., Skokie River	ND	ND	ND	ND	ND	ND	ND	7.95	8.09	8.53	8.06
34 Dempster St., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	9.70	8.09	8.31	9.43
74 Outer Dr. Bridge, Chicago River	ND	ND	ND	ND	ND	ND	ND	2.63	3.13	3.07	2.78
35 Central Ave., N. Shore Channel	5.97	ND	5.03	7.76	3.08	1.61	2.55	2.17	3.15	4.16	2.44
36 Touhy Ave., N. Shore Channel	8.46	ND	8.21	7.23	6.45	7.15	6.53	5.58	5.77	5.88	6.59
37 Wilson Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	6.35	5.94	6.20	5.55
73 Diversey Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	6.81	6.29	5.82	6.84
46 Grand Ave., N.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	6.53	5.79	5.40	5.91
39 Madison St., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	4.48	5.09	5.14	4.69
40 Damen Ave., S.B. Chicago River	ND	ND	ND	ND	ND	ND	ND	5.11	5.11	5.58	4.74
75 Cicero Ave., Chgo. San. and Ship Canal	7.36	ND	6.07	6.34	5.90	6.25	4.98	4.31	5.52	5.96	4.49
41 Harlem Ave., Chgo. San. and Ship Canal	9.18	ND	6.93	6.57	7.16	7.71	6.33	5.52	6.01	5.64	6.37
42 Hwy. 83 and Chgo. San. and Ship Canal	9.32	ND	7.70	6.64	6.97	7.85	6.31	5.34	6.81	6.17	7.00
48 Lemont Bridge, Stephen Street (Comp)	10.26	ND	7.06	7.22	7.34	8.32	7.83	7.14	7.19	7.73	6.47
82 Lockport Trebler	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	ND	ND	ND	ND	ND	ND	ND	3.67	4.75	5.04	4.58
54 Joe Orr Road, Thorn Creek	ND	ND	ND	ND	ND	ND	ND	12.03	11.40	10.53	10.29
52 Wentworth Ave., Little Calumet River	ND	ND	ND	ND	ND	ND	ND	14.01	14.36	10.62	13.19
57 135th and Ashland, Little Calumet River	ND	ND	ND	ND	ND	ND	ND	10.62	14.84	9.62	11.95
86 Burnham Avenue, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	15.87	13.11	11.90	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.36
49 92nd and Ewing Ave., Calumet River	ND	ND	ND	ND	ND	ND	ND	3.49	ND	5.44	2.48
55 130th Street, Calumet River	ND	ND	ND	ND	ND	ND	ND	5.12	6.35	7.77	8.34
56 Indiana Ave., Calumet River	7.07	ND	6.48	6.50	6.78	7.96	9.61	7.16	8.46	9.00	8.06
76 Halsted Street, Little Cal. River	9.25	ND	8.50	9.10	9.21	9.99	10.17	7.98	8.58	8.61	9.49
58 Ashland Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	8.62	12.25	9.43	9.96
59 Cicero Ave., Cal-Sag Channel	ND	ND	ND	ND	ND	ND	ND	9.66	12.01	10.25	10.54
43 Hwy. 83 and Cal-Sag Channel	8.97	ND	8.74	7.89	9.39	10.21	10.67	8.85	11.57	10.02	9.16
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	8.49	ND	8.53	8.86	11.98	9.12	7.43	10.83	7.99	9.58	11.24
64 Lake St., Du Page River	ND	ND	ND	ND	ND	ND	ND	10.25	11.34	9.37	11.18
89 Walnut Lane, West Branch Du Page River	10.64	ND	10.63	9.23	11.10	9.80	9.10	10.79	8.91	8.56	10.09
90 Chicago-Elgin Rd., Poplar Creek	ND	ND	ND	ND	ND	ND	ND	6.66	6.45	6.63	9.06
12 County Line Rd., Buffalo Creek	ND	ND	ND	ND	ND	ND	ND	10.26	10.68	11.43	12.07
79 Higgins Rd., Salt Creek	6.06	ND	7.21	8.02	8.41	9.52	7.92	8.67	8.21	7.50	9.09
80 Arlington Hts. Rd., Salt Creek	11.95	ND	8.84	7.79	9.91	10.02	7.34	9.01	8.36	7.76	10.35
18 Devon Ave., Salt Creek	ND	ND	11.00	ND	ND	ND	ND	10.05	8.60	8.67	10.56
24 Wolf Road, Salt Creek	ND	ND	ND	ND	ND	ND	ND	13.25	15.68	12.19	16.79
21 First Ave., Salt Creek	ND	ND	ND	ND	ND	ND	ND	11.05	14.27	11.65	15.41
77 Elmhurst Rd., Higgins Creek	7.18	ND	6.88	8.69	12.58	14.53	7.83	8.83	8.07	6.94	7.46
78 Wille Rd., Higgins Creek	16.83	ND	13.15	9.28	15.08	14.52	9.82	11.51	10.56	9.41	11.47
13 County Line Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	8.74	10.55	8.02	10.87
17 Oakton St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	10.59	10.53	8.70	11.36
19 Belmont Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	9.63	9.93	8.98	11.49
20 Roosevelt Road, Des Plaines River	ND	ND	ND	ND	ND	ND	ND	9.74	9.93	9.28	12.06
22 Ogden Ave., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	10.54	11.77	9.33	14.04
23 Willow Springs Rd., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	10.72	11.33	9.78	13.51
29 Lemont Stephen St., Des Plaines River	ND	ND	ND	ND	ND	ND	ND	10.27	11.79	10.09	12.57

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-67

TOTAL SILVER MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
No. Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.001	0.001	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
32 County line Rd., Skokie River	0.000	0.001	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.001	0.002	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.000	0.002	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.001	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.001	0.000	0.000	0.002	0.007	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.001	0.002	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.000	0.002	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.000	0.001	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.000	0.002	0.000	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.000	0.001	0.001	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.001	0.001	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.003	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.000	0.001	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.002	0.000
82 Lockport Trebler	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.000	0.004	0.002	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.000	0.002	0.000	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.000	0.002	0.000	0.003	0.006	0.000	0.000	0.000	0.000	0.000	0.000
57 135th and Ashland, Little Calumet River	0.000	0.000	0.001	0.003	0.004	0.002	0.000	0.000	0.003	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.000	0.001	0.002	0.003	0.005	0.000	0.000	0.000	0.000	0.000	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.000	0.002	0.005	0.003	0.005	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.000	0.001	0.000	0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000
56 Indiana Ave., Calumet River	0.000	0.000	0.000	0.003	0.005	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Cal. River	0.000	0.001	0.001	0.002	0.003	0.000	0.000	0.002	0.000	0.000	0.000
58 Ashland Ave., Cal-Sag Channel	0.000	0.002	0.002	0.002	0.004	0.001	0.000	0.000	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.000	0.002	0.006	0.003	0.004	0.000	0.000	0.000	0.000	0.000	0.000
43 Hwy. 83 and Cal-Sag Channel	0.000	0.002	0.003	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.000	0.000	0.006	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake St., Du Page River	0.000	0.001	0.006	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.005	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.001	0.007	0.000	0.008	0.001	0.000	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.006	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.001	0.006	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.000	0.000	0.005	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.000	0.000	0.006	0.000	0.006	0.001	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
21 First Ave., Salt Creek	0.000	0.000	0.002	0.001	0.006	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., Higgins Creek	0.000	0.000	0.006	0.001	0.007	0.001	0.000	0.000	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.000	0.002	0.000	0.008	0.001	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.000	0.005	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.000	0.000	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
19 Belmont Ave., Des Plaines River	0.000	0.000	0.002	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.002	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.001	0.000	0.007	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.000	0.000	0.005	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.000	0.000	0.002	0.000	0.007	0.001	0.000	0.000	0.000	0.000	0.000

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-68

TOTAL ARSENIC MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32 County Line Rd., Skokie River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. 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 Ave., N. Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. 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 Ave., N.B. 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 St., S.B. 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 Ave., S.B. Chicago River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and 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 Ave., Chgo. San. and 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 Hwy. 83 and Chgo. San. and 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 Lemont Bridge, Stephen Street (Comp)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	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	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000
57 135th and Ashland, 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
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	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.027	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56 Indiana Ave., 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 Cal. 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 Ave., 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 Ave., 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 Hwy. 83 and Cal-Sag Channel	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, 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 St., 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
89 Walnut Lane, West Branch Du Page River	0.000	0.017	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79 Higgins Rd., 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 Hts. Rd., 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 Ave., Salt Creek	0.000	0.022	0.000	0.000	0.000	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000
21 First Ave., Salt Creek	0.000	0.000	0.000	0.001	0.008	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., 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 Rd., Higgins Creek	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton St., 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 Ave., Des Plaines River	0.000	0.020	0.000	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 Ave., 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
23 Willow Springs Rd., 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 Lemont Stephen St., Des Plaines River	0.000	0.025	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-69

TOTAL BARIUM MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.038	0.030	0.050	0.067	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.039	0.040	0.039	0.041	0.043	0.010	0.000	0.000	0.000	0.000	0.063
32 County line Rd., Skokie River	0.040	0.044	0.044	0.046	0.046	0.022	0.000	0.000	0.025	0.067	
34 Dempster St., N.B. Chicago River	0.032	0.034	0.036	0.036	0.024	0.000	0.000	0.000	0.000	0.036	
74 Outer Dr. Bridge, Chicago River	0.020	0.021	0.022	0.022	0.018	0.000	0.000	0.000	0.025	0.000	
35 Central Ave., N. Shore Channel	0.023	0.022	0.024	0.026	0.023	0.000	0.000	0.000	0.000	0.000	
36 Touhy Ave., N. Shore Channel	0.020	0.021	0.022	0.020	0.016	0.000	0.000	0.000	0.025	0.083	
37 Wilson Ave., N.B. Chicago River	0.022	0.040	0.023	0.023	0.016	0.000	0.000	0.000	0.000	0.000	
73 Diversey Ave., N.B. Chicago River	0.048	0.023	0.023	0.023	0.017	0.000	0.000	0.000	0.000	0.025	
46 Grand Ave., N.B. Chicago River	0.021	0.023	0.025	0.023	0.013	0.000	0.000	0.000	0.033	0.033	
39 Madison St., S.B. Chicago River	0.024	0.024	0.023	0.023	0.027	0.000	0.000	0.000	0.033	0.000	
40 Damen Ave., S.B. Chicago River	0.024	0.025	0.023	0.024	0.024	0.000	0.000	0.000	0.025	0.000	
75 Cicero Ave., Chgo. San. and Ship Canal	0.023	0.023	0.023	0.023	0.016	0.000	0.000	0.000	0.000	0.000	
41 Harlem Ave., Chgo. San. and Ship Canal	0.019	0.020	0.022	0.021	0.014	0.000	0.000	0.000	0.045	0.000	
42 Hwy. 83 and Chgo. San. and Ship Canal	0.018	0.019	0.024	0.021	0.014	0.000	0.000	0.000	0.000	0.025	
48 Lemont Bridge, Stephen Street (Comp)	0.018	0.020	0.023	0.024	0.014	0.000	0.000	0.000	0.000	0.000	
82 Lockport Trebler	0.032	0.036	0.039	0.032	0.031	0.025	0.034	0.009	0.000	0.000	
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.024	0.027	0.028	0.028	0.022	0.008	0.000	0.000	0.025	0.000	
54 Joe Orr Road, Thorn Creek	0.023	0.025	0.025	0.023	0.016	0.000	0.000	0.000	0.058	0.027	
52 Wentworth Ave., Little Calumet River	0.037	0.045	0.045	0.051	0.036	0.009	0.000	0.000	0.000	0.080	
57 135th and Ashland, Little Calumet River	0.033	0.036	0.037	0.038	0.030	0.000	0.000	0.000	0.000	0.050	
86 Burnham Avenue, Grand Calumet River	0.026	0.027	0.028	0.116	0.053	0.000	0.000	0.000	0.000	ND	
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.024	0.019	0.022	0.023	0.019	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.029	0.027	0.027	0.026	0.023	0.000	0.000	0.000	0.025	0.000	
56 Indiana Ave., Calumet River	0.032	0.028	0.032	0.032	0.027	0.000	0.000	0.000	0.000	0.000	
76 Halsted Street, Little Cal. River	0.020	0.018	0.023	0.023	0.017	0.000	0.000	0.000	0.000	0.000	
58 Ashland Ave., Cal-Sag Channel	0.023	0.021	0.032	0.027	0.022	0.000	0.000	0.000	0.000	0.000	
59 Cicero Ave., Cal-Sag Channel	0.023	0.024	0.027	0.028	0.020	0.000	0.000	0.000	0.000	0.000	
43 Hwy. 83 and Cal-Sag Channel	0.024	0.026	0.025	0.031	0.020	0.000	0.000	0.000	0.025	0.025	
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.045	0.049	0.056	0.055	0.061	0.000	0.000	0.000	0.055	0.063	
64 Lake St., Du Page River	0.032	0.032	0.035	0.038	0.047	0.000	0.000	0.000	0.075	0.058	
89 Walnut Lane, West Branch Du Page River	0.025	0.023	0.022	0.031	0.035	0.008	0.000	0.000	0.000	0.000	
90 Chicago-Elgin Rd., Poplar Creek	0.101	0.063	0.071	0.085	0.067	0.018	0.000	0.000	0.033	0.000	
12 County Line Rd., Buffalo Creek	0.048	0.046	0.048	0.052	0.054	0.030	0.017	0.000	0.000	0.060	
79 Higgins Rd., Salt Creek	0.041	0.044	0.045	0.050	0.055	0.020	0.000	0.000	0.000	0.090	
80 Arlington Hts. Rd., Salt Creek	0.023	0.023	0.029	0.030	0.021	0.000	0.000	0.000	0.042	0.000	
18 Devon Ave., Salt Creek	0.026	0.023	0.035	0.030	0.021	0.000	0.000	0.000	0.000	0.027	
24 Wolf Road, Salt Creek	0.030	0.035	0.034	0.037	0.029	0.009	0.000	0.000	0.092	0.045	
21 First Ave., Salt Creek	0.030	0.033	0.034	0.035	0.030	0.000	0.000	0.000	0.058	0.027	
77 Elmhurst Rd., Higgins Creek	0.054	0.060	0.054	0.057	0.055	0.036	0.000	0.000	0.000	0.060	
78 Wille Rd., Higgins Creek	0.022	0.027	0.027	0.036	0.024	0.000	0.000	0.000	0.042	0.000	
13 County Line Rd., Des Plaines River	0.060	0.037	0.036	0.037	0.033	0.011	0.000	0.000	0.033	0.000	
17 Oakton St., Des Plaines River	0.035	0.040	0.038	0.041	0.045	0.000	0.000	0.000	0.000	0.030	
19 Belmont Ave., Des Plaines River	0.032	0.037	0.038	0.039	0.043	0.000	0.000	0.000	0.000	0.055	
20 Roosevelt Road, Des Plaines River	0.033	0.038	0.038	0.038	0.032	0.000	0.000	0.000	0.033	0.027	
22 Ogden Ave., Des Plaines River	0.032	0.035	0.039	0.036	0.033	0.000	0.000	0.000	0.000	0.027	
23 Willow Springs Rd., Des Plaines River	0.060	0.036	0.038	0.037	0.034	0.000	0.000	0.000	0.000	0.030	
29 Lemont Stephen St., Des Plaines River	0.059	0.038	0.038	0.038	0.029	0.000	0.000	0.000	0.033	0.000	

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-70

BORON MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	No.	Name	Annual Means (mg/L)										
			99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>													
30	County Line Rd., W. Fork N. Branch		ND	ND	ND	0.327	ND						
31	County Line Rd., Md. Fork N. Branch		0.132	0.113	0.133	0.164	ND						
32	County line Rd., Skokie River		0.125	0.155	0.188	0.199	ND						
34	Dempster St., N.B. Chicago River		0.178	0.167	0.227	0.234	ND						
74	Outer Dr. Bridge, Chicago River		0.025	0.047	0.055	0.092	ND						
35	Central Ave., N. Shore Channel		0.015	0.039	0.064	0.117	ND						
36	Touhy Ave., N. Shore Channel		0.207	0.215	0.274	0.233	ND						
37	Wilson Ave., N.B. Chicago River		0.188	0.180	0.243	0.233	ND						
73	Diversey Ave., N.B. Chicago River		0.192	0.175	0.227	0.233	ND						
46	Grand Ave., N.B. Chicago River		0.189	0.181	0.223	0.230	ND						
39	Madison St., S.B. Chicago River		0.156	0.120	0.155	0.172	ND						
40	Damen Ave., S.B. Chicago River		0.141	0.119	0.192	0.168	ND						
75	Cicero Ave., Chgo. San. and Ship Canal		0.132	0.113	0.188	0.169	ND						
41	Harlem Ave., Chgo. San. and Ship Canal		0.175	0.172	0.243	0.210	ND						
42	Hwy. 83 and Chgo. San. and Ship Canal		0.183	0.188	0.262	0.232	ND						
48	Lemont Bridge, Stephen Street (Comp)		0.197	0.185	0.280	0.229	ND						
82	Lockport Trebler		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>Calumet River System</u>													
50	Wolf Lake, Burnham Ave.		0.035	0.096	0.153	0.169	ND						
54	Joe Orr Road, Thorn Creek		0.353	0.357	0.428	0.413	ND						
52	Wentworth Ave., Little Calumet River		0.235	0.238	0.345	0.296	ND						
57	135th and Ashland, Little Calumet River		0.267	0.259	0.421	0.329	ND						
86	Burnham Avenue, Grand Calumet River		0.386	0.338	0.387	0.506	ND						
51	IHB R.R. Bridge, Grand Calumet River		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49	92nd and Ewing Ave., Calumet River		0.002	0.052	0.092	0.100	ND						
55	130th Street, Calumet River		0.061	0.091	0.150	0.140	ND						
56	Indiana Ave., Calumet River		0.123	0.168	0.214	0.189	ND						
76	Halsted Street, Little Cal. River		0.244	0.252	0.293	0.340	ND						
58	Ashland Ave., Cal-Sag Channel		0.227	0.260	0.332	0.261	ND						
59	Cicero Ave., Cal-Sag Channel		0.230	0.257	0.298	0.279	ND						
43	Hwy. 83 and Cal-Sag Channel		0.235	0.243	0.298	0.283	ND						
<u>Des Plaines River System</u>													
63	Longmeadow Lane, Du Page River		0.128	0.180	0.223	0.197	ND						
64	Lake St., Du Page River		0.238	0.266	0.309	0.296	ND						
89	Walnut Lane, West Branch Du Page River		0.311	0.327	0.393	0.339	ND						
90	Chicago-Elgin Rd., Poplar Creek		0.012	0.058	0.143	0.158	ND						
12	County Line Rd., Buffalo Creek		0.117	0.099	0.173	0.184	ND						
79	Higgins Rd., Salt Creek		0.071	0.092	0.169	0.186	ND						
80	Arlington Hts. Rd., Salt Creek		0.225	0.233	0.278	0.279	ND						
18	Devon Ave., Salt Creek		0.213	0.218	0.257	0.268	ND						
24	Wolf Road, Salt Creek		0.203	0.195	0.273	0.277	ND						
21	First Ave., Salt Creek		0.200	0.233	0.306	0.267	ND						
77	Elmhurst Rd., Higgins Creek		0.124	0.148	0.202	0.237	ND						
78	Wille Rd., Higgins Creek		0.376	0.373	0.436	0.404	ND						
13	County Line Rd., Des Plaines River		0.166	0.176	0.250	0.297	ND						
17	Oakton St., Des Plaines River		0.166	0.171	0.235	0.296	ND						
19	Belmont Ave., Des Plaines River		0.215	0.207	0.271	0.238	ND						
20	Roosevelt Road, Des Plaines River		0.205	0.213	0.285	0.313	ND						
22	Ogden Ave., Des Plaines River		0.201	0.213	0.321	0.308	ND						
23	Willow Springs Rd., Des Plaines River		0.196	0.207	0.317	0.279	ND						
29	Lemont Stephen St., Des Plaines River		0.185	0.201	0.324	0.274	ND						

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-71

TOTAL CADMIUM MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.001	0.040	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.001	0.004	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000
32 County line Rd., Skokie River	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.000	0.001	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.008	0.003	0.003
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	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
52 Wentworth Ave., 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
57 135th and Ashland, 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
86 Burnham Avenue, Grand Calumet River	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.000	0.000	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
56 Indiana Ave., 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 Cal. 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 Ave., Cal-Sag Channel	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Ave., 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 Hwy. 83 and Cal-Sag Channel	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.001	0.001	0.001	0.000	0.002	0.002	0.000	0.000	0.000	0.000	0.000
64 Lake St., Du Page River	0.000	0.001	0.000	0.000	0.001	0.001	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	0.001	0.001	0.000	0.000	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.000	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.001	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000
21 First Ave., Salt Creek	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., Higgins Creek	0.000	0.002	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.000	0.001	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.000	0.001	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.000	0.000
19 Belmont Ave., 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
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Rd., 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
29 Lemont Stephen St., 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

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-72

TOTAL COPPER MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.020	0.024	0.245	0.004	0.005	0.003	0.002	0.003
31 County Line Rd., Md. Fork N. Branch	0.003	0.007	0.007	0.002	0.012	0.001	0.002	0.001	0.000	0.000	0.000
32 County line Rd., Skokie River	0.004	0.007	0.005	0.006	0.013	0.001	0.002	0.003	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.003	0.007	0.008	0.005	0.012	0.002	0.002	0.001	0.000	0.000	0.003
74 Outer Dr. Bridge, Chicago River	0.002	0.005	0.005	0.002	0.007	0.000	0.000	0.002	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.001	0.004	0.004	0.002	0.013	0.000	0.002	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.003	0.004	0.004	0.005	0.007	0.002	0.003	0.001	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.002	0.005	0.003	0.005	0.007	0.001	0.001	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.003	0.007	0.006	0.007	0.008	0.001	0.002	0.001	0.000	0.004	0.000
46 Grand Ave., N.B. Chicago River	0.006	0.006	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.002	0.000
39 Madison St., S.B. Chicago River	0.001	0.005	0.004	0.006	0.008	0.000	0.000	0.000	0.000	0.003	0.003
40 Damen Ave., S.B. Chicago River	0.002	0.005	0.006	0.004	0.011	0.000	0.002	0.002	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.002	0.004	0.007	0.009	0.008	0.000	0.001	0.001	0.000	0.002	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.001	0.004	0.003	0.007	0.006	0.001	0.000	0.001	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.001	0.004	0.004	0.007	0.006	0.003	0.002	0.000	0.000	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.001	0.003	0.003	0.006	0.006	0.000	0.000	0.002	0.000	0.002	0.000
82 Lockport Trebler	0.049	0.110	0.051	0.032	0.023	0.006	ND	0.006	0.012	0.016	0.013
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.001	0.005	0.004	0.010	0.007	0.001	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.001	0.006	0.005	0.004	0.006	0.001	0.000	0.001	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.004	0.009	0.009	0.008	0.012	0.005	0.002	0.004	0.000	0.000	0.000
57 135th and Ashland, Little Calumet River	0.003	0.007	0.007	0.002	0.006	0.000	0.000	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.013	0.018	0.013	0.020	0.030	0.008	0.002	0.019	0.000	0.007	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
49 92nd and Ewing Ave., Calumet River	0.007	0.007	0.005	0.003	0.015	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.001	0.006	0.005	0.002	0.008	0.002	0.001	0.002	0.000	0.000	0.000
56 Indiana Ave., Calumet River	0.003	0.007	0.005	0.005	0.007	0.002	0.001	0.000	0.000	0.000	0.000
76 Halsted Street, Little Cal. River	0.000	0.004	0.003	0.010	0.007	0.002	0.000	0.000	0.002	0.000	0.000
58 Ashland Ave., Cal-Sag Channel	0.001	0.006	0.005	0.003	0.008	0.002	0.002	0.001	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.002	0.008	0.005	0.004	0.005	0.002	0.002	0.002	0.000	0.000	0.000
43 Hwy. 83 and Cal-Sag Channel	0.001	0.007	0.007	0.004	0.007	0.003	0.000	0.001	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.002	0.005	0.011	0.009	0.020	0.002	0.006	0.001	0.000	0.000	0.000
64 Lake St., Du Page River	0.002	0.010	0.008	0.011	0.013	0.004	0.006	0.007	0.002	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.006	0.007	0.010	0.011	0.015	0.004	0.006	0.007	0.003	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.005	0.004	0.006	0.011	0.004	0.003	0.006	0.000	0.002	0.000
12 County Line Rd., Buffalo Creek	0.001	0.005	0.006	0.008	0.007	0.007	0.002	0.001	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.003	0.005	0.005	0.010	0.002	0.005	0.001	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.003	0.005	0.006	0.006	0.007	0.004	0.005	0.001	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.004	0.004	0.007	0.007	0.008	0.003	0.001	0.001	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.004	0.005	0.006	0.012	0.009	0.009	0.007	0.001	0.002	0.000	0.000
21 First Ave., Salt Creek	0.005	0.007	0.006	0.013	0.012	0.007	0.016	0.000	0.000	0.000	0.003
77 Elmhurst Rd., Higgins Creek	0.003	0.007	0.005	0.011	0.007	0.006	0.007	0.004	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.013	0.004	0.007	0.007	0.003	0.003	0.000	0.000	0.000	0.002
13 County Line Rd., Des Plaines River	0.001	0.006	0.007	0.007	0.010	0.001	0.002	0.001	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.001	0.007	0.002	0.006	0.007	0.010	0.004	0.001	0.000	0.000	0.003
19 Belmont Ave., Des Plaines River	0.001	0.007	0.005	0.007	0.008	0.004	0.005	0.001	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.002	0.007	0.005	0.008	0.008	0.006	0.006	0.001	0.000	0.000	0.003
22 Ogden Ave., Des Plaines River	0.001	0.006	0.009	0.008	0.010	0.005	0.007	0.002	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.001	0.005	0.005	0.009	0.007	0.007	0.007	0.003	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.002	0.005	0.004	0.011	0.009	0.007	0.008	0.003	0.000	0.000	0.003

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-73

TOTAL CHROMIUM MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.018	0.155	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.001	0.005	0.000	0.001	0.011	0.004	0.000	0.000	0.000	0.000	0.000
32 County Line Rd., Skokie River	0.001	0.000	0.000	0.000	0.013	0.004	0.000	0.000	0.003	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.000	0.000	0.001	0.012	0.007	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.001	0.004	0.011	0.002	0.000	0.002	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.001	0.000	0.000	0.000	0.010	0.005	0.007	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.000	0.000	0.000	0.001	0.013	0.011	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.000	0.000	0.002	0.011	0.000	0.000	0.000	0.000	0.000	0.006
73 Diversey Ave., N.B. Chicago River	0.000	0.000	0.000	0.001	0.009	0.003	0.000	0.000	0.000	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.000	0.000	0.002	0.001	0.007	0.003	0.000	0.000	0.000	0.000	0.006
39 Madison St., S.B. Chicago River	0.002	0.002	0.000	0.003	0.009	0.010	0.000	0.000	0.000	0.000	0.005
40 Damen Ave., S.B. Chicago River	0.002	0.002	0.001	0.003	0.011	0.005	0.000	0.002	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.001	0.000	0.000	0.002	0.009	0.000	0.000	0.000	0.000	0.000	0.002
41 Harlem Ave., Chgo. San. and Ship Canal	0.001	0.001	0.000	0.004	0.008	0.002	0.000	0.000	0.002	0.000	0.005
42 Hwy. 83 and Chgo. San. and Ship Canal	0.001	0.000	0.001	0.007	0.012	0.000	0.000	0.000	0.000	0.000	0.006
48 Lemont Bridge, Stephen Street (Comp)	0.001	0.000	0.000	0.004	0.009	0.004	0.000	0.000	0.000	0.000	0.008
82 Lockport Trebler	0.006	0.003	0.002	0.002	0.000	0.000	0.002	0.002	0.004	0.006	0.006
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.000	0.000	0.000	0.002	0.006	0.001	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.001	0.000	0.002	0.002	0.006	0.002	0.000	0.000	0.003	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.001	0.000	0.000	0.003	0.006	0.000	0.000	0.000	0.002	0.000	0.000
57 135th and Ashland, Little Calumet River	0.001	0.000	0.000	0.001	0.005	0.000	0.002	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.002	0.005	0.003	0.035	0.018	0.001	0.000	0.000	0.000	0.002	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.002	0.002	0.000	0.002	0.005	0.002	0.000	0.000	ND	0.000	0.010
55 130th Street, Calumet River	0.001	0.000	0.001	0.001	0.005	0.000	0.000	0.000	0.000	0.003	0.000
56 Indiana Ave., Calumet River	0.001	0.000	0.000	0.003	0.005	0.001	0.000	0.000	0.000	0.003	0.000
76 Halsted Street, Little Cal. River	0.001	0.000	0.000	0.000	0.005	0.001	0.000	0.002	0.005	0.000	0.002
58 Ashland Ave., Cal-Sag Channel	0.001	0.004	0.000	0.002	0.004	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.002	0.000	0.000	0.005	0.006	0.000	0.000	0.000	0.000	0.000	0.005
43 Hwy. 83 and Cal-Sag Channel	0.002	0.000	0.002	0.004	0.007	0.001	0.000	0.000	0.000	0.000	0.002
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.002	0.002	0.001	0.002	0.016	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake St., Du Page River	0.000	0.001	0.001	0.000	0.011	0.000	0.001	0.000	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.000	0.002	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.000	0.002	0.000	0.015	0.000	0.000	0.000	0.000	0.002	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.000	0.001	0.011	0.000	0.000	0.000	0.000	0.004	0.003
79 Higgins Rd., Salt Creek	0.000	0.000	0.000	0.001	0.014	0.001	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.001	0.002	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.005	0.000
18 Devon Ave., Salt Creek	0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.004	0.004
24 Wolf Road, Salt Creek	0.000	0.000	0.001	0.002	0.009	0.000	0.000	0.000	0.002	0.008	0.000
21 First Ave., Salt Creek	0.001	0.000	0.000	0.001	0.009	0.000	0.000	0.000	0.000	0.007	0.003
77 Elmhurst Rd., Higgins Creek	0.000	0.002	0.001	0.001	0.009	0.000	0.000	0.000	0.000	0.000	0.003
78 Wille Rd., Higgins Creek	0.000	0.004	0.001	0.002	0.013	0.000	0.000	0.000	0.000	0.005	0.008
13 County Line Rd., Des Plaines River	0.000	0.000	0.001	0.001	0.007	0.000	0.000	0.000	0.000	0.002	0.000
17 Oakton St., Des Plaines River	0.000	0.001	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.018	0.000
19 Belmont Ave., Des Plaines River	0.000	0.001	0.001	0.001	0.011	0.000	0.000	0.000	0.004	0.005	0.000
20 Roosevelt Road, Des Plaines River	0.001	0.000	0.000	0.001	0.009	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.000	0.001	0.002	0.001	0.011	0.000	0.000	0.000	0.000	0.000	0.003
23 Willow Springs Rd., Des Plaines River	0.000	0.000	0.001	0.001	0.010	0.000	0.000	0.000	0.002	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.000	0.000	0.000	0.000	0.008	0.000	0.005	0.000	0.000	0.000	0.003

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-74

TOTAL IRON MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
No. Name	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.690	0.626	0.500	1.100	0.683	0.750	0.433	0.236
31 County Line Rd., Md. Fork N. Branch	0.734	0.526	0.710	0.786	0.782	0.610	0.725	0.655	0.560	0.518	0.850
32 County line Rd., Skokie River	0.652	0.575	0.492	0.620	0.643	0.500	0.708	0.709	0.680	0.667	0.878
34 Dempster St., N.B. Chicago River	0.521	0.488	0.431	0.435	0.546	0.382	0.475	0.550	0.300	0.458	0.518
74 Outer Dr. Bridge, Chicago River	0.102	0.098	0.133	0.137	0.149	0.080	0.108	0.067	0.033	0.050	0.000
35 Central Ave., N. Shore Channel	0.183	0.180	0.181	0.198	0.249	0.125	0.183	0.173	0.055	0.245	0.038
36 Touhy Ave., N. Shore Channel	0.136	0.107	0.101	0.139	0.137	0.118	0.118	0.075	0.080	0.000	0.075
37 Wilson Ave., N.B. Chicago River	0.210	0.178	0.152	0.203	0.233	0.158	0.150	0.150	0.058	0.117	0.075
73 Diversey Ave., N.B. Chicago River	0.273	0.248	0.208	0.268	0.261	0.183	0.283	0.158	0.075	0.258	0.092
46 Grand Ave., N.B. Chicago River	0.282	0.222	0.231	0.236	0.290	0.250	0.275	0.300	0.100	0.217	0.183
39 Madison St., S.B. Chicago River	0.237	0.199	0.165	0.222	0.250	0.140	0.258	0.142	0.033	0.158	0.091
40 Damen Ave., S.B. Chicago River	0.269	0.212	0.223	0.246	0.447	0.183	0.258	0.250	0.175	0.200	0.158
75 Cicero Ave., Chgo. San. and Ship Canal	0.313	0.225	0.243	0.268	0.278	0.225	0.275	0.217	0.117	0.158	0.117
41 Harlem Ave., Chgo. San. and Ship Canal	0.210	0.141	0.153	0.161	0.239	0.192	0.167	0.183	0.067	0.100	0.083
42 Hwy. 83 and Chgo. San. and Ship Canal	0.170	0.132	0.224	0.173	0.274	0.364	0.167	0.158	0.075	0.167	0.208
48 Lemont Bridge, Stephen Street (Comp)	0.222	0.261	0.277	0.333	0.370	0.283	0.350	0.492	0.200	0.300	0.282
82 Lockport Trebler	1.125	1.165	1.386	0.778	0.373	0.352	0.622	0.480	0.913	0.774	0.448
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.118	0.134	0.081	0.114	0.115	0.183	0.092	0.133	0.075	0.083	0.027
54 Joe Orr Road, Thorn Creek	0.262	0.447	0.368	0.222	0.266	0.242	0.475	0.325	0.567	0.292	0.300
52 Wentworth Ave., Little Calumet River	0.927	1.442	0.983	1.147	0.778	1.173	1.400	1.433	1.208	0.925	1.190
57 135th and Ashland, Little Calumet River	0.640	0.853	0.669	0.609	0.506	0.630	0.827	0.625	0.882	0.627	0.800
86 Burnham Avenue, Grand Calumet River	0.766	0.962	0.712	4.656	1.579	1.192	1.083	2.508	1.025	1.092	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.750
49 92nd and Ewing Ave., Calumet River	0.242	0.213	0.160	0.213	0.213	0.182	0.175	0.186	ND	0.300	0.120
55 130th Street, Calumet River	0.191	0.203	0.195	0.224	0.202	0.182	0.158	0.317	0.200	0.250	0.164
56 Indiana Ave., Calumet River	0.395	0.334	0.412	0.551	0.564	0.545	0.625	0.433	0.508	0.355	0.500
76 Halsted Street, Little Cal. River	0.251	0.294	0.347	0.412	0.380	0.375	0.917	0.450	0.300	0.317	0.342
58 Ashland Ave., Cal-Sag Channel	0.360	0.352	0.718	0.552	0.494	0.467	0.717	0.367	0.817	0.500	0.475
59 Cicero Ave., Cal-Sag Channel	0.398	0.416	0.510	0.612	0.658	0.575	0.683	0.458	0.792	0.625	0.600
43 Hwy. 83 and Cal-Sag Channel	0.388	0.420	0.659	0.690	0.582	0.645	0.767	0.542	0.842	0.600	0.433
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.672	0.749	0.614	0.955	0.944	0.590	0.792	0.627	0.618	0.727	0.475
64 Lake St., Du Page River	0.577	0.536	0.627	0.734	0.666	0.473	0.583	0.433	0.358	0.250	0.250
89 Walnut Lane, West Branch Du Page River	0.285	0.228	0.220	0.408	0.548	0.300	0.342	0.317	0.258	0.125	0.042
90 Chicago-Elgin Rd., Poplar Creek	0.627	0.508	0.893	0.931	0.645	0.545	0.836	0.600	0.573	0.583	0.489
12 County Line Rd., Buffalo Creek	0.839	0.629	0.599	0.786	0.516	0.780	0.675	0.583	0.700	0.792	0.600
79 Higgins Rd., Salt Creek	0.760	0.737	0.815	0.971	0.668	0.590	0.864	0.564	0.640	0.655	0.470
80 Arlington Hts. Rd., Salt Creek	0.375	0.220	0.250	0.229	0.213	0.250	0.267	0.208	0.083	0.275	0.142
18 Devon Ave., Salt Creek	0.583	0.248	0.425	0.298	0.278	0.317	0.300	0.250	0.108	0.300	0.227
24 Wolf Road, Salt Creek	0.557	0.478	0.598	0.602	0.542	0.655	0.658	0.517	0.733	0.625	0.718
21 First Ave., Salt Creek	0.514	0.457	0.473	0.500	0.439	0.591	0.783	0.491	0.692	0.650	0.645
77 Elmhurst Rd., Higgins Creek	0.812	0.748	0.704	1.029	0.956	1.055	0.700	0.645	0.764	0.542	0.700
78 Wille Rd., Higgins Creek	0.103	0.415	0.181	0.333	0.337	0.273	0.225	0.050	0.091	0.125	0.025
13 County Line Rd., Des Plaines River	0.586	0.537	0.589	0.582	0.431	0.500	0.633	0.483	0.550	0.658	0.509
17 Oakton St., Des Plaines River	0.577	0.586	0.688	0.504	0.541	0.700	0.667	0.545	0.583	0.575	0.530
19 Belmont Ave., Des Plaines River	0.490	0.493	0.670	0.507	0.507	0.892	0.600	0.458	0.457	0.583	0.436
20 Roosevelt Road, Des Plaines River	0.514	0.463	0.648	0.482	0.460	0.533	0.667	0.450	0.550	0.567	0.418
22 Ogden Ave., Des Plaines River	0.510	0.447	0.642	0.479	0.474	0.582	0.800	0.533	0.608	0.517	0.527
23 Willow Springs Rd., Des Plaines River	0.557	0.577	0.596	0.550	0.507	0.473	0.617	0.525	0.583	0.517	0.550
29 Lemont Stephen St., Des Plaines River	0.580	0.868	0.572	0.568	0.476	0.618	0.700	0.517	0.667	0.575	0.545

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-75

SOLUBLE IRON MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31 County Line Rd., Md. Fork N. Branch	0.291	0.177	0.206	ND							
32 County line Rd., Skokie River	0.212	0.178	0.204	ND							
34 Dempster St., N.B. Chicago River	0.111	0.108	0.134	ND							
74 Outer Dr. Bridge, Chicago River	0.034	0.025	0.037	ND							
35 Central Ave., N. Shore Channel	0.074	0.070	0.057	ND							
36 Touhy Ave., N. Shore Channel	0.047	0.031	0.042	ND							
37 Wilson Ave., N.B. Chicago River	0.068	0.054	0.063	ND							
73 Diversey Ave., N.B. Chicago River	0.072	0.057	0.068	ND							
46 Grand Ave., N.B. Chicago River	0.072	0.054	0.072	ND							
39 Madison St., S.B. Chicago River	0.079	0.067	0.060	ND							
40 Damen Ave., S.B. Chicago River	0.077	0.072	0.056	ND							
75 Cicero Ave., Chgo. San. and Ship Canal	0.085	0.064	0.053	ND							
41 Harlem Ave., Chgo. San. and Ship Canal	0.053	0.047	0.050	ND							
42 Hwy. 83 and Chgo. San. and Ship Canal	0.053	0.043	0.053	ND							
48 Lemont Bridge, Stephen Street (Comp)	0.060	0.075	0.063	ND							
82 Lockport Trebler	0.062	0.123	0.025	0.019	0.006	0.008	0.049	0.026	0.083	0.053	0.032
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.030	0.032	0.026	ND							
54 Joe Orr Road, Thorn Creek	0.083	0.268	0.180	ND							
52 Wentworth Ave., Little Calumet River	0.232	0.459	0.327	ND							
57 135th and Ashland, Little Calumet River	0.145	0.355	0.237	ND							
86 Burnham Avenue, Grand Calumet River	0.198	0.273	0.181	ND							
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
49 92nd and Ewing Ave., Calumet River	0.027	0.067	0.039	ND							
55 130th Street, Calumet River	0.037	0.044	0.050	ND							
56 Indiana Ave., Calumet River	0.052	0.059	0.084	ND							
76 Halsted Street, Little Cal. River	0.065	0.059	0.087	ND							
58 Ashland Ave., Cal-Sag Channel	0.090	0.124	0.262	ND							
59 Cicero Ave., Cal-Sag Channel	0.084	0.165	0.160	ND							
43 Hwy. 83 and Cal-Sag Channel	0.081	0.123	0.153	ND							
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.217	0.306	0.305	ND							
64 Lake St., Du Page River	0.119	0.123	0.198	ND							
89 Walnut Lane, West Branch Du Page River	0.066	0.059	0.102	ND							
90 Chicago-Elgin Rd., Poplar Creek	0.195	0.191	0.403	ND							
12 County Line Rd., Buffalo Creek	0.228	0.179	0.211	ND							
79 Higgins Rd., Salt Creek	0.198	0.192	0.295	ND							
80 Arlington Hts. Rd., Salt Creek	0.126	0.091	0.119	ND							
18 Devon Ave., Salt Creek	0.136	0.093	0.137	ND							
24 Wolf Road, Salt Creek	0.125	0.075	0.164	ND							
21 First Ave., Salt Creek	0.121	0.084	0.139	ND							
77 Elmhurst Rd., Higgins Creek	0.259	0.226	0.247	ND							
78 Wille Rd., Higgins Creek	0.048	0.081	0.072	ND							
13 County Line Rd., Des Plaines River	0.166	0.108	0.187	ND							
17 Oakton St., Des Plaines River	0.152	0.110	0.218	ND							
19 Belmont Ave., Des Plaines River	0.137	0.114	0.185	ND							
20 Roosevelt Road, Des Plaines River	0.126	0.110	0.165	ND							
22 Ogden Ave., Des Plaines River	0.135	0.098	0.164	ND							
23 Willow Springs Rd., Des Plaines River	0.139	0.100	0.146	ND							
29 Lemont Stephen St., Des Plaines River	0.135	0.097	0.123	ND							

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-76

TOTAL LEAD MEAN HISTORY THROUGH 1999

<u>Sampling Station</u>	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.009	0.830	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.000	0.000	0.000	0.000	0.024	0.001	0.000	0.000	0.000	0.000	0.000
32 County line Rd., Skokie River	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.005	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.000	0.000	0.005	0.027	0.004	0.000	0.000	0.003	0.002	0.003
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.000	0.015	0.003	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.002
37 Wilson Ave., N.B. Chicago River	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.002	0.003	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.000	0.000	0.000	0.015	0.003	0.000	0.000	0.000	0.002	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.000	0.000	0.000	0.023	0.005	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.000	0.000	0.004	0.000	0.005	0.000	0.000	0.000	0.005	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.000	0.000	0.003	0.000	0.006	0.002	0.000	0.000	0.004	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.004	0.000	0.003	0.000	0.031	0.000	0.000	0.000	0.000	0.000	0.002
41 Harlem Ave., Chgo. San. and Ship Canal	0.000	0.003	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.000	0.000	0.000	0.019	0.004	0.000	0.000	0.003	0.003	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.000	0.000	0.017	0.007	0.010	0.000	0.000	0.000	0.000	0.003	0.000
82 Lockport Trebler	0.004	0.005	0.007	0.008	0.000	0.001	0.004	0.004	0.003	0.010	0.005
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	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	0.003	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57 135th and Ashland, Little Calumet River	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.005	0.000	0.003	0.090	0.017	0.000	0.000	0.010	0.004	0.002	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002
49 92nd and Ewing Ave., Calumet River	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000
56 Indiana Ave., Calumet River	0.000	0.000	0.009	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Cal. River	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
58 Ashland Ave., Cal-Sag Channel	0.000	0.000	0.003	0.559	0.000	0.000	0.000	0.000	0.002	0.000	0.003
59 Cicero Ave., Cal-Sag Channel	0.007	0.000	0.014	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43 Hwy. 83 and Cal-Sag Channel	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.003
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.000	0.000	0.000	0.004	0.023	0.002	0.000	0.000	0.000	0.000	0.000
64 Lake St., Du Page River	0.000	0.000	0.000	0.001	0.018	0.005	0.000	0.000	0.004	0.005	0.002
89 Walnut Lane, West Branch Du Page River	0.000	0.357	0.000	0.002	0.017	0.000	0.000	0.000	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.553	0.000	0.000	0.015	0.004	0.000	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.000	0.001	0.004	0.001	0.000	0.000	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.000	0.000	0.000	0.002	0.011	0.000	0.000	0.000	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.000	0.000	0.004	0.001	0.019	0.003	0.000	0.000	0.003	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.008	0.001	0.007	0.000	0.000	0.000	0.005	0.003	0.000
21 First Ave., Salt Creek	0.000	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., Higgins Creek	0.000	0.000	0.000	0.003	0.019	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.000	0.000	0.002	0.015	0.000	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.000	0.009	0.006	0.009	0.000	0.000	0.000	0.000	0.005	0.000
17 Oakton St., Des Plaines River	0.000	0.000	0.000	0.001	0.018	0.017	0.000	0.000	0.000	0.000	0.000
19 Belmont Ave., Des Plaines River	0.000	0.000	0.000	0.002	0.008	0.001	0.000	0.000	0.002	0.000	0.003
20 Roosevelt Road, Des Plaines River	0.000	0.000	0.000	0.000	0.014	0.001	0.000	0.000	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.000	0.000	0.000	0.002	0.038	0.004	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.000	0.000	0.005	0.095	0.018	0.000	0.000	0.000	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.000	0.000	0.003	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-77

TOTAL NICKEL MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.010	0.013	0.200	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.000	0.005	0.002	0.002	0.014	0.000	0.000	0.000	0.000	0.000	0.000
32 County line Rd., Skokie River	0.000	0.002	0.003	0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.003	0.003	0.001	0.016	0.000	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.007	0.005	0.002	0.010	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.000	0.003	0.001	0.001	0.010	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.000	0.005	0.007	0.001	0.009	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.005	0.005	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.000	0.006	0.007	0.006	0.017	0.000	0.000	0.000	0.000	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.000	0.007	0.009	0.004	0.013	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.002	0.004	0.004	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.000	0.005	0.005	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.001	0.003	0.003	0.002	0.012	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.000	0.003	0.004	0.006	0.014	0.000	0.000	0.000	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.003	0.004	0.006	0.005	0.020	0.000	0.000	0.000	0.000	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.000	0.005	0.006	0.003	0.018	0.000	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler	0.003	0.001	0.001	0.001	0.000	0.000	0.002	0.026	0.000	0.000	0.022
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.000	0.003	0.002	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.002	0.002	0.007	0.002	0.007	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.003	0.002	0.006	0.003	0.007	0.009	0.000	0.000	0.000	0.000	0.000
57 135th and Ashland, Little Calumet River	0.002	0.003	0.007	0.001	0.008	0.000	0.009	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.003	0.003	0.006	0.007	0.018	0.000	0.000	0.008	0.000	0.000	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.002	0.004	0.002	0.001	0.006	0.000	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.002	0.002	0.002	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000
56 Indiana Ave., Calumet River	0.002	0.004	0.007	0.001	0.005	0.000	0.000	0.000	0.000	0.000	0.000
76 Halsted Street, Little Cal. River	0.003	0.003	0.007	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000
58 Ashland Ave., Cal-Sag Channel	0.002	0.005	0.003	0.001	0.006	0.000	0.000	0.000	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.002	0.003	0.006	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000
43 Hwy. 83 and Cal-Sag Channel	0.003	0.004	0.004	0.002	0.006	0.000	0.000	0.000	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.002	0.011	0.005	0.001	0.018	0.000	0.000	0.009	0.000	0.000	0.000
64 Lake St., Du Page River	0.000	0.006	0.005	0.000	0.018	0.000	0.000	0.008	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.000	0.006	0.006	0.001	0.016	0.000	0.000	0.008	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.004	0.008	0.001	0.014	0.000	0.000	0.018	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.005	0.009	0.002	0.017	0.000	0.000	0.008	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.005	0.006	0.001	0.011	0.020	0.000	0.009	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.000	0.006	0.007	0.001	0.014	0.000	0.000	0.008	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.000	0.004	0.010	0.001	0.006	0.000	0.000	0.008	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.008	0.006	0.002	0.011	0.000	0.000	0.000	0.000	0.000	0.000
21 First Ave., Salt Creek	0.000	0.007	0.006	0.002	0.018	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., Higgins Creek	0.000	0.008	0.008	0.001	0.017	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.006	0.006	0.003	0.016	0.009	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.006	0.008	0.001	0.016	0.000	0.000	0.008	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.000	0.004	0.003	0.001	0.010	0.000	0.000	0.000	0.000	0.000	0.000
19 Belmont Ave., Des Plaines River	0.000	0.005	0.002	0.000	0.016	0.008	0.000	0.000	0.000	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.000	0.003	0.005	0.002	0.018	0.000	0.000	0.042	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.000	0.002	0.008	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.000	0.002	0.005	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.000	0.004	0.004	0.001	0.019	0.009	0.000	0.008	0.000	0.000	0.000

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-78

TOTAL MANGANESE MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.087	0.077	1.945	0.089	0.084	0.098	0.142	0.045
31 County Line Rd., Md. Fork N. Branch	0.217	0.079	0.177	0.183	0.094	0.132	0.090	0.122	0.111	0.105	0.157
32 County line Rd., Skokie River	0.162	0.115	0.123	0.162	0.082	0.101	0.103	0.104	0.111	0.123	0.112
34 Dempster St., N.B. Chicago River	0.059	0.067	0.066	0.130	0.057	0.065	0.072	0.078	0.068	0.157	0.066
74 Outer Dr. Bridge, Chicago River	0.010	0.009	0.015	0.010	0.017	0.007	0.032	0.009	0.029	0.197	0.003
35 Central Ave., N. Shore Channel	0.024	0.017	0.026	0.028	0.019	0.007	0.013	0.009	0.060	0.341	0.000
36 Touhy Ave., N. Shore Channel	0.018	0.015	0.031	0.033	0.019	0.014	0.013	0.007	0.008	0.016	0.017
37 Wilson Ave., N.B. Chicago River	0.048	0.029	0.027	0.034	0.024	0.025	0.025	0.022	0.011	0.189	0.007
73 Diversey Ave., N.B. Chicago River	0.027	0.045	0.164	0.042	0.024	0.025	0.043	0.017	0.022	0.129	0.012
46 Grand Ave., N.B. Chicago River	0.028	0.052	0.026	0.026	0.034	0.031	0.032	0.030	0.011	0.117	0.028
39 Madison St., S.B. Chicago River	0.027	0.021	0.019	0.027	0.025	0.022	0.023	0.011	0.005	0.165	0.035
40 Damen Ave., S.B. Chicago River	0.028	0.024	0.023	0.034	0.023	0.031	0.023	0.061	0.054	0.045	
75 Cicero Ave., Chgo. San. and Ship Canal	0.027	0.022	0.034	0.033	0.029	0.024	0.033	0.014	0.101	0.232	0.168
41 Harlem Ave., Chgo. San. and Ship Canal	0.022	0.019	0.018	0.062	0.024	0.029	0.028	0.013	0.019	0.340	0.071
42 Hwy. 83 and Chgo. San. and Ship Canal	0.025	0.013	0.024	0.025	0.048	0.053	0.032	0.018	0.013	0.144	0.100
48 Lemont Bridge, Stephen Street (Comp)	0.033	0.026	0.040	0.045	0.038	0.052	0.052	0.042	0.043	0.072	0.081
82 Lockport Trebler	0.083	0.066	0.093	0.078	0.035	0.039	0.046	0.032	0.048	0.049	0.031
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.058	0.062	0.063	0.070	0.046	0.086	0.082	0.058	0.065	0.056	0.027
54 Joe Orr Road, Thorn Creek	0.062	0.043	0.146	0.056	0.041	0.058	0.080	0.106	0.041	0.052	0.059
52 Wentworth Ave., Little Calumet River	0.130	0.149	0.109	0.196	0.104	0.172	0.160	0.175	0.149	0.139	0.125
57 135th and Ashland, Little Calumet River	0.100	0.098	0.089	0.089	0.082	0.098	0.130	0.117	0.111	0.079	0.101
86 Burnham Avenue, Grand Calumet River	0.058	0.044	0.052	0.159	0.118	0.196	0.113	0.165	0.120	0.126	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.139
49 92nd and Ewing Ave., Calumet River	0.029	0.028	0.014	0.042	0.082	0.021	0.019	0.019	ND	0.030	0.012
55 130th Street, Calumet River	0.031	0.038	0.037	0.082	0.035	0.028	0.029	0.032	0.025	0.032	0.015
56 Indiana Ave., Calumet River	0.057	0.038	0.040	0.074	0.053	0.077	0.108	0.061	0.069	0.062	0.071
76 Halsted Street, Little Cal. River	0.056	0.045	0.046	0.070	0.078	0.068	0.087	0.094	0.093	0.072	0.080
58 Ashland Ave., Cal-Sag Channel	0.078	0.052	0.048	0.121	0.096	0.072	0.096	0.077	0.243	0.097	0.102
59 Cicero Ave., Cal-Sag Channel	0.065	0.058	0.060	0.104	0.080	0.078	0.092	0.079	0.094	0.092	0.101
43 Hwy. 83 and Cal-Sag Channel	0.061	0.053	0.064	0.077	0.066	0.085	0.093	0.071	0.162	0.123	0.079
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.073	0.174	0.108	0.132	0.127	0.092	0.093	0.115	0.075	0.101	0.097
64 Lake St., Du Page River	0.061	0.068	0.111	0.090	0.067	0.075	0.074	0.056	0.030	0.050	0.032
89 Walnut Lane, West Branch Du Page River	0.038	0.080	0.132	0.053	0.065	0.044	0.050	0.046	0.020	0.024	0.023
90 Chicago-Elgin Rd., Poplar Creek	0.068	0.164	0.208	0.136	0.113	0.104	0.119	0.120	0.115	0.085	0.072
12 County Line Rd., Buffalo Creek	0.168	0.165	0.195	0.197	0.137	0.178	0.127	0.123	0.134	0.154	0.125
79 Higgins Rd., Salt Creek	0.091	0.092	0.252	0.119	0.093	0.107	0.105	0.117	0.077	0.077	0.086
80 Arlington Hts. Rd., Salt Creek	0.050	0.064	0.115	0.058	0.051	0.063	0.058	0.047	0.052	0.045	0.047
18 Devon Ave., Salt Creek	0.069	0.050	0.153	0.061	0.048	0.059	0.063	0.054	0.054	0.076	0.032
24 Wolf Road, Salt Creek	0.065	0.083	0.064	0.087	0.065	0.081	0.068	0.049	0.062	0.062	0.085
21 First Ave., Salt Creek	0.055	0.068	0.058	0.076	0.063	0.084	0.075	0.056	0.063	0.096	0.118
77 Elmhurst Rd., Higgins Creek	0.112	0.136	0.111	0.140	0.135	0.160	0.106	0.165	0.145	0.104	0.201
78 Wille Rd., Higgins Creek	0.022	0.093	0.043	0.063	0.038	0.032	0.031	0.023	0.013	0.038	0.038
13 County Line Rd., Des Plaines River	0.065	0.111	0.218	0.094	0.069	0.092	0.091	0.073	0.112	0.096	0.085
17 Oakton St., Des Plaines River	0.071	0.097	0.077	0.087	0.083	0.073	0.094	0.086	0.075	0.070	0.226
19 Belmont Ave., Des Plaines River	0.059	0.096	0.074	0.094	0.080	0.093	0.080	0.077	0.068	0.068	0.162
20 Roosevelt Road, Des Plaines River	0.061	0.080	0.073	0.080	0.070	0.093	0.089	0.078	0.085	0.070	0.102
22 Ogden Ave., Des Plaines River	0.056	0.068	0.072	0.072	0.091	0.110	0.093	0.066	0.073	0.063	0.097
23 Willow Springs Rd., Des Plaines River	0.062	0.083	0.065	0.250	0.085	0.077	0.063	0.072	0.133	0.172	0.096
29 Lemont Stephen St., Des Plaines River	0.064	0.078	0.072	0.078	0.072	0.086	0.076	0.083	0.078	0.071	0.108

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-79

TOTAL MERCURY MEAN HISTORY THROUGH 1999

Sampling Station No. Name	Annual Means ($\mu\text{g/L}$)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.033	0.100	0.044	0.000	0.000	0.050	0.055
31 County Line Rd., Md. Fork N. Branch	0.019	0.044	0.030	0.125	0.030	0.040	0.017	0.000	0.000	0.027	0.000
32 County line Rd., Skokie River	0.035	0.038	0.050	0.000	0.022	0.044	0.033	0.000	0.000	0.075	0.033
34 Dempster St., N.B. Chicago River	0.037	0.040	0.036	0.000	0.030	0.036	0.033	0.000	0.000	0.075	0.000
74 Outer Dr. Bridge, Chicago River	0.025	0.044	0.009	0.036	0.000	0.010	0.017	0.000	0.000	0.025	0.040
35 Central Ave., N. Shore Channel	0.012	0.028	0.040	0.000	0.000	0.025	0.017	0.000	0.000	0.027	0.038
36 Touhy Ave., N. Shore Channel	0.006	0.033	0.058	0.000	0.042	0.045	0.000	0.000	0.000	0.025	0.000
37 Wilson Ave., N.B. Chicago River	0.016	0.043	0.075	0.000	0.025	0.033	0.025	0.000	0.000	0.025	0.000
73 Diversey Ave., N.B. Chicago River	0.036	0.043	0.092	0.000	0.033	0.025	0.017	0.000	0.000	0.000	0.025
46 Grand Ave., N.B. Chicago River	0.021	0.043	0.895	0.008	0.086	0.000	0.033	0.000	0.000	0.025	0.083
39 Madison St., S.B. Chicago River	0.028	0.032	0.009	0.000	0.000	0.040	0.000	0.000	0.000	0.075	0.036
40 Damen Ave., S.B. Chicago River	0.017	0.031	0.008	0.000	0.022	0.025	0.000	0.000	0.000	0.025	0.058
75 Cicero Ave., Chgo. San. and Ship Canal	0.022	0.043	0.067	0.000	0.008	0.000	0.000	0.000	0.000	0.025	0.050
41 Harlem Ave., Chgo. San. and Ship Canal	0.018	0.034	0.017	0.025	0.000	0.000	0.033	0.000	0.000	0.027	0.092
42 Hwy. 83 and Chgo. San. and Ship Canal	0.018	0.033	0.050	0.000	0.025	0.045	0.017	0.000	0.000	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.006	0.026	0.017	0.033	0.008	0.008	0.033	0.000	0.000	0.000	0.000
82 Lockport Trebler	0.021	0.000	0.008	0.004	0.017	0.006	0.000	0.000	0.043	0.071	0.042
Calumet River System											
50 Wolf Lake, Burnham Ave.	0.021	0.027	0.033	0.017	0.064	0.058	0.000	0.000	0.000	0.000	0.055
54 Joe Orr Road, Thorn Creek	0.035	0.036	0.042	0.000	0.009	0.067	0.000	0.000	0.000	0.025	0.000
52 Wentworth Ave., Little Calumet River	0.016	0.033	0.050	0.044	0.022	0.045	0.017	0.025	0.000	0.058	0.000
57 135th and Ashland, Little Calumet River	0.040	0.042	0.050	0.011	0.010	0.020	0.000	0.000	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.051	0.127	0.083	1.518	0.133	0.100	0.042	0.100	0.042	0.067	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.033
49 92nd and Ewing Ave., Calumet River	0.007	0.030	0.033	0.020	0.050	0.027	0.000	0.000	ND	0.000	0.000
55 130th Street, Calumet River	0.035	0.033	0.067	0.030	0.030	0.045	0.033	0.000	0.000	0.000	0.000
56 Indiana Ave., Calumet River	0.029	0.041	0.064	0.020	0.000	0.018	0.017	0.000	0.000	0.027	0.000
76 Halsted Street, Little Cal. River	0.038	0.032	0.375	0.000	0.036	0.050	0.000	0.000	0.000	0.000	0.000
58 Ashland Ave., Cal-Sag Channel	0.014	0.014	0.933	0.008	0.020	0.033	0.000	0.000	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.013	0.035	0.092	0.000	0.064	0.042	0.033	0.000	0.000	0.000	0.025
43 Hwy. 83 and Cal-Sag Channel	0.016	0.040	0.083	0.000	0.018	0.027	0.000	0.000	0.000	0.000	0.025
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.012	0.041	0.030	0.018	0.017	0.040	0.033	0.000	0.000	0.036	0.000
64 Lake St., Du Page River	0.060	0.021	0.058	0.009	0.025	0.045	0.033	0.000	0.000	0.025	0.000
89 Walnut Lane, West Branch Du Page River	0.053	0.328	0.042	0.008	0.017	0.017	0.000	0.000	0.000	0.025	0.025
90 Chicago-Elgin Rd., Poplar Creek	0.021	0.505	0.122	0.018	0.030	0.036	0.018	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.068	0.045	0.055	0.008	0.025	0.030	0.017	0.000	0.000	0.000	0.030
79 Higgins Rd., Salt Creek	0.058	0.062	0.055	0.010	0.000	0.010	0.055	0.000	0.000	0.027	0.080
80 Arlington Hts. Rd., Salt Creek	0.057	0.067	0.050	0.008	0.025	0.030	0.000	0.000	0.000	0.000	0.050
18 Devon Ave., Salt Creek	0.061	0.035	0.067	0.008	0.017	0.017	0.000	0.000	0.000	0.000	0.027
24 Wolf Road, Salt Creek	0.044	0.077	0.033	0.033	0.042	0.000	0.017	0.000	0.025	0.050	0.055
21 First Ave., Salt Creek	0.062	0.019	0.027	0.017	0.017	0.064	0.050	0.000	0.000	0.050	0.027
77 Elmhurst Rd., Higgins Creek	0.045	0.053	0.036	0.050	0.008	0.018	0.000	0.000	0.000	0.050	0.030
78 Wille Rd., Higgins Creek	0.050	0.019	0.033	0.017	0.008	0.018	0.033	0.000	0.000	0.025	0.067
13 County Line Rd., Des Plaines River	0.056	0.058	0.045	0.000	0.050	0.067	0.017	0.000	0.000	0.050	0.027
17 Oakton St., Des Plaines River	0.079	0.036	0.018	0.033	0.009	0.000	0.050	0.000	0.000	0.050	0.030
19 Belmont Ave., Des Plaines River	0.062	0.052	0.025	0.000	0.025	0.017	0.000	0.000	0.025	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.064	0.051	0.025	0.000	0.042	0.017	0.000	0.025	0.025	0.055	0.000
22 Ogden Ave., Des Plaines River	0.064	0.012	0.017	0.000	0.033	0.045	0.033	0.000	0.025	0.000	0.027
23 Willow Springs Rd., Des Plaines River	0.095	0.025	0.055	0.055	0.000	0.045	0.033	0.000	0.000	0.000	0.030
29 Lemont Stephen St., Des Plaines River	0.065	0.032	0.017	0.000	0.017	0.055	0.033	0.000	0.000	0.000	0.082

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-80

TOTAL ZINC MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
<u>Chicago River System</u>											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.032	0.024	6.600	0.000	0.025	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.027	0.005	0.019	0.013	0.006	0.040	0.000	0.009	0.000	0.000	0.000
32 County line Rd., Skokie River	0.032	0.009	0.020	0.027	0.010	0.000	0.008	0.018	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.058	0.007	0.025	0.035	0.012	0.018	0.008	0.017	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.011	0.007	0.025	0.006	0.006	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. Shore Channel	0.007	0.001	0.009	0.012	0.004	0.000	0.000	0.000	0.000	0.000	0.000
36 Touhy Ave., N. Shore Channel	0.037	0.017	0.038	0.043	0.014	0.027	0.000	0.025	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.033	0.013	0.028	0.039	0.015	0.008	0.013	0.017	0.000	0.000	0.000
73 Diversey Ave., N.B. Chicago River	0.043	0.020	0.057	0.053	0.013	0.000	0.000	0.017	0.000	0.000	0.000
46 Grand Ave., N.B. Chicago River	0.035	0.015	0.034	0.028	0.023	0.017	0.008	0.017	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.027	0.011	0.024	0.027	0.016	0.000	0.017	0.017	0.000	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.023	0.012	0.028	0.023	0.039	0.017	0.017	0.008	0.000	0.000	0.025
75 Cicero Ave., Chgo. San. and Ship Canal	0.032	0.012	0.032	0.033	0.016	0.025	0.008	0.008	0.000	0.000	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.036	0.013	0.032	0.036	0.021	0.042	0.008	0.033	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.031	0.018	0.046	0.037	0.023	0.036	0.017	0.008	0.000	0.000	0.025
48 Lemont Bridge, Stephen Street (Comp)	0.028	0.015	0.041	0.043	0.024	0.025	0.017	0.025	0.000	0.000	0.000
82 Lockport Trebler	0.094	0.162	0.141	0.133	0.069	0.049	0.067	0.023	0.092	0.000	0.000
<u>Calumet River System</u>											
50 Wolf Lake, Burnham Ave.	0.013	0.007	0.007	0.016	0.002	0.008	0.000	0.000	0.000	0.000	0.000
54 Joe Orr Road, Thorn Creek	0.041	0.032	0.054	0.042	0.025	0.025	0.008	0.017	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.028	0.023	0.031	0.054	0.021	0.018	0.000	0.033	0.000	0.000	0.000
57 135th and Ashland, Little Calumet River	0.031	0.063	0.032	0.026	0.018	0.010	0.027	0.008	0.000	0.000	0.000
86 Burnham Avenue, Grand Calumet River	0.080	0.103	0.068	0.296	0.102	0.075	0.075	0.233	0.000	0.000	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.025	0.013	0.008	0.027	0.011	0.009	0.000	0.000	ND	0.600	0.000
55 130th Street, Calumet River	0.015	0.019	0.012	0.028	0.014	0.009	0.000	0.000	0.000	0.000	0.000
56 Indiana Ave., Calumet River	0.032	0.027	0.025	0.031	0.018	0.009	0.017	0.000	0.000	0.000	0.000
76 Halsted Street, Little Cal. River	0.027	0.034	0.036	0.132	0.056	0.033	0.017	0.025	0.000	0.000	0.000
58 Ashland Ave., Cal-Sag Channel	0.030	0.027	0.032	0.095	0.063	0.008	0.033	0.033	0.000	0.000	0.000
59 Cicero Ave., Cal-Sag Channel	0.036	0.034	0.038	0.054	0.046	0.042	0.033	0.025	0.090	0.000	0.000
43 Hwy. 83 and Cal-Sag Channel	0.035	0.042	0.064	0.057	0.030	0.045	0.050	0.033	0.000	0.000	0.000
<u>Des Plaines River System</u>											
63 Longmeadow Lane, Du Page River	0.036	0.023	0.035	0.040	0.043	0.000	0.017	0.000	0.000	0.000	0.000
64 Lake St., Du Page River	0.029	0.039	0.040	0.053	0.038	0.018	0.033	0.017	0.000	0.000	0.000
89 Walnut Lane, West Branch Du Page River	0.042	0.059	0.042	0.038	0.058	0.008	0.017	0.017	0.000	0.000	0.000
90 Chicago-Elgin Rd., Poplar Creek	0.015	0.015	0.037	0.021	0.019	0.000	0.009	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.023	0.011	0.026	0.012	0.020	0.020	0.008	0.000	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.020	0.006	0.027	0.026	0.020	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.027	0.016	0.031	0.019	0.022	0.000	0.000	0.000	0.000	0.000	0.042
18 Devon Ave., Salt Creek	0.033	0.014	0.027	0.017	0.023	0.000	0.008	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.052	0.045	0.031	0.032	0.032	0.027	0.008	0.008	0.000	0.000	0.455
21 First Ave., Salt Creek	0.041	0.029	0.026	0.030	0.031	0.027	0.025	0.009	0.000	0.000	0.045
77 Elmhurst Rd., Higgins Creek	0.025	0.029	0.015	0.038	0.032	0.036	0.000	0.009	0.027	0.000	0.000
78 Wille Rd., Higgins Creek	0.045	0.062	0.043	0.045	0.050	0.036	0.033	0.000	0.000	0.025	
13 County Line Rd., Des Plaines River	0.023	0.021	0.063	0.027	0.022	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.025	0.024	0.014	0.023	0.029	0.033	0.008	0.000	0.000	0.000	0.030
19 Belmont Ave., Des Plaines River	0.025	0.031	0.023	0.023	0.030	0.017	0.008	0.008	0.033	0.000	0.000
20 Roosevelt Road, Des Plaines River	0.033	0.023	0.028	0.025	0.032	0.017	0.017	0.017	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.040	0.025	0.033	0.031	0.033	0.018	0.008	0.008	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.035	0.032	0.029	0.032	0.025	0.009	0.017	0.008	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.031	0.026	0.031	0.030	0.040	0.036	0.033	0.000	0.000	0.000	0.000

ND = No data

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE AII-81

TOTAL SELENIUM MEAN HISTORY THROUGH 1999

<u>Sampling Station</u> No. Name	Annual Means (mg/L)										
	99	98	97	96	95	94	93	92	91	90	89
Chicago River System											
30 County Line Rd., W. Fork N. Branch	ND	ND	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31 County Line Rd., Md. Fork N. Branch	0.000	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000
32 County line Rd., Skokie River	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.000	0.000	0.000	0.000
34 Dempster St., N.B. Chicago River	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000
74 Outer Dr. Bridge, Chicago River	0.000	0.000	0.024	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.000
35 Central Ave., N. 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 Ave., N. Shore Channel	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000
37 Wilson Ave., N.B. Chicago River	0.000	0.000	0.000	0.008	0.007	0.000	0.000	0.000	0.000	0.000	0.000
73 Diversey Ave., N.B. 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 Ave., N.B. Chicago River	0.000	0.000	0.000	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39 Madison St., S.B. Chicago River	0.000	0.000	0.019	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
40 Damen Ave., S.B. Chicago River	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75 Cicero Ave., Chgo. San. and Ship Canal	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 Harlem Ave., Chgo. San. and Ship Canal	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42 Hwy. 83 and Chgo. San. and Ship Canal	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48 Lemont Bridge, Stephen Street (Comp)	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82 Lockport Trebler	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
Calumet River System											
50 Wolf Lake, Burnham Ave.	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	0.007	0.000	0.000	0.000	0.000	0.000	0.000
52 Wentworth Ave., Little Calumet River	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57 135th and Ashland, 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
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	ND
51 IHB R.R. Bridge, Grand Calumet River	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000
49 92nd and Ewing Ave., Calumet River	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	ND	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
56 Indiana Ave., 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 Cal. 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 Ave., 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 Ave., Cal-Sag Channel	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43 Hwy. 83 and 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
Des Plaines River System											
63 Longmeadow Lane, Du Page River	0.000	0.000	0.003	0.002	0.013	0.000	0.000	0.000	0.000	0.000	0.000
64 Lake St., 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
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
90 Chicago-Elgin Rd., Poplar Creek	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.000
12 County Line Rd., Buffalo Creek	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79 Higgins Rd., Salt Creek	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80 Arlington Hts. Rd., Salt Creek	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
18 Devon Ave., Salt Creek	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
24 Wolf Road, Salt Creek	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21 First Ave., Salt Creek	0.000	0.000	0.001	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77 Elmhurst Rd., Higgins Creek	0.000	0.000	0.003	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000
78 Wille Rd., Higgins Creek	0.000	0.000	0.017	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000
13 County Line Rd., Des Plaines River	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17 Oakton St., Des Plaines River	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19 Belmont Ave., Des Plaines River	0.000	0.000	0.003	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	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 Ogden Ave., Des Plaines River	0.000	0.000	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23 Willow Springs Rd., Des Plaines River	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29 Lemont Stephen St., Des Plaines River	0.000	0.000	0.000	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ND = No data